B.Ed. C C-03
TEACHER FUNCTIONS

B.Ed. - ODL PROGRAMME
SCHOOL OF EDUCATION
25/2, Ballygunge Circular Road, Kolkata-19
PREFACE

Netaji Subhas Open University is one of the premier State Open Universities in India established in the year 1997 by a State Act (W. B. Act XIX) of 1997 and recognized by the University Grants Commission and Distance Education Council. Consequent upon the RTE Act 2009, the Govt. of West Bengal in its Higher and School Education Departments has decided to introduce B.Ed. programme in the Open and Distance Learning mode (ODL) to train up the in-service untrained teachers teaching at the upper primary level in the State. Accordingly, by its Memo No. 180-Edn. (U)/U-97 /12 Dated 5th February, 2013 the Govt of West Bengal identified Netaji Subhas Open University (NSOU) as the only nodal University capable of implementing the programme all over the state of West Bengal. The Govt. of West Bengal also decided to adopt the Curriculum, Syllabus and Self Instructional Materials (SIM) of a reputed University who has the updated curriculum, syllabus and standard SIMs. Therefore, NSOU approached the National Council for Teacher Education authorities for their approval of the programme and they were kind enough to accord their approval vide no. 48-18/2012/NCTE/N&S; Dtd. 19. 03. 2013. After rigorous exercise at the national level the curriculum, syllabus and SIMs of Karnataka State Open University (KSOU) have been identified and accordingly adopted through the signing of a tripartite MoU among KSOU, Department of Higher Education, GOWB and NSOU. NSOU further approached NCTE for their approval for using the KSOU course curriculum and self learning materials and the authorities of NCTE were kind enough to allow NSOU to use the study materials of KSOU vide no. 48-18/2012/NCTE/NS Dt.9th July 2013. The study materials as received are reprinted at our end. The study materials are reproduced for exclusive use by the Counsellors and Student Teachers of the programme. It is expected that Counsellors, Student Teachers and all concerned will receive benefit from it and make the most of it.

Teacher Education is an important discipline gaining further momentum as both Govt. of India and Govt. of West Bengal are laying increasing emphasis on it as only quality teacher education can ensure quality instruction and consequently produce learners with a
good understanding of the subjects. The quality of teacher education not only depends on professionally sound and relevant curriculum, but also on the way the curriculum is transacted in the institutions. Hence, it is our earnest request to fellow faculties and dear student teachers to take advantage of this special programme of ODL and make a success of it. After completion of the course, the Student Teachers will go back to their classrooms, and then try to make it vibrant, instil imagination in children and ignite curiosity in them.

I am thankful to the Hon’ble Minister in Charge, Department of Higher and School Education, Govt. of West Bengal for his continuous guidance and support. Shri Vivek Kumar IAS, Secretary, Higher Education Department has been a perpetual source of encouragement and he extended all sorts of cooperation and guidance as and when required. We are thankful to the authorities of the Ministry of Human Resource Development (MHRD), Govt. of India for their unstinted support. We must acknowledge the instant gesture of cooperation and help extended by KSOU authorities to share course curriculum and study materials with us. The authorities of Paschim Banga Sarva Siksha Mission (PBSSM) were very generous to provide financial support to make the project possible. My colleagues at the School of Education have made it possible to reprint the SIMs within such a short period of time. They have taken care of proof corrections, prepared the printing lay-outs and other things needed for printing. The Publication Department has also taken the initiative to print such a quantum of self learning materials within a very short period of time. The initiative must be appreciated. I sincerely believe that the Self Instructional Materials as reprinted will be appreciated by all. Any objective suggestion for its improvement from the users will be appreciated, too.

Professor Subha Sankar Sarkar
Vice-Chancellor, NSOU
B.Ed. –ODL PROGRAMME
(Bachelor of Education Programme through Open and Distance Learning Mode)

COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

<table>
<thead>
<tr>
<th>Block</th>
<th>Topic</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Facilitating Learning</td>
<td>7-112</td>
</tr>
<tr>
<td>2</td>
<td>Curriculum Construction</td>
<td>113-178</td>
</tr>
<tr>
<td>3</td>
<td>Organising Co-curricular Activities</td>
<td>179-278</td>
</tr>
<tr>
<td>4</td>
<td>Evaluation and Data Processing</td>
<td>279-360</td>
</tr>
<tr>
<td>5</td>
<td>Management of School Programme</td>
<td>361-444</td>
</tr>
<tr>
<td>6</td>
<td>Resource Mobilisation and Management</td>
<td>445-520</td>
</tr>
</tbody>
</table>
COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

BLOCK 01
FACILITATING LEARNING
# B.Ed. CC-03 : TEACHER FUNCTIONS

## Block 1

### FACILITATING LEARNING

<table>
<thead>
<tr>
<th>Unit</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit-1</td>
<td>Teaching: An Introduction</td>
<td>13</td>
</tr>
<tr>
<td>Unit-2</td>
<td>Micro Skills of Teaching</td>
<td>28</td>
</tr>
<tr>
<td>Unit-3</td>
<td>Micro Skills: Description and Components</td>
<td>41</td>
</tr>
<tr>
<td>Unit-4</td>
<td>Models of Teaching</td>
<td>68</td>
</tr>
<tr>
<td>Unit-5</td>
<td>Communication</td>
<td>85</td>
</tr>
<tr>
<td>Unit-6</td>
<td>Teaching as Communication</td>
<td>100</td>
</tr>
</tbody>
</table>
INSTRUCTIONAL DESIGN AND EDITORIAL COMMITTEE

Prof. M. G. Krishnan  
Chairman  
Vice Chancellor  
Karnataka State Open University  
Mysore 570 006  
Karnataka

Prof. Vikram Raj Urs  
Convener  
Dean - Academic  
Karnataka State Open University  
Mysore 570 006

Dr. N. Lakshmi  
Course Coordinator  
Chairperson - DOSR in Education  
Karnataka State Open University  
Mysore 570 006

Prof. B. N. Manjunathaiah  
Course Editor  
Professor – DOSR in Education  
Karnataka State Open University  
Mysore 570 006

Shobana S.  
Course Writer  
Lecturer  
Sri KMKG College of Education  
Mysore 570 023

Dr. Thejasvi Naviloor  
Coordinator  
Planning and Development Officer  
ICT Course Content  
Karnataka State Open University  
Development and Delivery  
Mysore 570 006

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INTRODUCTION

Teaching is concerned with the all round development of the child- intellectual, emotional, social, moral and even physical. This makes the child the focus of teaching. Since it is the learner who is emphasized here, the teacher is required to guide the learner and bring about development in the learner. Teaching has undergone various changes since the ancient times of the Gurukula system to the present day, where instructional technology plays a great role. Therefore in the following units we shall first of all take a peep into the historical perspective of teaching with reference to the changes it has undergone down the ages.

Teaching is an art that results in learning in the students. To achieve this teaching should be performed in a way to bring about learning. This can be done only when the task of Teaching is deeply studied with reference to the components of the same. For teachers of all times, it is mandatory that these components are the skills that comprise the teaching task. Here they are identified, practiced and mastered. This is done using the technique of ‘microteaching’. In-the following Units, we shall identify what these individual skills are, how they can be practiced and mastered so as to integrate into the Teaching skill with reference to classroom teaching.

Teaching is a process of communication that takes place in the classroom. How this takes place and what exactly are the components of this process are will be discussed. Teaching helps the child to respond to his environment. In such a context, we shall also discuss the Models of Teaching - those that help the teacher in teaching concepts, initiate thinking and enquiry processes in the students and develop positive social behaviour and so on. You will understand how these concepts help in your classroom teaching of the various subjects and the concepts in them.

This block consists of six Units- In the first unit the concept of Teaching is explained. Teaching is a complex process consisting of many Micro-skills. These are introduced in Unit 2. In unit 3, Models of Teaching have been designed by educationists. Some of these Models of Teaching are described in Unit 4. In Unit 5 the nature of Communication is explained. In Unit 6 Teaching is considered as communication.

These topics when read and internalized will help in bringing out more effective teaching. So then, let us now go ahead and deal with these one by one.
UNIT 1  ❯ TEACHING- AN INTRODUCTION

Structure

1.1 Introduction
1.2 Objectives
1.3 Teaching
  1.3.1 As an Activity to Facilitate Learning -Historical Perspective
  1.3.2 As a Complex Task
1.4 Let Us Sum Up
1.5 Answers to ‘Check Your Progress’
1.6 Unit-End Exercises
1.7 References

1.1 Introduction

This unit will provide you with definitions of Teaching, the meaning of Teaching and landmarks in the history of teaching-learning process in India. These landmarks will acquaint you sufficiently well with a good historical perspective from the pre-Vedic days to our contemporary set-up in Independent India.

The second part of this unit will take up for detail analysis of several complexities involved in the process of teaching. It will be dealt with, as a complex task that contains within it, the various components that makes it a complex activity. The narrative in this unit, it is hoped, will also motivate you to arrive at your articulation of these two issues of teaching, namely:

a) Teaching as an activity to facilitate learning.
b) Teaching as a complex task.

I hope you will whole-heartedly participate as an active distance learner, and interact with the learning material provided.
1.2 Objectives

After having worked through this unit, you will be able to:

- Define the concept of teaching.
- Explain teaching as an activity that facilitates learning.
- Trace the landmarks in the development of teaching in India.
- Analyse the components in the complex process of teaching.

1.3 Teaching

Teaching is a series of events through which a teacher attempts to bring desired change in behaviour of the students. This brings about a change in the thinking, feeling and action of the students. It helps them to adapt to their environment.

In the Dictionary of Education, Teaching is defined as:

1. Teaching is the act of instructing in an educational institution.
2. Teaching is the management by the instructor of the teaching-learning situations including:
   (a) Direct interaction between the teacher and the learners
   (b) Proactive decision-making process of planning, designing and preparing the materials for the teaching-learning conditions and
   (c) Post-active redirection (Evaluation, Redesign and Dissemination) and
3. Collectively, that which is taught, such as the teaching of a religious leader.”

One of the many ways to understand the nature of Teaching is to analyse the definitions of ‘Teaching’.

As a first step in this direction, let us now take a few definitions on Teaching:

**Edmund Amidon** - “Teaching is an interactive process, primarily classroom talk which takes place between teacher and pupils and occurs during certain definable activities.”

**H. C. Morrison** - “Teaching is an intimate contact between a more mature personality and a less mature one which is designed to further the education of the latter.”

**Clarke** - “Teaching refers to activities that are designed and performed to produce change in students’ behaviour.”

Now let us start analysing the definitions to understand the nature of teaching. Taking
the definition of Edmund Amidon, teaching is a process that is an interaction between the teacher and the students in the classroom during which activities that are defined are performed. Here, the “definable activities” may be set to include those that are to be performed by the teacher and the students so as to realize the objectives with reference to the corresponding activity. This purposeful interaction that is a two-way communication between the pupils and the teacher results in the improvement of both participants. This definition also considers the act of teaching as one that is properly planned with objectives that are kept as the goals to be achieved at every stage of teaching.

The definition of Morrison focuses mainly on the levels of maturity between the teacher and the taught. The more mature and experienced teacher who enjoys the elevated position by virtue of his knowledge, status and experiences through the teaching process helps the lesser-experienced pupil to develop according to his needs as well as those of the society. The teacher sets forth the ideals and also acts as a model to be emulated by the pupils. Looking deep into this definition brings to light the aspect of the passivity of the pupils who are mere listeners, and only imitate the model presented by the teacher.

The definition of Clarke is almost a definition of education, which says that it is an activity that brings about a change in behaviour. This should of course be taken as a change that is desirable, which is achieved through a set of organised activities.

**Analytical concept of teaching:** In order to do an analysis of the concept of ‘Teaching’, we first need to know the components of teaching which can be divided into broad aspects of (a) Activities undertaken while teaching (b) Objectives to be achieved through these activities. N. K. Jangira and Ajit Singh (1982) analysed teaching in the following manner:

“Teaching can be analysed in terms of teacher behaviour at least three levels i.e., component teaching skills, component teaching behaviours comprising the component skill and atomistic teaching behaviours.” (This means the finer aspects of teaching, like, the attitude of the teacher, interest, influence on students, etc.)

Diagrammatically, this analysis can be presented in the following manner:

```
Teaching
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**Level 1:** Teaching may be analysed into various component teaching skills say, S1, S2, S3...Sn

<table>
<thead>
<tr>
<th>S1</th>
<th>S2</th>
<th>S3</th>
<th>S4</th>
<th>S5</th>
<th>S6</th>
<th>S7</th>
<th>S8</th>
<th>S9</th>
<th>S10</th>
<th>S11</th>
<th>S12</th>
<th>Sn</th>
</tr>
</thead>
</table>
Level 2: Each of the components teaching skill may be analysed into a number of component teaching behaviours, say, C1, C2, C3... Cn. (Component teaching skills - 7)

\[
\begin{array}{cccccccc}
\text{C1} & \text{C2} & \text{C3} & \text{C4} & \text{C5} & \text{C6} & \text{C7} & \text{C8} & \text{Cn}
\end{array}
\]

Level 3: Each of the component teacher behaviour may be further analysed into atomising teaching behaviours, say, Tbl, Tb2, Tb3... . Tbn. (Component teaching behaviour-4)

\[
\begin{array}{cccccc}
\text{Tbl} & \text{Tb2} & \text{Tb3} & \text{Tb4} & \text{Tb5} & \text{Tbn}
\end{array}
\]

Based on the above pattern of analysis, teaching may be analysed into well-defined components of 'teaching skills' or 'Technical Skills' of teaching. This projects the concept of teaching as having a group of skills, which the teacher has to essentially enquire so as to make teaching effective.

1.3.1 As Activity to Facilitate Learning - Historical Perspective

Teaching is useful because it facilitates learning, for as Dewey aptly suggests, a teacher can no more teach unless someone learns, than a seller can sell unless someone buys. Good teaching enlightens the society because it is done effectively, whereas, poor teaching results in ignorance and intellectual stagnation.

To understand teaching, we should first know what teaching is not. As per one definition, teaching is giving information and parting knowledge. It is actually this aspect that is being given more than needed prominence in institutions. Going by this definition, we need to make sure that the knowledge given by the teacher is received by the students, for only if they are prepared to receive it will there be any learning taking place. When the pupil is ready to receive the knowledge, teaching facilitates learning. Therefore, teaching is helping the pupil to learn and do things for himself and getting him to get adapted to his environment.

When we mentioned that teaching is helping the pupil to get adapted to his environment, it naturally includes the training of his emotions. When right feelings are evoked in the pupils, they do the right thing. Sri Aurobindo says, "The first principle is that nothing can be taught. The teacher is not an instructor or taskmaster; he is a helper and guide. His business is to suggest and not impose. He does not actually train the pupils mind; he only shows him to perfect his instruments of knowledge and helps and encourages him in the process. He does not impart knowledge to him, he shows him to acquire knowledge for
himself. He does not call forth the knowledge that is within, he only shows him where it lies and it can be habituated to rise to the surface."

Teaching is very much a process of socialization. Learning is no doubt an individual task, but takes place better in a social set-up, as the group has a controlling influence on the individual learner.

According to B. Othanel Smith, "Teaching is a system of action involving an agent, an end in view and a situation including two sets of factors—those over which the agent has no control (class-size, size of classroom, physical characteristics of pupils, etc.), and those which he can modify (ways of asking questions about instruction and ways of structuring information or ideas gleaned)."

Thomas F. Green gives the following definition of Teaching: "Teaching is an instance of human action aimed at enhancing the human capacity for action."

When we analyse these two definitions, we find that there are some important aspects that we should play close attention to. Firstly, teaching is a system of action, which is directed at a goal; secondly, it takes place in a situation that comprises of controllable and uncontrollable sets of factors. The second definition puts forth the idea that, teaching results in increasing the "capacity of action" of the learner.

I would like to further explain the concept of teaching in a slightly unusual way, by once again quoting Smith, who has elaborated his own definition, analysing the same to reveal the components within. Teaching as a normative activity, is defined by him in the following manner:

"Normative teaching requires that the activities of teaching conform to certain ethical conditions-

a) Conditioning (stimulus-obeying behaviour)
b) Indoctrinating (uninformed behaviour)
c) Brainwashing (conditioned behaviour/uninformed behaviour)
d) Informing (information with explanations or evidence, no experience provided)
e) Training (rule-obeying behaviour)
f) Teaching (processes of verification, concern for what the student thinks, preparing for independent action)"

You will see that, an analysis of the components of the above definition, gives a hierarchical description of the act of teaching. This hierarchy culminates in the act of teaching as a process of verification, which has a concern for directing the thought process of the learner. This prepares him for independent action. When this takes place, we can
say that teaching facilitates the learner to learn, by providing him the right environment, guiding the learner, asking questions as well as encouraging the learner to ask questions. This enables him to discover things for himself. The teacher thus plays the role of a facilitator, facilitating the learner to learn by himself.

As we have now listed out the functions of teaching, you will no doubt be interested to know how this process of teaching has been taking place since the pre-Vedic days in India. I shall now try to satisfy your curiosity by giving you a bird's-eye view of teaching processes, depicting the same in a tabular form, so that it is concise, and at the same time helps you to make a comparative study of teaching processes right from the Vedic times to the present day.

<table>
<thead>
<tr>
<th>Period</th>
<th>Institution</th>
<th>Feature</th>
<th>Aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vedic period</td>
<td>Gurukula</td>
<td>Teacher-centered</td>
<td>Religion oriented</td>
</tr>
<tr>
<td>Buddhist period</td>
<td>Monasteries &amp; Viharases</td>
<td>Teacher-centered</td>
<td>Religion oriented</td>
</tr>
<tr>
<td>Muslim period</td>
<td>Maktabs &amp; Madarasas</td>
<td>Teacher-centered</td>
<td>Religion oriented</td>
</tr>
<tr>
<td>British period</td>
<td>Missionary schools, matric schools, western model schools</td>
<td>Teacher-centered</td>
<td>Politically oriented</td>
</tr>
<tr>
<td>Independent India</td>
<td>Schools, colleges &amp; Universities</td>
<td>Learner-centered</td>
<td>Serving Constitutional ends</td>
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</tbody>
</table>

The tabular presentation depicted above gives you an idea of the transition in the process of teaching through the Vedic ages to the present times. In order to present a little more information with reference to the historical perspective, let us now see how the process of teaching took place at various times.

During the Vedic period teaching was verbal as writing material was not available in those days. This necessitated the verbal preservation and verbal presentation of the material to be taught and learnt. There was ideal teacher-pupil relation in the Gurukula, with the teacher acting as almost the father of the pupil, and the pupil like a son. The Guru developed qualities in the pupil so as to take him to greater heights-than himself.

During the Buddhist period though writing material was available, writing was not common. Therefore, teaching was mostly verbal. Education was mainly to spread the Buddhist religion and teaching was imparted to monks at the Monasteries and Viharas.
Education during the Muslim period was organised in Maktabs and Madarasas mainly to spread the Islam religion. To a certain extent, military education too was imparted. Corporal punishment in educational institutions made its appearance in this period. There was no ideal relationship between the teacher and the taught, as the teacher did not occupy the position that he enjoyed during the Vedic and the Buddhist period.

We find that the British at first were apprehensive about providing education to the masses of Indians. Therefore, they educated the higher classes alone, expecting the 'Downward Filtration Theory' to materialize. According to this theory, the British government ruling India, anticipated education among this class would gradually permeate downward to the masses from above. Thus, education during the British period was politically motivated. Teaching in the mission schools and European model schools was teacher-centered.

The major changes that you will see in the educational scenario after the British rule is that, education in the schools, colleges and Universities became need based, from the point of view of the nation, as well as the pupils. Education catered to the Constitutional requirements. English, as well as the national and regional languages are given prominence. The scene gradually has improved with the recommendations of the various Education Commissions being implemented so as to enhance the quality of education.

Now, after having gone through the short description of the educational scenario and teaching process right from the Vedic to the present days, you can compare the same and while doing so, you will find a hierarchy with reference to the teaching process.

'Check Your Progress' -1

1. How does H. C. Morrison define teaching?
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--------------------------------------------------------------------------------------------
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2. Into what components can the act of teaching be broadly classified?
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--------------------------------------------------------------------------------------------

3. Name the three levels of teacher behaviors as put forth by N. K. Jangira and Ajith Singh.
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4. Why was the teaching verbal during the Vedic times?

5. What major difference do you find in the teaching processes between the British period and the present India?

6. According to Sri Aurobindo, what is the role of a teacher?

1.3.2 Teaching as a Complex Task

Now that you are familiar with the meaning of Teaching, let us now analyse the task of teaching so as to get to know what exactly the task of teaching comprises of. Such an analysis will reveal that the process of teaching can be viewed from various angles, with respect to the activities and the elements involved in it.

Teaching results in learning. This 'teaching behaviour' when analysed will explain the concepts of teaching and learning. The following components involved in the teaching task will reveal to you that teaching is a complex task.

Teaching is a system of activities: You certainly will agree that Teaching is not just one activity but a series of logical activities like saying, writing, explaining, demonstrating, asking questions, defining, describing, classifying, answering, reacting, directing, giving pauses, praising, encouraging, and rebuking. These specific activities go into making the teaching activity.

Teaching is an interaction of elements: We know that teaching is a process that involves the elements, namely the teacher, the subject and the learner. Of the three mentioned, the teacher and the pupil being characteristically social, the entire process of teaching becomes social with the intention of bringing about learning.

Teaching is a constant shaping-up process: We have in the preceding paragraph reasoned out that teaching is an interaction of elements. This being so, there is every...
possibility that this process of teaching has every scope of improvement with experience and efforts on the part of the teacher.

**Teaching is goal-oriented:** Teaching is always with a purpose, the major one that of bringing about a desirable change in behaviour. You know that this change is effected due to learning. We could therefore logically conclude that teaching is goal-oriented, the goal being specific with reference to the needs and objectives of teaching-learning.

**Teaching is an influence-directed activity:** When you consider a teaching-learning activity in progress, you will find that there is an influence exerted by the teacher on the learner. It is only on very rare occasions that the learner influences the teacher. Thus you can conveniently conclude that teaching-learning activity is an influence-directional activity.

**Teaching has a logical and linguistic dimension:** If you recall the list of activities mentioned in the very first point in this topic, you will agree that all of them like defining, describing, classifying etc. are logical and at the same time possess a linguistic dimension that goes without saying. These two aspects namely logic and language are inseparable from the act of teaching. According to Smith and Meux (1962), language is the basis for all teaching interactions and without logic; a teacher cannot succeed in classifying, comparing or contrast. Teaching is thus logic and language based.

**Teaching is a family of activities:** According to the definition of Teaching by Smith B.O, teaching is a conglomeration of activities like conditioning, indoctrinating, informing, training and instructing. Thomas F Green asserted that the structure of teaching concept could be described by analysing these activities. This analysis you will find, will show you how these activities are related and how there is a gradual transition from to the next. Therefore, teaching can be said to be a family of activities that are interrelated.

**Teaching is a complex skill:** Teaching is a complex skill that has many sub-skills. These sub-skills are those that when analysed and identified reveals the complexity of the skill of teaching.

The above points very well show that teaching is a complex activity involving the various elements, activities and components mentioned therein.

**Teaching comprises of various stages:** Let us now discuss the complexity of the teaching act by relating it to the various stages of teaching. Teaching doesn't just mean entering a classroom and delivering the goods there. In order to do so efficiently, calls for a considerable amount of planning. After planning, this has to be executed carefully in the classroom in a systematic manner. Once this is done, the whole process has to be evaluated as to the effectiveness by relating it to the achievement of the objectives of teaching.
Based on the procedure mentioned above, we can divide teaching into three sequential steps corresponding to the stages of teaching. These phases of teaching are namely the pre-active phase of teaching, interactive phase of teaching and the post-active phase of teaching.

![Diagram showing three phases of teaching: Pre-Active Phase (Planning Stage), Interactive Phase (Implementation Stage), Post-Active Phase (Evaluation Stage)]

Let us now discuss each phase in detail.

**Pre-Active Phase:** As mentioned in the previous paragraph, teaching has to be done only after a careful planning so as to perform the task smoothly and successfully. This particular stage involves two major steps, namely,

(a) Establishment of objectives or goals
(b) Deciding ways to achieve these objectives or goals.

(a) **Establishment of objectives or goals:** In planning a lesson, the very first step should be framing of objectives related to the topic that has to be taught. With reference to a period of instruction, the specific instructional objectives are to be written in behavioral terms.

(b) **Deciding ways to achieve these objectives:** As the teacher has already identified the specific objectives to be achieved with reference to the topic to be dealt with, the next move is to decide how these specific objectives are to be achieved. This should be done keeping in mind the topic or content to be taught, as this is content specific. All topics cannot be dealt with in a uniform manner. Planning is done for deciding the following aspects:

i) Learning experiences to be given
ii) Teaching approach to be followed
iii) What maxims/principles can be followed?
iv) Teaching aids to be used
v) Time taken to teach the particular topic
vi) Management of the classroom
vii) Tools to be used for evaluation

**Interactive Phase:** Having planned the teaching in the first phase, in this second phase, the teacher executes the plan. This is nothing but the actual teaching. For the successful implementation and achievement of the objectives framed in the first phase, the
teaching should proceed in an interactive manner. Both students and teachers are involved in this process. This improves the quality of teaching. The activities that take place in this phase can be listed as follows:

i) Perception
ii) Diagnosis
iii) Reaction process

Let us now see what these exactly mean.

i) **Perception:** The aspect of perception relates both to the teacher as well as the students. As for the teacher, he/she has to perceive the classroom atmosphere, preplanning, abilities in interacting with the particular group. The students on their part have to perceive these aspects of the ability of the teacher, personality characteristics and behaviour of the teacher from the point of view of a desirable interaction between them and the teacher.

ii) **Diagnosis:** It is the teacher's concern to diagnose the abilities of the pupils, their academic background, their intelligence, their interests and aptitude. This can be done by questioning or by accessing their performance by providing opportunities to do so. The students access their own abilities, interests, aptitude and behaviour performance of their responses through verbal or non-verbal interaction.

iii) **Reaction process:** Classroom teaching involves continuous action-reaction between teacher and pupils. The action of the teacher decides the reaction of the pupils. For this to be performed successfully so as to result in realisation of the specific objectives, the teacher has to give the proper stimuli, reinforcement and feedback. The teacher should also adopt strategies to suit the needs of the pupils and the specific objectives to be realized. When the teacher does this, a proper reaction can be expected from the pupils in response to the stimuli and teaching techniques used by the teacher.

Thus, the interaction phase of teaching involves the effective interaction between teachers and pupils in an appropriate classroom atmosphere, wherein, the teacher provides suitable activities for the students.

**Post-active Phase:** As mentioned earlier, this phase deals with the evaluation activities. First and foremost, it attempts to measure the desirable change in behaviour in the pupils resulting in the realisation of the specific instructional objectives. Now let us see what the ways of testing this achievement. The following are the general devices adopted- Tests, Quiz, Oral Questions, Structured or Unstructured situations and Behavioural Situation. The devices are to be selected appropriately so that they project the extent of improvement in the students.
The advantages of this evaluation are many and may be listed as follows:

- Helping the teacher to decide the suitability of the specific instructional objective and the resulted extent of achievement of the same. This helps the teacher to weigh the strengths and weaknesses.
- Helps the teacher in evaluating the organisation of the content and the method adopted to teach the same.
- In evaluating how suitable the teaching aids, teaching strategies adopted have been, and how the same can be altered for further improvement.
- In accessing the classroom environment, the activities and the learning experiences given to students so that necessary changes can be brought about to make teaching more effective and result oriented.

The teaching task is thus composed of various phases that involve a variety of activities, approaches and techniques, all of which go into making the task of teaching a very complex one.

'Check Your Progress' - 2

1. List four logical activities that form part of the teaching activity.

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2. What activities according to Smith B.O. form the concept of Teaching?

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3. Into what phases can the teaching task be divided?

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4. What does each stage of the task involve?

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5. What are the major steps in the Pre-active phase?

6. What are the aspects to be decided while planning?

7. What activities are observed in the Interactive phase?

8. What does the teacher diagnose in the pupils?

9. What brings about effectiveness in the reaction process?

10. Give two advantages of the evaluation in the post-active phase.

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### 1.4 Let Us Sum up

- Teaching is a system of action which has a goal.
● Teaching takes place in a situation that comprises of both controllable and uncontrollable factors.
● Teaching increases the "action capacity" of the taught.
● Teaching facilitates the learner to learn by providing him the right environment, guiding the learner.
● Asking questions as well as encouraging the learner to ask questions and thus help him discover things for himself.
● The teacher plays the role of a facilitator, facilitating the learner to learn by himself.
● Teaching has invariably been teacher-centered or subject-centered prior to independence, it became learner-centered or activity-centered long after India got independence.
● Teaching is a complex task, comprising connected activities such as, saying, writing, explaining, describing, demonstrating, praising, rebuking etc.
● Teaching is the interaction among the three elements namely the teacher, the subject and the taught.
● Teaching is a constant shaping-up process that improves with the efforts of the teacher.
● Teaching is an influence-directed activity, the influence being uni-directional as it is generally the teacher who influences the learner and very rarely vice-versa.
● Teaching according to Smith B. O. is a conglomeration of activities like conditioning, indoctrinating, informing, training and instructing.

1.5 Answers to Check your Progress

'Check Your Progress' - 1

1. "An intimate contact between a more mature personality and a less mature one which is designed to further the education of the latter."
2. (a) Activities undertaken while teaching
   (b) Objectives to be achieved through these activities.
3. Level 1-Component Teaching Skills
   Level 2 - Component Teaching Behaviours
   Level 3 - Atomistic Teaching Behaviours
4. Teaching during the Vedic times was verbal and memory dependent as writing material was not available in those days.
5. During the British period teaching was teacher-centered whereas in the post independent India it is pupil-centered.

'Check Your Progress' - 2

1. Defining, explaining, classifying and comparing.
2. Conditioning, indoctrinating, informing, training and instructing.
3. Pre-active, Interactive and Post-active phases.
4. Pre-active phase involves planning, Interactive phase involves implementation and Post-interactive phase involves evaluation.
5. (a) Establishment of objectives or goals (b) Ways of achieving these objectives or goals.
6. Learning experiences, teaching approach, maxims to be followed, teaching aids to be used, time taken to teach, class-room management, tools for evaluation.

1. Perception, Diagnosis and Reaction process.
2. Abilities, academic background, intelligence, interests and aptitude.
3. The teacher giving proper stimuli, reinforcement and feedback.
4. Evaluation of the organisation of content, suitability of the teaching aids. (or any two among those given).

1.6 Unit - End Exercises

1. Discuss the changing processes of teaching in India from a historical point of view.
2. Explain how Teaching is a complex task.

1.7 References

UNIT 2 □ MICRO SKILLS OF TEACHING

Structure

2.1 Introduction
2.2 Objectives
2.3 Micro Skills of Teaching
   2.3.1 Concept
   2.3.2 Importance
2.4 Acquisition of Micro Skills - Process
2.5 Let Us Sum Up
2.6 Answers to 'Check Your Progress'
2.7 Unit-End Exercises
2.8 References

2.1 Introduction

You have by now come to terms with the fact that teaching is a complex task, after having gone through the previous unit. In the current unit, we are going to find out why teaching is a complex skill. For this, we need to know what the sub-skills of teaching are, and how these sub-skills when individually acquired and practiced, integrate to make up the Skill of Teaching.

The technology of practising these skills originated at Stanford University in 1961 as an experimental research project, but the name 'Micro Teaching' was coined in 1963. In India, it started in the early '70s.

2.2 Objectives

After working though this unit, you will be able to:

- Trace the field, which was the source for this practice for gaining experience in teaching practice
- Reason out why the skill of teaching is a complex skill
- Describe the concept of "micro-teaching"
2.3 Micro-Skills of Teaching

The skill of teaching when analysed is found to comprise of various sub-skills. Take for example a classroom teacher who is taking a lesson. You will observe that during the teaching process, to begin with, the teacher resorts to introducing the lesson / topic and then goes about explaining the concept / topic. In order to make the comprehension of abstract concepts easy, the teacher gives examples of the phenomenon observed in real life situations. Then to make sure that they have understood, the teacher evaluates by questioning or using some other device.

In the previous paragraph you will have noticed at least three or four sub-skills that the teaching skill is made up of. They are the skills of introducing a lesson, explaining, giving examples, asking questions. There are more of these skills. You will agree that these individual skills are very essential for a teacher. Such skills are therefore called the core-teaching skills. It is essential that any teacher, irrespective of the subject that he/she teaches, needs to possess these basic sub-skills. These individual skills are called micro-skills of teaching.

2.3.1 Concept

In the paragraph 2.3, you were introduced to a few sub-skills of Teaching and you came to know that these skills are very essential to a teacher, in order to make teaching result-oriented and effective. This being so, each of these skills is to be individually acquired and developed. These skills thus individually developed should be integrated into the macro skill of Teaching. Therefore, it is but reasonable to refer to these sub-skills as the "micro-skills" that make up the "macro" Teaching skill.

These micro-skills are developed in the teacher / teacher-trainee by a 'safe-practice' technique. This practice enables the teacher-trainee to gain confidence, after mastering each micro-skill individually. It also helps an experienced teacher in honing his /her skills and consistently improves the teaching skill. This technique that equally helps a teacher-trainee as well as the experienced teacher is called "micro-teaching".
You will be surprised to know that the strategy of this practice i.e. the "micro-teaching" has been adopted from the "moot court" arrangement made available to the law student, and the "cadaver" experience, experienced by the medical student. This was also done in the training of pilots, who had several 'rehearsals' of flying, before actually starting to fly commercially.

Let us now get to know the meaning of the concept of micro-teaching. The words 'micro' and 'macro', as you know, denote 'small' and 'large', respectively. Thus 'micro-teaching' may be defined as a 'scaled-down teaching encounter' that helps a trainee in practising specific instructional 'micro-skills', (one skill at a time) taking a very limited content, (a single topic) with the class size of about five to ten pupils, practising for about five to seven minutes at a time. You would have noticed that all the components of the teaching scenario are reduced from the real classroom-teaching situation. This justifies the nomenclature, 'micro-teaching'. The concept of micro-teaching implies a controlled practice in a simplified setting with a focus on a specific skill.

'Check Your Progress'- 1
1. What are micro-skills?

2. From where is the strategy used in the practice of micro-skills adopted?

2.3.2 Importance

As you are in-service teachers, you will remember the very first day of teaching. Recall that first experience and you will admit that you had been a little nervous of facing a class of 40 to 60 pupils. It was to a considerable extent a complex situation interacting with such a large group, with 80 to 120 pairs of eyes constantly watching every move of yours. This would have put you on guard and made you think twice before you made any move, or utter any word. Of course, gradually you would have got used to this. Now take the case of a trainee who is just out of college and joined the training programme. When the time comes for him/her to face the students during the teaching practice session, he/she,
unlike you with no experience of teaching, becomes nervous to face the class. The practice of micro-skills of teaching helps both, the experienced teacher as well as the pre-service teacher, as the same benefits them.

In paragraph 2.3.1 you have read that the practice of micro-skills of teaching is "scaled-down" in the aspects of (a) the number of skills - one at a time (b) scope - very small content (c) duration of practice - 5 to 7 minutes (d) number of students - 5 to 10. As a result the trainee feels more confident. Moreover, the micro-skills being practiced individually, helps the trainee to master each one of them with repeated practice, during the micro-teaching sessions; and integrate them. As for experienced teachers, you will agree that it them to confidently impart new information and ideas in their concerned subject. They are made competent and capable enough to face the challenges in their day-to-day teaching.

Micro-teaching is an important technique that helps the trainee to master the components of the complicated task of teaching, before he attempts to perform effectively to teach at the macro-level.

'Check your progress' - 2

1. How does micro-teaching help the pre-service trainee?

2. How does micro-teaching help the experienced teacher?

2.4 Acquisition of Micro-Skills-Process

We have repeatedly referred to the "micro skills of Teaching". What are these "micro skills" and how are they acquired?

Teaching as already mentioned is a complex skill. This complex is split up into its sub-skills. It does not mean that they are split; but that certain sub-skills are identified in it for the convenience of practising each one individually. Such sub-skills, called micro-skills of
teaching, after being individually practiced and mastered are integrated into the complex skill of teaching.

An important aspect of micro-skills that I would like to mention here, is that, irrespective of the subject handled by any teacher, or any topic, teaching skill has in it certain very important sub-skills which is a must for any teacher. Such sub-skills/micro skills are called the core-teaching skills. A list of such skills may exceed twenty. But from these a few major sub-skills are practices by the process called "micro teaching", which you have already been introduced to in 2.3.1.

Let us now see what this process of micro-teaching is all about. According to J. C. Cliff and others, the process of micro-teaching has three phases: (1) the knowledge acquisition phase, (2) the skill acquisition phase, and (3) the skill transfer phase.

1. **The knowledge acquisition phase**: Here the practitioner is acquainted with the particular micro-skill. This can be done in one of the following ways or a combination of them.
   a) Through reading material
   b) A live demonstration of the micro-skill by an expert
   c) A video-tape of the demonstration of the skill

   In the live as well as the videotaped of the demonstration of the skill, the practitioner has a model whom he emulates. The practitioner therefore reads, observes or views as the case may be. This helps him to acquire the knowledge about how to practice the skill.

2. **Skill acquisition phase**: During this phase, the practitioner first plans a micro-skill and manipulates the model, in order to practice the particular skill. For this, first of all, the 'setting' for the micro-teaching has to be done wherein the size of the micro-class should be decided. This could range between 5 - 10 students. In the micro-teaching setting, the students are the practising individuals of the peer group, and not the real students. Thus micro-teaching could be referred to as 'micro-simulation'. The next point to be considered is the duration of the micro lesson, which generally extends from 5 - 7 minutes. The 'setting' thus taken care of, the feedback is the next point of consideration. This aspect can be taken care of in various ways; the most economic and practical way of doing this is to provide observation schedule sheets to the peer group and the teacher educator, who record their comments on these sheets. Once the practitioner has performed the skill, these comments are provided to him/her as the feedback. On the basis of this feedback, the practitioner re-plans his/her micro-lesson for re-teaching.
These activities of plan, teach, feedback, re-plan, re-teach and re-feedback go into forming the cycle of micro-teaching.

3. **Skill transfer phase:** In the third phase of the micro-teaching programme, called the skill transfer phase, the practitioner who has till now practiced the individual micro-skills is now set to transfer the acquisition of these to a wider classroom, wherein he/she faces a larger group of students, for a longer duration (15-20) and deals with a larger content. This phase calls for the 'integration' of two or more skills. The combination depends on the objectives to be realized. Such practice sessions repeated twice or thrice helps in the 'skill transfer' form the micro-teaching to real classroom macro teaching.

J. C. Clift and others have represented the process in the following manner:

1. **Knowledge acquisition Phase**

   | Observe Demonstration of skill | Analyse and Discuss Demonstration |

2. **Skill acquisition phase**

   | Prepare Micro-Skill Lesson | Practice Performance |

3. **Transfer phase**

   | Transfer of Skill to actual teaching situation |

Now, having seen the three phases, let us look into the steps that make up the three phases.

1. **Orientation of the trainees:** In this step, the trainees are given information with respect to the concept of micro-teaching, significance of using micro-teaching, procedures of micro-teaching, setting forth the adoption of the same for classroom teaching.

2. **Discussion of teaching skills:** This step comprises the following:

   (a) Analysis of the component teaching skills.

   (b) Discussion of the role of these in teaching.

   (c) Discussion of the components of the skill.
3. **Selection of a particular skill:** Trainees are given the necessary knowledge about how to observe a model of demonstration of the selected skill.

4. **Presentation of the model of a particular skill:** This can be done in any one of the following ways or using a combination of these:
   
   (a) Videotaped demonstration of a model lesson
   
   (b) Written handbooks pertaining to the particular skill
   
   (c) Listening to an audiotape of the skill
   
   (d) Live demonstration of the skill by an expert

5. **Observation of the model lesson:** The trainees are helped to observe intently the model lesson with the help of an observation schedule of the particular skill.

6. **Critical Appraisal:** Trainees are made to give a critical appraisal of the model lesson.

7. **Preparation of the micro-lesson plan:** The teacher educator helps the trainees in writing the micro-lesson plan for the selected skill, with reference to the behaviours therein that are the components of the particular skill.

8. **Creation of a Micro-teaching setting:** The NCERT gives the following aspects required for the setting up of a Micro-teaching session:

   a) Number of pupils - 5 to 10
   
   b) Type of pupils - Real pupils or peers
   
   c) Type of supervisor - Teacher educators and peers
   
   d) Time duration for a micro lesson - 6 minutes
   
   e) Time duration for a micro lesson cycle-36 minutes

   This is divided as follows:

   Teach session - 6 minutes

   Feedback session - 6 minutes

   Re-plan session - 12 minutes

9. **Practising the skill:** Here, under the teach session, the trainee teaches the lesson as per the micro lesson plan, for 6 minutes to a group of 5 - 10 students; real or peers. The peers and teacher educator supervise this. It may also be audio-taped and / or video-taped for a more effective feedback to be provided to the trainee.
10. **Providing feedback:** Immediately after the teach session, the trainee is given the feedback by the teacher educators and peers. If the lesson had been recorded on a audio/video tape, the same is also played back for more effective feedback.

11. **Re-plan session:** Based on the feedback provided, the trainee re-plans his micro-lesson plan, strengthening the strong points and avoiding the weak ones. For this he is given 12 minutes.

12. **Re-teach session:** On the basis of the re-planned lesson, the trainee teaches for 6 minutes.

13. **Re-feedback session:** Once again feedback is provided as earlier by the peers, teacher educator, audio and / or video playback of the recording.

14. **Integration of teaching skills:** Having practiced the individual skills and acquiring a considerable degree of mastery over the same, these are now integrated and used in the real teaching situation in a classroom.

A mention has to be made here about the importance of the video / audiotape used as a tool for feedback. C. C. Wood says that the videotape helps the trainee to acquire a thorough awareness of his teaching behaviour and so this is a very useful instrument in the Micro-teaching technique. Moreover, sometimes the observers miss out on an important aspect of behaviour, while noting down in the observation schedule.

**Importance of Micro-teaching Technique:**

1. **Micro-elements:** Micro-teaching is a technique that helps the trainee to master the components of the complicated task of teaching, before he attempts to perform effectively at the macro-level.

2. **Identification of different teaching skills:** The various skills can be identified and classified under three heads and independently practiced. These three heads and the skills contained within are:

   a) **Pre-instructional skills:** This involves writing of instructional objectives, sequencing knowledge to be presented sequentially so as to realize specific objectives, proper organisation of content, selection of teaching aids, activities etc.

   b) **Instructional skills:** These that comprise the actual class-room teaching are-skill- of introducing lesson, explaining, illustrating with examples, questioning, probing questions, recognising attending behaviour, reinforcing pupil participation etc.

   c) **Post-instructional skills:** Skills of writing test items for evaluation, interpreting pupils' performance in the test, planning remedial measures etc.
3. **The feedback element:** Micro-teaching technique provides a valuable system of immediate feedback that is given by the supervisor. Along with this oral feedback, there is also the provision for:

   a) Observation schedule filled by the peer group
   b) Audio-tape recording which records the verbal interaction
   c) Videotape recording, which provides a more accurate feedback of the classroom activities of verbal, non-verbal and interactive patterns of the trainee.

4. **Safe Practice:** As this Micro-teaching technique is performed under simulated conditions, it helps the trainee to overcome any inhibition, anxiety or nervousness.

5. **Teaching 'Models':** The live demonstration or the film viewed by the trainee on the particular skill, provide 'model' as guide, which the trainee to follow the same and gradually develop his own style.

**Advantages of Micro Teaching:**

Various researchers have advocated micro-teaching strategy as a useful training strategy for teacher trainees due to the following reasons:

1. Provides a scope for practising one specific skill at a time.
2. Effective for modification of teacher behaviour.
3. The teacher trainee can focus his attention on clearly defined aspects of behaviour.
4. Lessens the complexities of normal classroom teaching due to the scaled down aspects in teaching.
5. Useful in improving teaching efficiency in pre-service as well as in-service teacher education programmes.
6. Offers individualized training for trainees by giving opportunity for progressing at his own rate, depending on his ability.
7. Can be performed in simulated conditions, thus reducing the anxiety factor for the trainee.
8. The patterns of classroom interaction and communication between teacher and pupil can be objectively studied.
9. Allows for various strategies of immediate feedback for better preparation for re-teach and improvement.
Limitations:

In spite of the advantages that are listed above, the technique of micro-teaching is not without limitations. These can be listed as follows:

1. Teacher educators need to undergo special training in micro-teaching before helping trainees to practice them.
2. There is administrative difficulty as no school will allow only five to ten pupils sent for practising micro lesson.
3. Sufficient literature on micro-teaching is not yet available in all languages.
4. Micro-teaching is not suitable for all subjects and all topics
5. Teaching cannot be practically broken down into sub-skills and these specific skills cannot be practiced in isolation as they are combined and inter-twined skills projected while teaching.
6. Teaching is not a conglomeration or summation of specific skills.
7. When done in simulated conditions, micro-teaching has its own disadvantages, as peer group trainees cannot effectively play the role of school pupils.
8. As it is conducted under controlled environment, it is totally different from real classroom situations.
9. Micro-teaching technique applies only to demonstrable, observable skills and not to skills such as decision-making, preparing audio-visual aids, maintaining students' records, etc.

'Check Your Progress' - 3

1. What are the three phases of the process of micro-teaching?

2. How does a trainee acquire the knowledge of the micro-skill?
3. Why is micro-teaching referred to as micro-simulation?

- The sub-skills of the complex skill of teaching are called the micro-skills of teaching.
- The 'safe practice' technique that enables a teacher-trainee to gain confidence by mastering individual skills had its origin in fields like medicine, defense and law.
- Micro-teaching is 'scaled-clown teaching encounter' that helps in practising specific instructional micro-skills.
- The aspects of 'scaling-down' are with reference to the concept (very little), teaching time (5-7 minutes), number of skills (one at a time), number of students (5-10).
- The concept of micro-teaching implies a controlled practice in a simplified setting with the focus on a specific skill.
- The practice of micro-teaching helps the pre-service trainee by putting him/her at ease during teaching, as the sub-skills mastered individually and integrated, helps in gaining confidence to face students.
- It helps the in-service teachers to confidently impart new information and ideas in their concerned subject, making them competent and capable enough to face the challenges of classroom teaching.
- The sub-skills of teaching that are essential in a teacher, irrespective of the subject, are called the 'core teaching skills'.

4. What steps comprise the steps of the cycle of micro-teaching?

- Let Us Sum Up

  - The sub-skills of the complex skill of teaching are called the micro-skills of teaching.
  - The 'safe practice' technique that enables a teacher-trainee to gain confidence by mastering individual skills had its origin in fields like medicine, defense and law.
  - Micro-teaching is 'scaled-clown teaching encounter' that helps in practising specific instructional micro-skills.
  - The aspects of 'scaling-down' are with reference to the concept (very little), teaching time (5-7 minutes), number of skills (one at a time), number of students (5-10).
  - The concept of micro-teaching implies a controlled practice in a simplified setting with the focus on a specific skill.
  - The practice of micro-teaching helps the pre-service trainee by putting him/her at ease during teaching, as the sub-skills mastered individually and integrated, helps in gaining confidence to face students.
  - It helps the in-service teachers to confidently impart new information and ideas in their concerned subject, making them competent and capable enough to face the challenges of classroom teaching.
  - The sub-skills of teaching that are essential in a teacher, irrespective of the subject, are called the 'core teaching skills'.
The three phases of micro-teaching process according to J. C. Cliff and others are: The knowledge acquisition phase
the skill acquisition phase
The skill transfer phase

The knowledge acquisition phase provides a model by way of an expert giving a demonstration, videotape showing the demonstration of the skill or just some reading material regarding the particular skill.

In the skill acquisition phase, the practitioner manipulates the model in order to practice the individual skill.

Micro-teaching is also called 'micro simulation' because the practice setting is simulated with the peer group individuals among the practitioners, acting as students.

The cycle of micro-teaching consists of six steps. They are - Plan - Teach - Feedback - Re-plan - Re-teach - Re-feedback.

In the third phase of the micro-teaching i.e., the skill transfer phase, the practitioner faces a larger group for a longer duration and deals with a larger content.

In this phase, there is also an integration of two or more micro-skills, which when practiced two or three times helps in the skill transfer from micro to macro teaching in real classrooms.

2.6 Answers to ‘Check Your Progress’

'Check Your Progress' -1
1. The components of skills of teaching are called micro-skills
2. This strategy has been adopted from the fields of law, medicine and training of pilots.

'Check Your Progress' - 2
1. As the micro-skills of teaching are practiced repeatedly till they are mastered, it helps the pre-service teacher trainee to integrate them in the classroom teaching
2. It helps the in-service teacher in facing the challenges of teaching with confidence and competence.

'Check Your Progress' - 3
1. The three phases of the process of micro-teaching are
   a) Knowledge acquisition phase
b) Skill acquisition phase
c) Skill transfer phase

2. The trainee acquires the knowledge of the micro skills through
   a) Reading material
   b) Live demonstration by an expert teacher
   c) Videotape showing the demonstration by a model

3. In the micro-teaching setting, instead of real students, the practitioner has his/her own peer group trainees as the students & so it is also called 'micro simulation'

4. Plan - Teach - Feedback - Re-plan - Re-teach - Re-feedback

### 2.7 Unit - End Exercises

1. What is meant by micro-skills of teaching? Explain the concept and importance of the same.

2. Explain the process of the acquisition of the micro-skills. How does this help the pre-service as well as the in-service teachers?

### 2.8 References


UNIT 3 □ MICRO SKILLS-DESCRIPTION AND COMPONENTS

Structure

3.1 Introduction
3.2 Objectives
3.3 Skill of Introducing a Lesson
3.4 Skill of Explaining
3.5 Skill of Questioning
3.6 Skill of Illustrating with Examples
3.7 Skill of Using Blackboard
3.8 Skill of Stimulus Variation
3.9 Skill of Recognising Attending Behaviour
3.10 Skill of Achieving Closure
3.11 Let Us Sum Up
3.12 Answers to Check Your Progress
3.13 Unit-End Exercises
3.14 References

3.1 Introduction

In Unit 2 we have discussed the meaning of Micro-skills of Teaching, its importance and the process through the technique of Micro-teaching. In this Unit, we will be discussing a few specific skills, their meaning, components, the principles underlying and their development.

The materials required for implementing the process can be listed as follows:

- Video tape of the particular skill or a handbook containing the detailed description; components of the skill
- Observation schedule for the supervisor and also for the peer group trainees
3.2 Objectives

After studying this unit, you will be able to:

- List out the micro skills in the teaching task.
- Identify the components of the skill of introducing a lesson.
- Explain the desirable behaviours in the skill of introducing a lesson.
- Explain the undesirable behaviours in the skill of introducing a lesson.
- Explain the desirable behaviours in the skill of explaining.
- Explain the undesirable behaviours in the skill of explaining.
- Describe the components of the skill of using the blackboard.
- Recognize the importance of the skill of stimulus variation.
- Describe the skill of recognizing attending behaviour.
- Explain the skill of achieving closure with reference to the components of the skill.

3.3 Skill of Introducing a Lesson

You are experienced teachers, who will be used to the protocol of introducing a lesson before actually getting to teach the same. Now, take the case of a teacher who does this by himself or herself, i.e., introducing the lesson by uttering a few introductory statements and then starting to teach the lesson. Consider another instance where another teacher introduces the topic by getting the students involved in it, asking them a few questions, to understand how much they know about it and then finding out where they stand with reference to the topic. This also gets them interested in the topic by enticing their curiosity to know more about it. After this, the teacher starts teaching the lesson. I am sure you would agree that the second illustration is a more effective way of introducing the lesson, as the students are ready to take what new information is going to be imparted.

This Skill of Introducing a lesson can be described with reference to the components within, which are as follows:

The two desirable behaviours are as follows:

i) Using previous knowledge
ii) Using appropriate devices

The two undesirable behaviours are as follows:

i) Lacking in Continuity
ii) Uttering irrelevant statements or questions
Let us now go into the details of each of the behaviour.

Desirable Behaviour

i) Using previous knowledge: Any new information given, certainly finds a foundation in the mind of the receiving learner. It is the teacher who has to gauge what previous knowledge the learner possesses with reference to the present knowledge given. The new knowledge when relevantly linked with the previous knowledge finds continuity and the old and new knowledge gets restructured to form the previous knowledge for the next lesson on the same topic. Thus, using the previous knowledge of the learners while introducing the new lesson helps in bringing the relevant previous knowledge to the conscious level of the learner.

Previous knowledge of the learners can be elicited in many ways. You may refer to what they had learnt in the previous classes, or may find out what they know about the current topics in connection with the new lesson. You may also create situations and refer to the relevant knowledge.

ii) Using appropriate devices: The technique used to introduce a lesson is called the device. Devices can be of various kinds like:

- Giving examples
- Asking questions
- Narrating / Describing
- Telling a story
- Dramatisation
- Using Audio-Visual aids
- Demonstration.

The selection of devices depends on its relevance to the topic. While selecting the device, the criteria with reference to the learners, to be borne in mind are:

- Their interest
- The age group
- The grade level
- The maturity level

Undesirable Behaviour:

i) Lack in continuity: While introducing a lesson, you have to bear in mind that the statements uttered have a sequence in the ideas or information given. One statement should
logically lead to another and so on and so forth, so that there is total relation in the series of statements uttered.

ii) Uttering irrelevant statements/questions: While introducing a lesson, care should be taken to see that the statements uttered or the questions asked are in relation to the topic of the lesson. Unless and until this is taken care of, the statements uttered, though sequential, will only confuse the students.

'Check Your Progress' -1

1. What are the desirable behaviours with reference to the Skill of Introducing a lesson?
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   --------------------------------------------------------------------------------------------
   --------------------------------------------------------------------------------------------

2. What are the undesirable behaviours with reference to the Skill of Introducing a lesson?
   --------------------------------------------------------------------------------------------
   --------------------------------------------------------------------------------------------
   --------------------------------------------------------------------------------------------

3. What is a 'device' with reference to the Skill of Introducing a lesson?
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   --------------------------------------------------------------------------------------------
   --------------------------------------------------------------------------------------------

4. Give two examples of 'devices'.
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5. What are the criteria to be borne in mind while selecting 'devices'?
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3.4 Skill of Explaining

Explaining, generally, is the description of 'what' something is, or giving reasons as to 'how' an event happened or 'why' it happened. It could also be with reference to an action, condition or phenomenon. This is done to bring clarity about the same. Explanation in a class is the statements made by the teacher to bring about clarity of the concept taught, the idea or information given; so as to make the students understand it well. Such an explanation is effective.

Now that you know what 'explaining' is, let us see how this can be effectively practised in the classroom teaching scenario. Here too, as in the Skill of Introducing, there are techniques used to explain effectively. Some of these are:

- Question - Answer
- Using Audio - Visual aids
- Using Inter-related statements

Here also you would find both desirable and undesirable behaviours. The desirable behaviours are:

- Using explaining links
- Using beginning and concluding statements
- Testing pupils' understanding

The undesirable behaviours are:

- Giving irrelevant statements
- Lacking continuity in statements
- Using inappropriate vocabulary
- Lacking in fluency

Let us now see each component of the desirable and undesirable behaviours in more detail.

Desirable Behaviour:

The desirable behaviours to be followed while practising the Skill of Explaining are:

1. Using explaining links: This is nothing but the utterance of statements using linking words or phrases during explanation. This brings about continuity in the series of
statements uttered. Examples of linking words are - 'and', 'then', 'later', 'gradually', 'therefore', etc. Such words bring about the sequence of events in a phenomenon, process or action. Examples of linking phrases are - 'whenever', as a result', as a consequence', etc.

2. **Using beginning and concluding statements:** Whenever something has to be explained, it is essential to start the explanation with a relevant beginning statement. This prepares the minds of the students as to what would follow. Having explained the idea or principle or concept, in order to conclude it, the teacher has to do so by consolidating the points explained. These statements comprise the concluding statements.

3. **Testing pupils' understanding:** As the purpose of explanation is to bring about understanding in the students about the concept, principle or event explained, the testing of this becomes a very essential part of any explanation. This can be done by putting questions at every point of interval after every sub-concept explained or after every key point explained.

**Undesirable Behaviour:**

The undesirable behaviours to be followed while practising the skill of explaining are:

1. **Giving irrelevant statements:** As the term indicates, 'irrelevant' statements not related with the topic or idea, have to be avoided. Such statements will only confuse the students and make the explanation ineffective.

2. **Lacking continuity in statements:** While explaining, if the statements uttered are not logically related to each other, it creates an obstacle in the sequential flow of statements and the idea explained suffers a setback in the understanding of the same.

3. **Using inappropriate vocabulary:** Words are the basic units of the vehicle of communication. As such, you will agree that if these basic units are not properly and judiciously used in communication, the whole process of communication becomes ineffective. Bearing this in mind, it is very essential for the teacher to use words that are suitable to the age level of the students. A major aspect of concern is the use of simple words that are easily understood. The teacher is not required to exhibit his/her proficiency in the use of high-flown language using technical jargon; but a simple language using simple words.

4. **Lacking in fluency:** A free flow of words and sentences, without any break or uneasy pauses in the middle of a sentence is what fluency means. As such, there is a break caused by a lack of free flow of thought into words. This should be avoided during explanation.

As you have now read the components of the skill of explanation, you can now see for yourself how much you have understood them by checking it yourself.
'Check Your Progress' - 2

1. What do you mean by 'explanation'?

2. What are 'devices'? Give two examples of the same.

3. What are the desirable behaviours of the Skill of Explanation?

4. What are the undesirable behaviours of the Skill of Explanation?

5. Give three examples each of linking words and linking phrases.

6. What do you mean by fluency?
3.5 Skill of Questioning

The Skill of Questioning is a very important skill that a teacher had to master. I trust you will certainly endorse this view because questioning, as you know is a part and parcel of teaching. You need to ask questions at all stages of a lesson. When introducing a lesson, you use this device to gauge the previous knowledge of the learners. While doing the lesson, you ask questions to develop the lesson and after explaining every topic you ask questions to ascertain comprehension. Questions are also framed for achieving closure of the lesson in order to develop the summary of the total instruction. Again while giving the Home Assignment, you frame questions for the students to answer the same or perform some activity. Apart from using questions at every stage of the lesson, eventually for the tests and examinations too, you need to set the question paper. All these go to prove how important the Skill of Questioning is for a teacher to master the same.

Having seen the importance of the Skill of Questioning, let us now see the components within this skill.

1. Structure of questions.
2. Delivery and distribution of questions.
3. Different levels of questions

Let us now deal with the various aspects of each component.

1. Structure: The criteria for a well structured question are-
   a) Grammatical correctness
   b) Conciseness
   c) Relevance
   d) Specificity
   e) Avoiding the use of leading questions

Let us now discuss each criterion one by one in detail.

a) Grammatical correctness: The correctness of the order of words in the question is the consideration here. If the question uttered is not grammatically correct, it has no clarity and hence students fail to understand it. Due to the confusion in their minds, they are unable to respond, as the question asked is not very meaningful. It also results in waste of time.
b) Conciseness: This refers to the optimum length of the question, which is generally short, with no unnecessary words included. The question should be direct and straightforward.

c) Relevance: A very important point of consideration with reference to the skill of questioning is the relevance of the question asked. This means that it should be with reference to the topic dealt with. The question should also contain only terms that have been explained earlier, if not, even such a question is irrelevant.

d) Specificity: This means that the question asked should be such that it will fetch only one answer that is correct. If the question asked is general in nature, it may get more than one response that could be accepted as correct, and this leads to a bit of confusion and loss of time. Moreover, the question asked should be related to only one idea.

e) Avoid the use of leading questions: Questions directly reflecting the answers or those which themselves contain the answer should be avoided.

2. Delivery and distribution of questions: After the structuring of the questions, the way these questions are delivered and distributed is now discussed. The criteria to be considered here are as follows:

1. Speed of asking questions
2. Voice
3. Pause
4. Distribution

Let us now discuss each criterion one by one in detail.

a) Speed of asking questions: The teacher should ask the question neither too slowly nor too fast. Both pave the way for ineffectiveness as students fail to comprehend.

b) Voice: This refers to the audibility and the modulation with which the question is put forth. Questions should be asked in such a way that every student in the class hears it.

c) Pause: After delivering the question in the required speed, a pause should be given for the students to understand the question, before expecting a response from them.

d) Distribution: This refers to how the question asked is distributed among the students. It should be distributed among the volunteers and non-volunteers. The same question asked could be redirected to other students to increase pupil participation. The proper distribution of questions helps in securing and sustaining pupil's attention and active involvement in the teaching-learning process.
3. Different levels of Questions: Questions can be classified into three levels, namely, Lower Order, Middle Order and Higher Order.

The lower order questions include knowledge level, middle order includes understanding and application levels of thinking and the higher order questions include analysis, synthesis and evaluation levels of thinking.

'Check Your Progress' - 3

1. At what stages of the lesson are questioning generally used?

2. What are the components of the skill of questioning?

3. What are the criteria for a well structured question?

4. What do you mean by 'conciseness'?

5. What are the three levels of questions?
3.6 Skill of Illustrating With Examples

As teachers, you would have come across situations in your classrooms wherein you found that in order to explain an abstract concept/idea/principle to your students, you had to naturally resort to giving examples. This is precisely the skill of illustrating with examples that a teacher has to acquire and master so as to bring about effective teaching.

Now what exactly is an example? An example is an observation or situation of occurrence or a concept or generalization. The skill of illustrating with examples can be defined as the selection and presentation of examples relevant to the concept/idea/principle that has to be taught to the pupils.

The components of the skill are:

1) Formulating simple examples
2) Formulating examples relevant to the concept/idea/principle
3) Formulating interesting examples
4) Using appropriate media for presenting examples
5) Using appropriate approach for presenting examples

Let us now discuss each component one by one:

1) Formulating simple examples: Simple examples are those that the students are familiar with in their day-to-day life and as such it is the previous knowledge they possess. They might have acquired this either by experience or by reading books or listening to others. The teacher should be well aware of the age, grade level and also the background of the pupils in order to give simple examples. The proof that the examples are simple is the correct responses of the students when the teacher questions them.

2) Formulating relevant examples: The examples formulated must be related to the concept being explained. This is what relevancy means. Unless the examples given are relevant, the concept or rule explained will not result in the clear understanding of the same.

3) Formulating interesting examples: An interesting example is one which arouses the curiosity of the pupils, and also sustains it. While giving such examples, the teacher has to bear in mind the chronological as well as mental age of the pupils so as to suit their level of interest.

4) Using appropriate media for presenting examples: The media here refers to the different types of teaching aids that can be utilized. These could be auditory, visual or
tactile. Appropriateness refers to the criteria of age, grade, maturity of the pupils and the topic taught. The media used could be verbal or non-verbal. Visual examples are objects, models, maps, charts, diagrams, etc. Auditory examples are telling stories, explaining events, relating incidents, etc. Tactile examples involve presenting actual objects like real flowers, leaves, etc., while teaching Botany so as to feel the texture.

5) **Using appropriate approach for presenting examples:** While teaching, the teacher generally uses two approaches, namely, the Inductive and Deductive. In the Inductive approach, the rule/concept/generalization is derived after giving a number of examples. This approach follows the maxim of going from known to unknown. In the deductive method, the approach is to state the rule/concept/generalization at first and then give examples for illustrating them. This goes from unknown to known.

In developing the skill of illustrating with examples, a combined approach is followed. The inductive approach is followed while clarifying the concept or rule. The teacher gives examples, which form part of the pupil's previous knowledge. Following these examples, the concept or rule is stated involving the pupils, thus deriving the same from the pupil's previous knowledge or experience. Then, in order to ascertain whether they have understood the rule/concept, the teacher asks them to give their own examples related to the concept/rule. Thus, a three-stage approach is followed in the Inductive - Deductive approach of illustrating with examples.

'Check Your Progress' - 4

1. What is an example?

2. Define the Skill of Illustrating with Examples.

3. What are the components of the skill? Illustrate them with examples.
4. What are simple examples?

5. What is an interesting example?

6. What are the different kinds of media used for presenting examples?

7. What is the Inductive Approach?

8. What is the Deductive Approach?

3.7 Skill of Using Blackboard

The Blackboard is the most often used visual aid by a teacher. Now, let us see what factors are to be considered by the teacher for effective use of the same.

1) Legibility of Handwriting
2) Neatness in Blackboard work
3) Appropriateness of written work on the Blackboard
Let us now go into the details of each component mentioned above.

1. Legibility of Handwriting: To make handwriting legible, certain points have to be given due consideration. These are the following:
   a) Letters to be distinct.
   b) Adequate spacing between two letters and two words.
   c) Slantness of letters closest to the vertical.
   d) Size of the letters big enough to be read by the students at the far end.
   e) Capital letters just bigger than the small letters.
   f) All capital letters of same size and all small letters of the same size.

2. Neatness in Blackboard work: The subcomponents of this component of the skill of using Blackboard are as follows:
   a) Straightness of the line wherein the written lines should be horizontal and parallel to the base of the Blackboard.
   b) Spacing between lines to be adequate.
   c) Avoiding over-writing so as to avoid untidiness in the Blackboard work.
   d) Focusing the relevant matter by retaining the same and erasing the irrelevant and unrelated matter so as to help pupils concentrate on the matter under focus.

3. Appropriateness of written work on the Blackboard: This component of the skill of Blackboard work is realized by keeping in mind the following considerations:
   a) Continuity in the points: By this we mean that a point should be logically related to the previous one.
   b) Brevity and simplicity: This is most relevant in the development of the Blackboard summary at the end of the lesson, when only the main points covering the whole lesson are written. The points are to be written in simple language and in a brief manner so that pupils easily recall the whole lesson.
   c) Drawing attention and focusing: While writing the Blackboard summary, important points/terms/definitions are to be focused by underlining or using a colored chalk. This helps the pupils recall them easily.
'Check Your Progress' - 5

1. List the three components of the Skill of using Blackboard.

2. How does the teacher draw attention to the main points while writing on the Blackboard?

3. What do you mean by continuity in points?

4. In which part of the lesson is the aspect of Brevity and Simplicity to be resorted to?

3.8 Skill of Stimulus Variation

Stimulus is something or anything that an individual responds to. So far as a classroom is concerned, the teacher is the main source of stimuli while imparting teaching. Now let us see to what these stimuli connected with the teacher are.

Imagine a teacher explaining something and in order to make the same effective, he/she moves to the Blackboard to write something no\yes towards the students to ask questions in order to ascertain comprehension. The teacher uses various gestures, using hands, head and facial expressions. Such behaviours that draw and sustain pupils’ attention keep changing as per the requirements of the situations. These changing movements and gestures of the teacher while teaching comprise the skill of Stimulus Variation.
Let us now see the components under this skill. The details of the various behaviours in this skill as follows:

1. **Movement:** The movements of the teacher should be such that the attention of the pupils is maintained at all times.

2. **Gestures:** These are made by the movement of the parts of the body like the head, hands and facial expressions. These can be combined with oral message too. Here too, the purpose is to direct the attention of the pupils while emphasizing something important.

3. **Change in Speech Pattern:** This is also referred to as the voice modulation. The variation in the voice shows the sudden change in stimulus and thus attracts the pupils' attention. The voice modulation expresses the anger, appreciation, disagreement, agreement, etc., that catches the attention of the students who respond accordingly.

4. **Focusing:** This could be of three types - Verbal, Gestural and Verbal-Gestural. As the terms indicate, Verbal focusing is the mode of drawing the pupils' attention by words/phrases like - "Look at this diagram", etc. Gestural focusing is the way in which the teacher draws the attention of the pupils' by gestures using head, hand and body movements, like pointing to the parts of an organ on the chart. Verbal-Gestural focusing involves words or phrases accompanied by gestures in focusing a particular item, like drawing of a diagram on the Blackboard, accompanied by the description or explanation of the same.

5. **Change in interaction styles:** The types of interaction that take place in a classroom is between teacher-student, student-teacher and student-student. By changing these interaction styles, a student's attention can be kept alive throughout the lesson.

6. **Pausing:** Pauses are a must during teaching, for, when the teacher is continuously talking or asking questions, students don't get a chance to respond. Pauses are also essential when students' attention is to be secured. Imagine a classroom where few students are talking and the teacher is not heard. But, when the teacher stops talking, students become fully aware of the silence created, thus resulting in gaining their attention towards the teacher.

7. **Change of Oral-Visual Media:** Continuing to give oral information from the beginning of a period till the end is quite boring and does not sustain the attention of the students towards the lesson taught. Therefore changing the medium from oral to visual and vice-versa would create interest in the students and also help to sustain the same. The visual medium can include demonstration, experiments, filmstrips, specimens, objects, charts, models, etc. These successfully supplement the oral information.
'Check Your Progress' - 6

1. How can you define the Skill of Stimulus Variation?

2. What are gestures?

3. What are the three types of focusing?

4. What do you mean by Gestural focusing?

5. Name the three types of interaction styles.

3.9 Skill of Recognising Attending Behaviour

You as a teacher will certainly agree that unless learning takes place, teaching is not actually performed. In order to learn what you teach, pupils should pay attention to your teaching. Now how do you recognize that they are attending? What are the behavioral aspects of the pupils that help you to recognize that they are attending? These, when recognized by the teacher enables one to conclude that the teacher has acquired the skill
of recognizing Attending Behaviour. Similarly, the teacher also has to note the Non-Attending Behaviours too. Now let us see what these Attending Behaviours and Non-Attending Behaviours are.

**Attending Behaviours:** The following behaviours of pupils go to show that they are attentive:

a) Alertness  
b) Listening with concentration  
c) Thinking and asking questions  
d) Pointing out mistakes

Now, how does a teacher recognize these behaviours? Alertness is recognized by the erect posture, with eyes fixed on the teacher. Concentration is shown by the absence of fidgeting or any activity that shows distraction.

**Non-Attending Behaviours:** The following behaviours of pupils go to show that they are non-attentive:

a) Yawning  
b) Chewing something  
c) Talking  
d) Giggling  
e) Making faces  
f) Moving restlessly  
g) Complaining  
h) Having a bored expression  
i) Late in submitting assignments  
j) Untidy work  
k) Neglecting the Home Work  
l) Looking out of the class  
m) Asking irrelevant/nonsense questions  
n) Disturbing the others
Thus the skill of recognising Attending Behaviour can be defined as the observation and diagnosis of the verbal and non-verbal cues of the pupils that help the teacher to gauge their degree of attentiveness in the classroom.

Now having learnt the Attending and Non-Attending Behaviours of the pupils, you as a teacher will have to know how you would react to these to bring about effectiveness in teaching learning. Sneha Joshi classifies such reactions into five groups, which can be called as the Five Components of the skill of recognising Attending Behaviour. These are:

1. Rewarding Attending Behaviour
2. Giving directions
3. Asking questions
4. Accepting feelings and / or ideas of the pupils
5. Using silence and non-verbal excuse

Let us now go into the details of these components one by one:

1. Rewarding Attending Behaviour: of the pupils can be done by using verbal reinforces like "good", 'well-said", "you're right", etc.

2. Give directions: like "Look at the Blackboard", "Stop talking", "Do not write while I am explaining", etc.

3. Asking questions at intervals while teaching, so that students' attention can be ascertained. Getting the correct answers from the pupils is the feedback for the teacher that they have paid attention to the teaching.

4. Accepting feelings and/or ideas of pupils: When the teacher finds a pupil putting his head down on the desk or holding his head with his hands, he may ask the reason for it and if he comes to know that the pupil has a head-ache or some such difficulty he could help him by making him comfortable. This shows that he has accepted the feelings of the pupil. Similarly, in accepting ideas of the students, when he adds some information to that which has already given by the teacher, the teacher shows that he has appreciated his attentiveness.

5. Using silence and non-verbal excuses: Imagine a classroom situation when almost all pupils are engrossed in the explanation of a difficult concept by the teacher. Only one or two students are secretly murmuring and this draws the teacher's attention. The teacher has to continue with the explanation for the sake of the majority who are eager listeners, but should also pull up the inattentive ones. Therefore he resorts to a short pause (silence) and
glares at them. This is sufficient for them to direct their attention towards the teacher. The teacher thus achieves this without disturbing the whole class.

'Check Your Progress' - 7

1. Give two examples of Attending Behaviour.
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2. How can you recognize alertness in students?
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3. Define the skill of recognising Attending Behaviour.
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4. List out the five components of the skill of recognising Attending Behaviour.
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5. What is the significance of the teacher accepting the pupils' idea?
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3.10 Skill of Achieving Closure

You have learnt that the purpose of mastering the Skill of Introducing a Lesson is to generate interest in the pupils towards the topic to be taught. Now, after having taught the lesson, you need to conclude it, isn't it? What is the purpose of this? How do you do this?
Before concluding a lesson, you, as a teacher would need to ascertain whether the objectives before teaching a lesson have been realized after the teaching. In your lesson plan, you had realized the necessity of getting to know that as you proceed with the lesson, here and there, at intervals, you need to do recapitulation so as to make sure that the teaching-learning was effective. Now when you are at the end of the lesson, you will surely want to evaluate your teaching as well as the pupils' understanding, and how successfully they have synthesized all that they have learnt into a meaningful whole.

The process of achieving closure to the lesson realizes all the above objectives. Let us now see what the components of the Skill of Achieving Closure are.

The components of the Skill of Achieving Closure are:

1) Consolidation of major points
2) Providing opportunities to pupils to apply present knowledge to various new situations
3) Linking past knowledge to present knowledge
4) Linking present knowledge to future learning

Let us now discuss one after the other in detail:

1. Consolidation of major points: During the teaching of a lesson, the teacher would have ascertained at intervals the effective assimilation of the points explained. Now towards the end of the lesson, it has to be made sure that the pupils have successfully synthesized all that they have learnt into a meaningful whole. If there are any gaps in the knowledge the teacher helps in filling in the same.

Now, how does the teacher get to know this? The usual approach to this is questioning. The teacher puts forth questions that are sequential in order of the taught points, and the pupils' response to these gives the teacher the knowledge of the effectiveness of teaching and the successful grasping of the points taught. It is also advisable to write these answers on the Blackboard, as a summary, as the questions asked are logically linked so as to get responses that are conveniently developed as the Blackboard summary.

2. Providing opportunities of pupils to apply the present knowledge to various new situations: This can be done by testing the understanding of students so that the pupils may use it in new situations. An apt example of this could be given from an English class wherein the teacher has given the meaning of strange words, use them in sentences and then ask pupils to frame sentences of their own so that it shows that they have understood their meanings well enough to use them in other situations. The testing can be
done either orally or in a written manner. Another example that could be sighted is after having taught the properties of a magnet, the teacher can then ask pupils to give instances where this is applied in daily life situation and the pupils may sight examples of the refrigerator door, or the closing of a hand bag; etc. By these responses of the pupils, the teacher can conclude the successful understanding of the topic and effective application of the same in unfamiliar situations.

3. **Linking past knowledge with present knowledge:** For a teacher, the present knowledge refers to the lesson in progress or just concluded. The past knowledge may refer to the immediately preceding lesson or the previous knowledge relevant to the present lesson that the pupils already possess. Now since the newly acquired knowledge has to be properly integrated into the previous knowledge, there should be links and these have to be perceived by the pupils. In this step, the teacher does exactly this, i.e., to see that the pupils successfully perceive the link and integrate the present knowledge with the previous knowledge. The approach used by the teacher may be illustrated with an example. Consider an instance where the teacher had just done with teaching the parts of an animal cell. The previous class had been regarding the parts of a plant cell. Now, since there are similarities and differences between the two, the teacher could ask how the structure of the animal cell differs from that of a plant cell and the features that are similar. This prompts the pupils to compare and contrast the two and thus naturally a link is established between the present knowledge and previous knowledge.

4. **Linking present knowledge with future learning:** You have already learnt that the present knowledge becomes the previous knowledge for the next lesson. Now as knowledge acquisition is a continuous process, it certainly has a link with future learning too. Generally by future learning we mean the application of the present knowledge in future situations. The major goal of education is application of the knowledge acquired and this is done by giving some home assignment. This should be such that it requires the pupil to apply the acquired knowledge in higher mental processes rather than just recalling the present-knowledge.

Therefore, the Home Assignment given should provide opportunities for the pupils to solve problems, find solutions, prepare charts, models etc., so that the acquired knowledge is applied in performing such activities.

Having seen that the components of the Skill of Achieving Closure almost summarises a lesson, you would have realized how important it is for a teacher to master this very important skill.
'Check Your Progress' - 8

1. What is the objective of achieving closure?

2. What are the components of the Skill of Achieving Closure?

3. What is the common approach used by the teacher to ascertain whether students have synthesized the learnt matter?

4. How can the teacher test the ability of the pupils to apply the present knowledge?

5. Give an example of pupils' application of the present knowledge in daily life situation.

6. How can the teacher provide opportunities for the pupils to link the present knowledge with future learning?
3.11 Let Us Sum Up

The technique of practising the micro-skills of teaching originated at Stanford University in 1961. The materials required for implementing the process are a videotape of the particular skill or a handbook containing the detailed description of the skill and the components of the skill as well as an observation schedule for the supervisor. The desirable behavioral components of the skill of introducing a lesson are using previous knowledge, using appropriate devices. The undesirable behavioral components are lacking in continuity, using irrelevant statements.

Effective explanation is achieved when the skill of explanation is mastered. The desirable behavioral components of this skill are using explaining links, using beginning and concluding statements, testing pupils' understanding. The undesirable components are giving irrelevant statements, lacking continuity in statements, using inappropriate vocabulary and lacking in fluency.

Questions play a very important role in any lesson for it is used from the beginning to the end of a lesson for the purpose of testing previous knowledge, introducing a lesson, developing a lesson, ascertaining comprehension and achieving closure. The components of the skill of questioning are structure of questions, delivery and distribution of questions and levels of questions.

There are three levels of questions-lower order questions that include knowledge level. Middle order questions that include understanding and application levels. Higher order questions that include analysis, synthesis and evaluation levels. The Skill of Illustrating with examples have the components of- formulating simple, relevant and interesting examples and using appropriate media and approach for the same.

The Skill of Using the Blackboard refers to legibility of writing, neatness and appropriateness of written work on the Blackboard. The various movements, gestures and range of the tone used by the teacher as the situation demands is referred to as the Skill of Stimulus Variation. Unless the teacher is sure that pupils are paying attention to the teaching, no teaching takes place. The behaviour of the pupils show that they are attentive or inattentive comprises the Skill of Recognising Attentive Behaviour.

The Skill of Achieving Closure is an important skill that helps the teacher to ascertain the understanding and application of the learnt matter, by applying it in new situations.
3.12 Answers to ‘Check Your Progress’

'Check Your Progress' - 1
1. Using previous knowledge, using appropriate devices.
2. Lack in continuity, uttering irrelevant statements.
3. The technique used to introduce a lesson.
4. Giving examples, asking questions. (Or any two mentioned therein).
5. Students' interest, age group, grade level and maturity level.

'Check Your Progress' - 2
1. Statements made by the teacher to bring about the clarity of the concept taught, the idea/information given so as to make the students understand it well.
2. Techniques used to explain effectively like questions and answers, using audio-visual aids.
3. Using explaining links, using beginning and concluding statements, testing pupils' understandings.
4. Giving irrelevant statements, lacking continuity in statements, using inappropriate vocabulary and lacking in fluency.
5. 'and', 'then', 'later' - words, 'as a result', 'in order that', 'whenever' - phrases
6. A free flow of words and sentences, without any abrupt break or unnecessary pauses in the middle of a sentence is what fluency mean.

'Check Your Progress' - 3
1. When introducing a lesson, when developing a lesson, to ascertain comprehension, to develop the summary of the total instruction and while giving home assignment.
2. Structure of questions, delivery and distribution of questions, levels of questions.
3. Grammatical correctness, consciences, relevance, specificity.
4. Optimum length of the question with no unnecessary words included.
5. Lower order, Middle order and Higher order questions.

'Check Your Progress' - 4
1. An observation/situation of occurrence of a concept or generalization.
2. Selection and presentation of examples relevant to the concept / idea / generalization to be taught.

3. Formulating simple examples, formulating examples relevant to the concept, formulating interesting examples, using appropriate media for presenting the examples, using appropriate approach for presenting.

4. Those that the pupils are familiar with in their day-to-day life or those acquired by reading or listening.

5. That which arouses curiosity in the pupil.

6. Auditory, Visual, Tactile, Verbal, Non verbal

7. From examples to generalisation, known to unknown, specific to general.

8. Generalisation to specific, unknown to known.

'Check Your Progress' - 5

1. (a) Legibility of Handwriting, (b) Neatness in Blackboard work, (c) Appropriateness of written work on the Blackboard.

2. By focusing the main points which are done either by underlining or using a colored chalk.

3. Points that are logically related to the preceding and following ones.

4. In the development of the Blackboard summary at the end of the lesson when only the main points covering the whole lesson are written.

'Check Your Progress' - 6

1. Changing movements and gestures of the teacher while teaching.

2. Gestures are movements made by the parts of the body like head and hands and facial expressions.

3. Verbal, Gestural and Verbal - Gestural

4. The way in which the teacher draws the attention of the pupils using movements of the parts of the body like head and hands.

5. Teacher-Student, Student-Student, Student-Teacher.

'Check Your Progress' - 7

1. Alertness, Asking questions.

2. By their erect posture and eyes fixed on the teacher.
3. Observation and diagnosis of the verbal and non-verbal cues of the pupils that helps the teacher to gauge the degree of alertness in the classroom.

4. Rewarding attending behaviour, giving direction, asking questions, Accepting feelings and/or ideas of pupils, Using silence and non-verbal cues.

5. Teacher shows that he has appreciated the pupils' attentiveness.

'Check Your Progress'- 8

1. To ascertain whether pupils have comprehended what was taught and are successful in synthesizing all they learnt into a meaningful whole.

2. Consolidation of major points by the teacher, providing opportunities for pupils to apply present knowledge to new situations, linking present knowledge to previous knowledge, linking present knowledge to future learning.

3. Questioning.

4. Oral and written tests.

5. Identifying the application of the attractive property of magnet in refrigerators and handbags.

6. By giving Home Assignments like projects, solving problems, preparing charts and models.

3.13 Unit - End Exercises

1. What are Micro-skills of Teaching? Explain the skill of introducing a lesson.

2. What do you mean by Stimulus Variation as far as classroom teaching is concerned? Explain the components of the Skill of Stimulus Variation.

3. Describe the Skill of Questioning. Discuss the importance of questioning in the Teaching Process.

3.14 References


2. Aggarwal. J. C., Principles, Methods and Techniques of Teaching
UNIT 4 □ MODELS OF TEACHING

Structure

4.1 Introduction
4.2 Objectives
4.3 Models of Teaching
   4.3.1 Concept
   4.3.2 Importance
   4.3.3 Components
4.4 Examples of Models
   4.4.1 Concept Attainment Model
   4.4.2 Inductive Thinking Model
   4.4.3 Inquiry Training Model
   4.4.4 Memorisation Model
4.5 Let Us Sum Up
4.6 Answers to 'Check Your Progress'
4.7 Unit-End Exercises
4.8 References

4.1 Introduction

In Unit I we have seen that teaching is a complex task that the teacher should prepare to handle in such a way so as to bring about learning. In this Unit, we shall see how Models of Teaching will help to bring about this effectiveness. For this you will see what the concept of Models of Teaching means and how this has been categorized into families on the basis of the particular objective each family realizes, most importantly the Information processing family, specific Models of which you will be learning in detail. The general components of Model of teaching will be discussed. Apart from this the individual Models of the information Processing family, namely the Concept Attainment Model, the Inductive Thinking Model, the Inquiry Training Model and the Memorisation Model. These being very important from a teacher's point of view, I'm sure that you will really be interested in getting to know more about these so as to improve your teaching. So then, let's now go ahead and discuss these at length.
Education is goal oriented; the broad goal being that of developing the all round personality of the learner. Thus, teaching should bring about in the individual the development of his social, intellectual and emotional development.

Teaching, is an interaction process between the teacher and the taught, needs to be done in an atmosphere that is conducive to facilitate the development of the individual in all spheres as mentioned above. This setting that is developed by the teacher for the achievement of the goals/objectives makes up the 'model' of Teaching. The pattern of teaching activity that the teacher plans in order to make the environment goal achievement oriented is called the Model of Teaching.

It would not be incorrect to say that Models of Teaching are Models of Learning. In the present day learner-centered teaching scenario, teaching is defined as facilitating the learner to learn, and this is what we have seen too, in Unit 1. The teacher plays the role of a facilitator and the outcome of instruction here results in enhancing the abilities of the learner to learn. Models of Teaching, according to Bruce Joyce and Marsha Weil, are to increase the learners' aptitude for learning.

In the following Unit we shall discuss the concept of Models of Teaching and their importance, the components of models in general. We shall also discuss a few models of teaching the knowledge of which, as a teacher is very important to us.

4.2 Objectives

After you have studied this unit, you will be able to:

- Define 'Models of Teaching'.
- Name the families of Models of Teaching.
- Describe the Models under the 'Information Processing' family.
- Identify the general components in a Model.
- Bring out the importance of Models of Teaching.
- Describe a 'Concept Attainment Model'.
- Describe the process of concept attainment through the Concept Attainment Model.
- Describe the 'Inductive Thinking Model'.
- Define 'inquiry'.
- Explain the process of inquiry training, using the 'Inquiry Training Model'.
- Describe the 'Memorization Model'.
- Describe the importance of the 'Memorization Model' in retention and recall of information.
4.3 Models of Teaching

4.3.1 Concept

K. P. Pandey interprets a model in three ways in his book, 'Modern concepts of Teaching Behaviour'. Firstly he refers to a model as an ideal quality to be emulated, as in a 'model person'. A second interpretation is that of a representation of an original, like the model of a Taj Mahal. And the third sense in which it is used is a little abstract. It has the interpretation of a 'paradigm'. In this sense, a 'model' is something that has a particular pattern, and the word 'Model' in Models of Teaching takes this meaning.

In the sub-unit 4.1, you have already got to know that a 'Model of Teaching' is the pattern of teaching activity that the teacher plans in order to make the environment conducive for achieving the objectives of instruction. Bruce Joyce and Marsha Well have mentioned that according to Dewey, the core process of teaching is the arrangement of environments within which the student can interact. They further explain a Model of Teaching as a "plan or pattern" that can be used "to design face-to-face teaching in classrooms or tutorial settings and to shape instructional materials - including books, films, tapes, computer-mediated programs, and curricula (long term courses of study)". From this definition of Models of Teaching we can conclude that a Model of Teaching guides in designing an instruction to facilitate students achieve the vicarious objectives.

'Check Your Progress' - 1

1. What does the word 'model' in the 'Models of Teaching' mean?

2. What is the purpose of using a Model of Teaching?

4.3.2 Importance

Having come to know what a Model of Teaching is, you will certainly be curious to know its importance from the point of view of a teacher. Bruce Joyce and Marsha Weil assert that the Models of Teaching are really Models of Learning as they help students to acquire information, ideas, skills, values, and ways of thinking and means of expressing
themselves. The most important long-term utility of these Models of Teaching is that they increase the students' capabilities to learn more easily and effectively. They help them to achieve various learning objectives. Researches conducted on socially and economically disadvantaged children have put forth their findings as to how gainful the Models of Teaching are as they have made them more powerful students.

Models of Teaching have helped students memorize information, attain concepts, practice in building hypotheses and using tools to test these hypotheses. They also aid them to extract information and ideas from lectures, to train themselves in athletics, performing arts, mathematical skills, social skills, writing skills, problem solving, increasing creativity, and most of all in planning personal study.

'Check Your Progress' - 2

Complete the following sentences:

1. Models of Teaching help students to acquire and ..........., ............, ..........".
2. Findings of Researches conducted of socially and economically disadvantaged students show that Models of Teaching have made them ..........................................
3. Models of Teaching, most of all help students in planning .........................

4.3.3 Components

Bruce Joyce and Marsha Weil describe a 'model' with reference to the components they identify in them. These components as analysed by these authors in their book 'Models of Teaching' are - syntax, the social system, principles of reaction and support system.

The 'syntax' refers to the phases or stages as to how it begins and what the sequence of activities are. These sequences are unique to the specific model.

The 'social system' describes the roles of the students and the teacher, and the relationship between them. The leadership role of the teacher decides the structure of the model. It could be a 'high structured model' (teacher being the centre of activity), 'moderate structured' (activities equally distributed between the teacher and the students), or 'low structured' (student being the centre of activity).

'Principles of reaction' refers to the mode of reaction adopted by the teacher when responding to the learner.

Any Model requires the basic requirements namely the human skills, capacities, and technical facilities. But the 'support system' describes the extra requirements other than these. Taking the case of a learner-centered model the 'support system' here includes the
textbooks, the reference books, films, self-instructional systems and other such requirements.

We have discussed the four components of a Model of Teaching.

'Check Your Progress' - 3

1. Name the four components of Teaching as identified by Bruce Joyce and Marsha Weil.

2. What is a 'high-structured' Model of Teaching?

3. What do the component principles of reaction' refer to'?

4.4 Examples of Models

Bruce Joyce and Marsh Weil have grouped Models of Teaching into four families, namely - The Social Family, The Information Processing Family, The Personal Family and The Behavioral System Family. As the Models you are expected to learn come under the Information Processing Model, let us see which are the Models that come under this Family-

- Inductive Thinking Model
- Concept Attainment Model
- Mnemonics (Memorization) Model
- Advance Organizers Model
- Inquiry Training Model
- Synetics Model
- Students' Intellectual Development Model
Of these we shall now discuss one after the other The Concept Attainment Model, The Inductive Thinking Model, The Inquiry Training Model and The Memorization Model.

4.4.1 Concept Attainment Model

A concept attainment method requires the student to learn to classify a set of objects or events. This is similar to the way that scientists categorize or classify objects or events in order to draw generalizations. Thus, it is the identification of the attributes that helps the learner to distinguish the examples of a category, from non-examples.

According to the authors of 'Models of Teaching' Bruce Joyce, Marsh Weil and Emily Cathaun, the Model of Concept Attainment is a Model of Teaching that "requires a student to figure out the attributes of a category that is already formed in another person's mind, by comparing and contrasting examples (called exemplars) that contain the characteristics (called attributes) of the concept, with examples that do not contain those attributes".

The working of the Model is in this manner. In order to teach a concept, the defining attributes of the particular concept have to be made very clear to the learner. The teacher then presents examples and non-examples that are labeled. Students compare the attributes in the positive and negative examples. Listing out the common characteristics in the examples and segregating these items from the non-examples, the students define the concept according to the essential attributes they possess. The purpose of providing negative examples is to help the students to get to know the boundaries of the concept. The teacher then presents unlabeled examples. The students then identify these to ascertain whether they belong to the same category or not. The teacher confirms their findings, names the concept. The definition of the concept is then restated according to the essential attributes. Finally it is the turn of the students to give more examples of the concept.

The model has a moderate structure as the teacher only controls the activities and encourages students to interact more.

Let us know describe the Model in terms of the general components.

Syntax: The sequence of activities is as follows:

- Presenting data for the identification of the concept.
- Presenting examples with 'yes' or 'no' labels on them.
- Comparing the positive and negative attributes of the examples for Framing hypotheses and testing them.
- Naming the concept.
- Defining the concept with reference to its attributes.
- Testing the attainment of concept.
- Identifying other unlabelled examples of 'yes' or 'no' of the concept.
- Pupils giving their own examples

**The social system:** In the initial stages, while presenting examples and explaining attributes, the teacher has to exercise full control. Students should be able to think freely, formulate the hypotheses and test them in the light of given data. The teacher could guide them in accepting or rejecting hypotheses by prompting them to revise the data.

**Principles of reaction:** The principles of reaction between the teacher and students may be listed as follows:

- Teacher should be supportive of students' hypotheses.
- Maintain a record of the attributes mentioned by students.
- Direct students' attention to the process of analysis of the concept.
- Encourage and reinforce right analysis.

**Support system:** The support system required for teaching the Concept Attainment Model is:

- Well thought positive and negative examples to be presented to pupils.
- A Blackboard or tag board to help students to record the description of attributes of the examples.
- A flannel board for the presentation of parts of the definition and explanation of a concept.

'Check Your Progress' - 4

1. Name the four families of Models of Teaching as grouped by Bruce Joyce and Marsha Weil.

2. Give two examples of Information Processing family Models of Teaching.
3. What is a basic requirement of the Concept Attainment Model?

4. What is the purpose of providing negative examples?

4.4.2 Inductive Thinking Model

In your daily life you would have certainly experienced basically two kinds of arguments - the Inductive and the Deductive. Inductive is usually described as moving from the specific to general and deductive begins with general and ends with the specific.

The Inductive Thinking Model helps students how to learn by thinking inductively. It is a way of processing information and solving problems. The Inductive Thinking Model put forth by Hilda Taba, like other models in Inductive Thinking firmly believes that the concept formation precedes Inductive Thinking. She built her model on the basis of three approaches. These, as listed in 'Models of Teaching' by Bruce Joyce and Marsha Weil are namely - (1) thinking can be taught (2) thinking is an active transaction between the individual and data (3) process of thought evolve by a sequence that is 'lawful' i.e. certain thinking skills to be mastered first in order to master certain other thinking skills.

Taba analyses three tasks in the process of Inductive Thinking, which are (1) concept formation (2) interpretation of data (3) application of principles.

1. **Concept formation**: The stages in this first task are (a) identifying and listing the data relevant to the topic or problem, (b) grouping these into categories wherein members have common characteristics, (c) labeling these categories.

2. **Interpretation of data**: This stage involves interpreting the data collected and categorized, inferring and generalizing. Here, the students are encouraged to explore relationships with reference to the data collected and categorized. This leads them to inferences that they draw from the relationships they have explored and finally come out with generalizations or principles of the solution they have arrived at.

3. **Application of principles**: In this third cognitive task, the teaching strategy is that of applying the principles arrived at during the second cognitive task, to explain new phenomena.
Thus, you will note that, during the first phase, the strategy implemented requires students to hypothesize. In the second phase, they attempt to explain or support their hypotheses. And in the last phase, students verify these predictions. Having read the process adopted in the Inductive Thinking Model, you must have concluded rightly that Hilda Taba’s Model is based on teaching strategy built in developing thinking capacity wherein students are required to acquire large quantities of data and process them.

The Model requires students to collect information, analyse it thoroughly, organise them into categories and concepts, and finally manipulate these concepts. The role of the teacher in the Inductive Thinking Model is to guide the students in creating and organizing data by using appropriate eliciting questions.

Let us know describe the model in terms of the general components.

**Syntax:** The series of operations are concept formation, interpretation of data and application of principles or ideas. This involves identifying and listing the data relevant to the topic or problem, grouping these into categories on the basis of common attributes and developing labels for categories.

At first the students are required to predict consequences, explain unfamiliar data or hypothesis. Then they support the hypothesis. Finally students verify this production or identify the connotation that would prove their predictions.

**Social System:** The atmosphere should be co-operative with pupils involved in activities. The teacher includes the activity and starts controlling but gradually students dominate the activities.

**Principle of reaction:** The most important task of the teacher is to monitor the process of information processing by the students and use appropriate eliciting questions.

**Support System:** The major requirement of the model is large quantities of data that have to be given to the pupils. So the teachers' job is to provide this as well as helping in processing the same.

'Check Your Progress' - 5

Complete the following:

1. The three tasks in the process of Inductive Thinking analysed by Hilda Taba are ..............................................................

2. The role of the teacher in the Inductive Thinking Model is to guide the students by ............................................. data.
4.4.3 Inquiry Training Model

Before we go into the details of the Model, let us first get to know what 'Inquiry' is. J. Richard Suchman, who put forth an Inquiry Training Model, asserts, "Inquiry is the way people learn when they are left alone." This could be illustrated with an example of a small child left alone in a room with different shapes and colours of things. When you observe silently, without interfering with the activities of the child, you will see that the child will touch, throw, drag or even break the things he sees around him. This is how he learns about the things in his environment.

In the teaching-learning scenario, the learner when faced with a confusing situation adopts the method of inquiry. Suchman explains this further in a very simple way. According to him, when one sees a strange object, he is curious to know what it is made of, what it is used for, how it came into existence and so on. In order to find answers to these questions, he examines the strange object closely, compares it and contrasts it with familiar things, enquires others about it. These acts of the person comprise the act of enquiry. Thus, it is now obvious to you that enquiry is preceded by a problem presented to the learner. Suchman's Inquiry Training Model is based on the Scientific method and attempts to teach students the skills of inquiry.

Under this Model of teaching, Suchman presents a problem by demonstrating episodes that have dramatic outcomes, so that the students are alerted immediately and are curious to know the cause for the particular phenomenon. After thus enticing the curiosity of the students he gets them to start asking questions. The questions should be such that the teacher will answer only with a 'yes' or 'no'. If other questions are asked, the teacher directs the students to reframe their questions accordingly. This is the basic requirement for the enquiry model of teaching.

The situation selected by Suchman goes like this. He takes a strip made of two metals welded together and heats this thin strip. It expands and as the two metals have different rates of expansion, the strip bends and assumes a curved shape. The students watching this are puzzled and curiously observe this phenomenon. They then start asking questions like, "What is the strip made of?" But the teacher directs them to ask a question to which he could reply with a 'yes' or 'no'. The student then reframes the question and asks, "Was the strip made of metal?" The teacher replies with a 'yes'. And thus the question and answers go on in this manner. The students then develop hypotheses with the information gathered from the responses to the questions they get from the teacher. They finally develop the hypothesis that the strip could be made of two metals with different rates of expansion. Since these are attached together, the metal with greater rate of expansion bends more exerting pressure on the other one and tends to produce the curved appearance.
There are five phases in the Inquiry Training Model. They are:

i. Learner faced with a puzzling situation
ii. Data collection
iii. Verification. It is here that the students ask questions to the teacher
iv. In this phase, students organise the data and try to hypothesise
v. Here the students analyse the questions into effective one and ineffective ones and thus arrive at a proper cause and effect relationship or analyse problem-solving strategies used during enquiry.

The role of the teacher here is to assist the students' inquiry by directing them to ask questions that may lead to the type of information that is required by them. The teacher also takes care to make students reframe questions so as to fetch 'yes' or 'no' answers. During the last phase the teacher's task is to direct the inquiry into the process of investigation of the cause of the phenomenon.

We shall now describe the Model in terms of the general components.

**Syntax:** Four phases can be identified here. They are (1) the area of investigation posed to the student, (2) student structure the problem, (3) students identify the problem, (4) students speculate ways to solve the problem. In phase 1, students are given an area of difficulty and the methodology to investigate. In phase 2, the problem is structured for the students to identify the difficulty in investigation. In phase 3, students are asked to analyse the problem so as to identify the difficulty. In phase 4, the students are asked to find ways of clearing the difficulty, by organizing data in various ways.

**Social system:** A co-operative and rigorous climate is desired, as the students have to hypothesise. Since the students are in seeking of knowledge that is sought through scientific techniques, the climate also allows for a certain degree of boldness.

**Principles of reaction:** The teacher has to direct the process of inquiry and induce the students to reflect on it. His aim should be to direct the students towards framing hypothesis, interpret the data correctly.

**Support system:** The teacher should be skilled in the process of inquiry. The data should be sufficient to provide problematic area for pupils to realize the problem and initiate and conduct inquiry. These form the support system for this Model.

'**Check Your Progress**' - 6
Complete the following sentences:

1. The basic requirement for the Inquiry Training Model of Teaching is……………………
2. The 2nd and 3rd phases in this Model are …………………and………………

3. The role of the teacher in the last phase of the Model is to ……………………………

4.4.4 Memorisation Model

When you come across the word 'memorisation', you certainly will recall the 'rote memorization method' you had adopted in memorizing the names of the states in India as it exists in the map. Even after innumerable repetitions and drill, you will admit that you did forget one or two of them, when you needed to recall them. Now, is there a way that you could recall every one of them, without forgetting any? According to Presley, Levin and Delancy, this is made possible through the application of various mnemonic devices, as told by Bruce Joyce and Marsha Weil, in their book, 'Models of Teaching'.

You might wonder what this 'mnemonics' is. Mnemonics are strategies for memorizing and assembling information, using peg words, keywords and link words.

Bruce Joyce and Marsha Weil describe the List Word method as follows. This method has two components that help in learning to master the unfamiliar material. The first component provides the learners with some familiar material that links with the unfamiliar material that they have to learn. The second component brings about an association of the new material with the meaning of the unfamiliar word. For example, if the learner is expected to recall the names of the Prime Ministers of India in the order of their service, the mnemonic method to be followed is, first the name of the Prime Minister, then the link word and then an illustration of the link word attached to it. Let us now try this out. The first Prime Minister of India was Jawaharlal Nehru, the second Lal Bahadur Shasthri, the third Indira Gandhi and so on. The following is the method of Link words to be used.

1. JAWAHARLAL NEHRU - JAVA (LINK WORD)
2. LAL BAHADHUR SHASTHRI-LAL BAGH GARDENS

(LINK WORD)

3. INDIRA GANDHI - INDIA (LINK WORD)

The students study the pictures and the words. When they are tested they obviously recall the pictorial illustration at first, then the link word and eventually the name of the Prime Minister. Lorayne and Lucas opines that "you can remember any new piece of
information if it is associated to something you already know or remember." As the pictures are presented in a serial order, the pictorial image helps the students recall the serial order and the name of the Prime Minister too.

The role of the teacher in this Model is a bit laborious as it requires the preparation of the link words and the visual material associated with the words. This is required at the earlier stages. Gradually students learn to make their own link words when they study new material.

The description of the Model in terms of the general components is as follows.

Syntax: **Phase 1** - attending to the material listing (using underlining, reflecting)

**Phase 2** - developing connections (make connections using key word, substitute word and link word technique)

**Phase 3** - expanding sensory images (using techniques of ridiculous associations, and exaggeration. Revise images)

**Phase 4** - practising recall (practice recalling the material until completely earned)

**Social system:** social system is co-operative and both the teacher and the students work for the shaping of new material for the commitment to memory.

**Principles of reaction:** the teacher's role is to help students identify the items, pairs and images.

**Support system:** pictures, aids, films and other audio-visual materials for increasing sensory association. No other support system is required.

The Memorisation Model increases the capacity to store and retrieve information. It improves the imagining capacity, which in turn nourishes creativity.

'Check Your Progress' - 7

1. What do you mean by 'Mnemonics'?
2. What is the role of the teacher in the Memorisation Model?

3. What are the advantages of the Memorisation Model?

4.5 Let Us Sum Up

- The core process of teaching is the arrangement of the environments within which the students can interact.
- A model of teaching is a technique or plan that helps teachers to achieve educational goals.
- They differ from general teaching techniques in the aspect that they help to realize specific objectives or goals.
- It is compared to the blueprint designed by the engineer, which decides the structure to be built.
- Models of Teaching help students to acquire information, skills, values, ways of thinking and means of expressing themselves.
- They increase the students' capacity to learn easily and effectively.
- A Model of Teaching is described with reference to the components identified in a Model.
- These components are - the syntax, the social system, principles of reaction and support system.
- Bruce Joyce and Marsha Weil have grouped Models of Teaching into four families namely, The Social Family, The Information Processing Family, The Personnel Family and The Behavioural System Family.
- The Concept Attainment Model requires the student to figure out attributes of a category that is already found in another person's mind, by comparing and contrasting examples that contain the characteristics of the concept, with examples that so not contain the attributes.
- The Inductive Thinking Model helps students learn by thinking inductively so as to process information and solve problems.
- The Inquiry Training Model is based on the Scientific Method and attempts to teach the students the skills of inquiry.
- In the Memorisation Model, 'Mnemonic Devices' are strategies for memorizing and assembling information using peg words, key words and link words.
- The Memorisation Model helps to increase the capacity to store and retrieve information.

### 4.6 Answers to Check Your Progress

**'Check Your Progress' - 1**

1. A 'model' is something that has a particular pattern, and the word 'Model' in Models of Teaching takes this meaning.
2. To make the environment conducive for achieving the objectives of instruction.

**'Check Your Progress' - 2**

1. Information, ideas, skills, values, and ways of thinking and means of expressing themselves.
2. More powerful students.
3. Personal study.

**'Check Your Progress' - 3**

1. Syntax, the social system, principles of reaction and support system.
2. In the interaction between the teacher and students, when the teacher is the centre of activity it is called a 'high-structured Model'.
3. 'Principles of reaction' refers to the mode of reaction adopted by the teacher when responding to the learner.
'Check Your Progress' - 4
2. Inductive Thinking Model, Concept Attainment Model (or any two mentioned)
3. Identification of the attributes that helps the learner to distinguish the examples of a category, from non-examples.
4. To help the students to get to know the boundaries of the concept.

'Check Your Progress' - 5
1. (1) Concept formation (2) interpretation of data (3) application of principles
2. Creating and organizing data

Check Your Progress' - 6
1. To teach the students the skills of inquiry.
2. Data collection and verification.
3. To direct the inquiry into the process of investigation of the cause of the phenomenon.

'Check Your Progress' - 7
1. Mnemonics are strategies for memorizing and assembling information, using peg words, keywords and link words.
2. Preparation of the link words and the visual material associated with the words.
3. The Memorisation Model increases capacity to store and retrieve information. It improves the imagining capacity, which In turn nourishes creativity.

4.7 Unit - End Exercises
1. Explain how you would adopt the Concept Attainment Model in teaching concepts.
2. Describe the Inductive Thinking Model of Hilda Taba.

4.8 References
Unit 5 □ Communication

Structure

5.1 Introduction
5.2 Objectives
5.3 Communication
  5.3.1 Meaning, Importance
  5.3.2 Components
5.4 Factors affecting Communication
5.5 Media - Classification, Relative Merits
5.6 Let Us Sum Up
5.7 Answers to 'Check Your Progress'
5.8 Unit-End Exercises
5.9 References

5.1 Introduction

Communication is basic to all human interactions and transactions, because it is the act of imparting and exchanging information. In this Unit we shall discuss what communication means and how important it is in our life. The concept of Communication will be discussed with reference to the components that make up the cycle of Communication. In order to impart and exchange information effectively, there should not be any barriers. But we do come across barriers that affect Communication. We shall see what these factors are, and how they can be overcome. The various meanings of 'Media', the classification of Media, and examples for these along with their merits will be highlighted. Also, since the concept of audio-visuals is important to a teacher, we shall discuss the concept, types and values of these.

5.2 Objectives

After having studied this Unit, you will be able to:

- Recall the meaning of communication
5.3 Communication

5.3.1 Meaning, Importance

Before going into the meaning of the word 'Communication', let us know first how the name itself originated. This has its origin in the Latin word 'Communis', which means 'Common'. The term 'Communication' thus gives us to understand that it is the act wherein a concept, fact, idea, principle or theory is passed from one individual to another or a group.

Communication is the process of give and take of information. But the information conveyed should be without any distortion. What is the purpose of Communication? The objectives of Communication may be various ranging from motivating, informing, suggesting, warning, ordering, bringing about a change in behaviour, establishing better relation, bringing about meaningful learning and so on.

In order to understand the meaning of 'Communication' better, let us now see a few definitions of 'Communication'. "Communication means sharing of ideas and feelings in a mood of mutuality." "Communication is a process of sharing of experiences till it becomes a common possession." "Communication involves interaction which encourages give and take." "Effective Communication is a two-way process, including feedback and interaction."

From the few definitions we have seen, we may conclude that Communication generally means the following - Passing of information, exchange of ideas and sharing of ideas.

Types of Communication: While explaining the meaning of Communication, you have seen that it takes place between two persons or between one and a group and so on. Based on this, the presentation may be in different modes such as:
1) **Face-to-Face Communication:** Here, Communication is person to person, wherein one person speaks and the other listens. In this type, therefore, Communication is a face-to-face interaction. Even when it is between one person and a group, like in a lecture, it is a face-to-face interaction. This is the most important characteristic of such a mode of Communication. This is very effective as the listener can ask question, get his doubts clarified and get satisfaction.

2) **Writing - reading Communication:** Here, the experience of the receiver of information is derived from the reading material. Although the reader enjoys the writings, there might be certain aspects that he may not understand and there is no scope of it being clarified immediately. The lack of face-to-face interaction is a handicap here. Such Communication takes place when reading books, newspapers, magazines, etc.

3) **Visualising - observing:** An apt example of this is viewing TV programmes, watching a film, witnessing a drama being enacted. These experiences provide an opportunity to view the facial expressions and gestures and so produce a greater impact than writing -reading communication.

Communication is basic to all human performance and interaction. Therefore, the ability to communicate effectively is very essential in any interaction. Communication is a two-way process that is affected following the principles of Psychology of human nature. Man, being a social animal, can never live in isolation. Moreover, in a society where people are interdependent, it is essential that they communicate with people around them. Can you imagine a world where you can live without interacting with anybody for even a day!!! Even if you do not verbally communicate, you will certainly need to resort to some kind of non-verbal communication. Such is the importance of Communication. Communication, which is made with a specific purpose, is a very important process, irrespective of the place where it takes place. It reduces the gap between the knowledge developed and that, which is acquired. Communication has traversed a long way from the days of the runner to the present day satellite and Internet.

*Check Your Progress* - 1

1. Define the term Communication.
2. List four examples that can be used as channels of Communication.

5.3.2 Components

Communication is always made with a purpose. For Communication to take place there should be a source from where the message has to originate and then a receiver to receive the same. But, Communication does not comprise only of these. Between the sender and the receiver, are the message and the medium/channel of Communication. The channel may be the language, the signs, gestures, etc. The receiver might receive it by listening, reacting or simply observing. Thus, the process of communication involves four components, namely, Sender, technically known as encoder, Message/Signal, Medium or Channel of Communication and the Receiver or Decoder.

A Simple diagrammatic representation of the cycle of Communication will give you a clear idea of the

Now looking at the above diagram, you will find it easy to explain the cycle of Communication.

The *sender* or the encoder has the information, which is transmitted accurately at optimum speed. This message may be for a single person or a group of people. The message may have for its medium spoken or written symbols that are hand-written or
drawn or photographic pictures. It may also be expressions or gestures. The message when received by the receiver/decoder, through the medium, is decoded or interpreted by the receiver/decoder. In turn, the receiver reacts to the message, produces the desired response and sends this message via an apt medium, back to the sender. This sending of the response is called the feedback.

'Check Your Progress' - 2

1. Name the four components of the Communication cycle.

2. What is another name for decoder?

3. What do you mean by feedback?

5.4   Factors Affecting Communication

The effectiveness of Communication depends on a large number of factors. You would have experienced situations wherein you had talked to someone and the person with whom you wanted to share the information could not hear you or understand you due to various reasons. These may be the words you used, the noise around you and such other reasons. Now you find that in such a situation, the Communication you wanted to effect had not materialized, due to the factors like the above, which defeat the effectiveness of Communication.

Now let us see in detail what these factors are. Broadly speaking, these can be classified into four.

1. Factors related to the sender.
2. Factors related to the message.
3. Factors related to the receiver.
4. Factors related to the climate.

Let us now discuss each one in detail.

1. Factors related to the sender: Here the major concern is that of the sender. It is essential that the sender of information needs to have a correct perception of himself as a communicator and also the information that he wants to communicate. Another point of concern is how the receiver looks upon the sender. Unless the sender has an open mind and concentrated attention, the effectiveness of Communication will not be realized.

2. Factors related to the message: The factors related to the message can be categorized into two, namely, verbal message and non-verbal message. When Communication is done through verbal message, the factors given consideration here are:

   a) Accuracy and precision of words
   b) Simplicity and clarity
   c) Appropriateness
   d) Imagination and originality
   e) Intonation and delivery

   The factors that are to be given prominence in the non-verbal Communication are:

   a) Posture
   b) Gesture
   c) Facial expression and emotions
   d) Movement

3. Factors related to the receiver: As for the receiver factors, the aspects relevant here are:

   a) Intelligence
   b) Age and sex
   c) Self esteem
   d) Motivation
   e) Attitude
   f) Listening skills
4. Factors related to the climate: The climate related factors are:
   a) Openness
   b) Empathy
   c) Supportiveness
   d) Positiveness
   e) Avoiding noise

'Check Your Progress'- 3
1. What are the four broad categories of factors that affect Communication?
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------

2. What are the two basic requirements of a sender of information?
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------

3. The five factors related to verbal message are:
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------

4. The factors related to non-verbal message are: ---------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------

5. The receiver related factors of Communication are:
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
   -----------------------------------------------------------------------------------------------------
6. The climate related factors of Communication are:
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5.5 Media Classification, Relative Merits

The Latin word 'Media', means 'between'. Applying this term in the field of communication, you can conclude that 'Media' is the device that comes 'between' the sender and receiver to bring about effectiveness in communication.

Depending on the matter to be conveyed, and other various requirements, Media can be classified into a range of aids- ranging from projected aids like charts, diagrams, maps to be projected, aids like slides, films transparencies etc. Aids like this by themselves are not termed as Media, but only when they are used for the purpose of instruction, they are called 'Media'.

A classification of the types of Media can be had from the following table.

<table>
<thead>
<tr>
<th>PROJECTED AIDS</th>
<th>NON-PROJECTED AIDS</th>
<th>ACTIVITY AIDS</th>
<th>3D AIDS</th>
<th>AUDIO AIDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graphic aids</td>
<td>Display boards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Films</td>
<td>Photographs</td>
<td>Black board</td>
<td>Experimentation</td>
<td>Models</td>
</tr>
<tr>
<td>Filmstrips</td>
<td>Pictures</td>
<td>Flannel Board</td>
<td>Demonstration</td>
<td>Objects</td>
</tr>
<tr>
<td>Slides</td>
<td>Flashcards</td>
<td>Bulletin board</td>
<td>Dramatics</td>
<td>Specimens</td>
</tr>
<tr>
<td>Opaque</td>
<td>Posters</td>
<td>Magnetic board</td>
<td>Programmed-</td>
<td>Dioramas</td>
</tr>
<tr>
<td>O H P</td>
<td>Maps</td>
<td>Peg board</td>
<td>instruction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diagrams</td>
<td></td>
<td>Teaching-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Charts</td>
<td></td>
<td>machines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graphs</td>
<td></td>
<td>Computer-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cartoons</td>
<td></td>
<td>Aided</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comics</td>
<td></td>
<td>instruction</td>
<td>(CAI)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Puppets</td>
</tr>
</tbody>
</table>
Another way of classifying the Media is by categorizing them into Hardware and Software. Hardware is based on the application of engineering principles for developing equipments. Few examples for hardware are a personal computer, OHP, projector, tape recorder, TV etc. Software uses principles of psychology for modifying behaviour. Software items are by themselves not capable of helping the learner or teacher, but act along with the hardware in the teaching-learning process. A few examples for Software are computer programmes, transparencies, audiocassettes, TV programmes etc.

The third way of classifying Media is by categorizing them into auditory, visual and audio-visual aids. Auditory Media are devices that can only be heard. Examples under this category are the radio, Language Laboratories, sound distribution system sets, Tape and disc recordings.

Visual Media are those devices that cater to the sense of seeing. Examples of this are bulletin board, chalk board, charts, drawings, exhibits, filmstrips, flash cards, flannel board, pictures, maps, models, posters photographs, self instructional materials, silent films and slides. Audio-visual Media comprise devices that cater to both the senses of hearing and seeing. Examples of this category are demonstrations, films, sound filmstrips, study tours, TV and videotapes.

Now that we have discussed the categories of Media, it is to be decided on what criteria these should be selected for imparting effective communication. So let us now see what these criteria are.

**Principles behind selecting appropriate Media for Instructional purposes:**

1. **Principle of selection:** The media used for instructional purposes have to be selected keeping in mind the age-level and grade level of the learners. The selected teaching aid should be interesting and motivating. They should be true representation of the actual things.

2. **Principle of preparation:** When a teaching aid is prepared, locally available material should be used, as far as possible. Teachers having acquired training should prepare them, with the involvement of students in the preparation of the same.

3. **Principle of presentation:** While presenting the audio-visual aids, the teacher using them should handle them carefully and should use it only after having rehearsed before actual presentation. Care should be taken to see that there is proper illumination in the classroom and also that the aid is visible to all the students.

4. **Principle of response:** It is the duty of the teacher to guide the students to respond actively while presenting the audio-visual aids so that it helps in maximum comprehension.
5. **Principle of evaluation:** The audio-visual material used should be continuously evaluated along with the method of using it so that the objectives of using the same are realized.

**Relative merits of Media/audio-visual aids:**

- Media motivates learners and create interest and enthusiasm.
- They help teachers reduce verbalism.
- Using audio-visual aids caters to multiple senses and therefore provides clearer images.
- Though first hand experiences are the best, substituted experiences, inaccessible objects and phenomena and such audio-visual experiences help in easy and precise acquisition of concepts. They provide variety, making it more interesting, which in turn enhances comprehension.
- Using of audio-visual material follow the maxims of teaching such as 'learning by doing', 'known to unknown,' 'near to far' etc.
- It saves a lot time and energy.
- They make learning experiences concrete.
- They break the monotony of the teacher's talk.
- Bringing the world into the classroom is made possible by the use of Media.
- The use of Media in the classroom provides a conducive atmosphere for effective learning.

'Check Your Progress' - 4

1. What are the three ways in which Media can be classified?

2. Give three examples of audio aids.
3. Give three examples of projected aids.

4. Give three examples of 3D aids.

5. What is the basic difference between Hardware and Software?

6. Give three examples of Hardware.

7. Give three examples of Software.

8. Give any five merits of audio-visual aids.

9. What are the principles behind selecting appropriate Media?
Let Us Sum Up

- Communication is the act wherein a concept, fact, idea, principle or theory is passed from one individual to another or a group.
- The media through which communication is made is called Communication Media.
- The four components in the Communication process are the Sender / Encoder, Message / Signal, Medium / Channel of Communication and the Receiver / Decoder.
- Intrapersonal communication is the assimilation and processing of information gathered within oneself.
- Interpersonal communication is the communication that takes place between two entities. The entities could be individuals, a group or between two groups.
- The factors affecting Communication can be broadly classified into - factors related to the Sender
- Factors related to the Message, factors related to the receiver and factors related to the climate
- Factors related to the Sender are the correct information required to be given, correct perception of the Sender, correct perception of the Sender by the Receiver.
- Factors related to the Message can be further classified into the verbal and non-verbal message. Factors related to the Verbal Message are-
  - Accuracy and precision of words
  - Simplicity and clarity
  - Appropriateness
  - Imagination and originality
  - Intonation and delivery
- Factors related to the Non-verbal Message are-
  - Posture
  - Gesture
  - Facial expression and emotions
  - Physical movement
Factors related to the Receiver are -
Intelligence
Age and sex
Self-esteem
Motivation
Attitude
Listening skills

Factors related to the climate are -
Openness
Empathy
Supportiveness
Positiveness
Avoiding noise

The audio-visual materials or electronic devices used for transmitting or delivering messages are called Media.

Media can be classified into audio, visual and audio-visual Media; 2D, 3D and projected aids; Software and Hardware.

Hardware is based on the application of engineering principles for developing equipments.

Software uses principles of psychology for modifying behaviour, involving task analysis, writing objectives, and selecting appropriate leaning strategies, providing feedback and evaluation.

While using Media for instructional purposes, certain principles should be borne in mind.

These principles are related to the various stages like selection of Media, preparation, presentation, response and evaluation.

The advantages of using audio-visual aids for the purpose of instruction are many. They make teaching-learning interesting, save time and energy of the teacher and students, provide variety in teaching, bring clarity and reality in teaching, effect better comprehension, and reduce verbalism and so on.
5.7 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1
1. "Communication is the sharing of ideas and feelings in a mood of mutuality'.

2. Language, signs, gestures, written word (or any of the four mentioned).

‘Check Your Progress’ - 2
1. The four components are Sender, Message, Medium and Receiver.

2. Receiver.

3. Sending of response by the Receiver of the message is called the feedback.

‘Check Your Progress’ -3
1. Factors related to the Sender, factors related to the Message, factors related to the Receiver and factors related to the climate.

2. Correct perception of himself as a communicator and also the information that he wants to communicate.

3. Accuracy and precision of words
   Simplicity and clarity
   Appropriateness
   Imagination and originality
   Intonation and delivery

4. Posture, gestures, facial expressions and emotions, and physical movement.

5. Intelligence, age and sex, self-esteem, motivation, attitude, listening skills.

6. Openness, empathy, supportiveness, positiveness, avoiding noise.

‘Check Your Progress’ - 4
1. Media can be classified into audio, visual and audio-visual Media; 2D, 3D and projected aids; Software and Hardware.

2. The radio, Language Laboratories, sound distribution system sets.

3. Films, filmstrips, slides.

4. Models, objects, specimens.
5. Hardware is based on the application of engineering principles for developing equipments. Software uses principles of psychology for modifying behaviour.

6. Personal computer, OHP, projector.

7. Computer programmes, transparencies, audiocassettes.

8. Create interest and enthusiasm, motivates students, reduces verbalism, saves time and energy, make learning experiences concrete.


5.8 Unit - End Exercises

1. Differentiate between Hardware and Software.

2. What is the role of audio-visual aids in the teaching-learning process?

3. What is Communication? Distinguish between intra-communication and inter-communication.

4. Explain the cycle of communication with the help of a diagram.

5.9 References


UNIT 6  ▶ TEACHING AS COMMUNICATION

Structure

6.1 Introduction
6.2 Objectives
6.3 Teaching as a Communication Process - Concept
6.4 Communication Patterns in the Classroom, Relative Merits
6.5 Effective Communication in the Classroom, Barriers
6.6 Let Us Sum Up
6.7 Answers to 'Check Your Progress'
6.8 References

6.1 Introduction

In Unit 5 we discussed what Communication generally means, and the components of communication cycle. Here, in this Unit, we shall see how teaching is a communication process, and how this takes in the classroom. You have already seen that the purpose of communication is to "share ideas in a mood of mutuality", and this involves interaction which encourages give and take of information. It also involves a feedback. In this Unit we shall see these aspects of communication with reference to the communication process taking place in the classroom between the teacher and the students.

6.2 Objectives

After studying this Unit, you will be able to:

- Justify that the interaction that takes place between the teacher and the students in the classroom is communication.
- Explain the concept of classroom communication.
- Identify the components of classroom communication.
● Describe the cycle of classroom communication.
● Name the types of classroom communication.
● Explain the patterns of classroom communication.
● List out the factors that are responsible for effective classroom communication.
● Explain the factors that are responsible for effective classroom communication.
● Identify the barriers of classroom communication.
● Bring out the relative merits of Verbal communication.
● Bring out the relative merits of Non-Verbal communication.

### 6.3 Teaching as Communication Process-Concept

You have already seen that the major objective of Communication is to inform, exchange/share ideas. When the process of Communication takes in a classroom, the objectives are extended to include those like motivation, change of behaviour and making learning meaningful.

Taking the classroom-teaching scenario into consideration, the purpose of Communication here is to bring about better learning and a change in behaviour. Since the learning experiences provided cannot always be first hand, Communication plays a major role in classroom teaching as it has to effectively compensate for the lack of first hand experiences.

Now, let us first discuss in detail the concept of Communication with reference to a classroom situation. The components of the process as we have seen are the encoder/sender, message, the medium and the decoder/receiver. Relating these components with the classroom teaching-learning situation, the teacher is the encoder, the information/content dealt with during the interaction between the teacher and the students is the message, the language/verbal symbols or other aids used in teaching comprise the medium and the student/learner is the decoder/receiver.

Let us now depict this cycle in a diagrammatic representation of the Communication cycle that takes place in the classroom.
Classroom Communication

The teacher (sender) transmits the information with regard to the content either verbally or through visual aids and the Receiver listens and/or sees and reacts in ways like verbal response, written response, or other performances.

Thus the Communication in the Classroom satisfies all the component criteria of the Communication cycle. An ideal Classroom Communication should have the message sent by the teacher and the counter message from the student.

Types of Classroom Communication: The Communication between the teacher and the students in the Classroom can be of Verbal Communication and Non-verbal Communication. Verbal Communication is mostly audible and Non-verbal uses visual material for Communication. Thus language (spoken or written) or audio-visual materials are the media of communication.
‘Check Your Progress’ - 1

1. Name the components of a Classroom Communication.

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2. What are the two ways in which the teacher effects Communication?

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3. What should an ideal Classroom Communication. Discuss.

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--------------------------------------------------------------------------------------------
6.4 Communication Patterns in the Classroom, Relative Merits

A pattern in Communication refers to the relationship between the sender and the receiver. In this context, there are many possibilities based on the number of persons involved in the Communication. A network is established on the basis of the number of persons involved at the receiving end. These patterns of network have been described as follows.

1. **Chain network pattern**: Here the sender communicates with one receiver, who is no. 1 becomes the sender of information to the next receiver, receiver no. 2 and this goes on in a chain fashion, thus getting the name, chain network pattern.

2. **Wheel pattern**: In this pattern of communication, the sender takes up the central position and communicates/sends information directly to the receivers, who are more in number. These receivers are not in a position to communicate with each other. Such a pattern is communication is highly effective and operates in small establishments, where a task has to be done with great speed. Such a set up of wheel pattern is called the 'Radial pattern'. With reference to the classroom, the teacher who is the sender of information is in the centre and sends information to the students who are the receivers. This pattern can be depicted in the following manner:

   ![Wheel pattern diagram]

A slight variation of this is, called the 'Polygonal pattern'. This is an extension of the Radial pattern, wherein there is some scope for the receivers to communicate with each other. In the classroom, this pattern of communication is seen when students interact with each other to exchange information to clarify or ascertain.

3. **Star network pattern**: In such a network pattern, the Sender and all the receivers communicate with each other mutually. In this decentralized pattern, the Sender does not
have a superior position. This makes it possible to deal with problems and innovations. This pattern can be thus represented diagrammatically:

In a classroom, the teacher, who wants to solve a classroom problem, with reference to student, first sends this information to the parents who gives this to the student and discusses with him his problem. The teacher also simultaneously collects information from the classmates and friends of the student. The information thus gathered, by the teacher and parents are exchanged. The parents too collect information from the neighbours' children and their child's friends and pass this on to the teacher. Thus the teacher, parents, the problematic student, the classmates, neighbours, friends etc form the parts of the Star network. The teacher, with the help of the data collected, solves the problem.

'Check Your Progress' - 2

1. What do you mean by a pattern in Communication?
2. On what does the pattern of Communication based?

3. What are the two variations of the wheel pattern?

4. What is the advantage of the Star network pattern?

6.5   Effective Communication in the Classrooms-Barriers

We say that communication is effective when the purpose of communication is achieved. So far as the classroom is considered, the effectiveness of communication is based on several factors, which we will now discuss one after the other.

1. Two-way Communication: Communication in the classroom is a two-way process, which provides the facility of a feedback from the learners. This two-way process facilitates further clarification of the topic taught and provides scope for seeking further information whenever needed.

2. Effective feedback: This feedback helps to ascertain the realisation or non-realisation of objectives. The feedback can be of the verbal or non-verbal mode. In the verbal mode the students orally respond or seek clarification. In the non-verbal mode, they express their non-comprehension in the form of a nod or shake of the head or with a satisfactory or unsatisfactory expression on their faces that show whether the communication has been effective or not.

3. Clarity of expression: Clarity of expression plays a vital role in the communication in the classroom. This clarity can be achieved only when the teacher has a good command over the language, since language is the most effective tool of communication. The teacher
has to take extra caution to see that the language adopted suits the level of the age group with reference to the vocabulary used, speed of delivery and tone of delivery, appropriate loudness so that comprehension is achieved by the learners.

4. Motivation of students: Since the learners are the main stake holders in a classroom, it is essential that communication should be made in such a way that they are motivated to listen, and this should be sustained throughout the lesson. When this is achieved, communication becomes effective.

5. The use of teaching aids: Now, in order to motivate students, the teacher should make use of teaching aids that draw the attention of students and get them interested to know more. This enables the teacher to communicate effectively as the topic is clearly understood and well retained by the learner.

Barriers to classroom communication: Communication may fail due to various barriers. These may be discussed under the following categories:

1. Physical barriers
2. Environmental barriers
3. Psychological barriers
4. Intellectual barriers

Let us now discuss each barrier individually.

1. Physical barriers: As the term suggests, the barriers that arise due to the physical condition of the learner, come under this category. These are:

   1. Physical discomfort
   2. Lack of illumination and ventilation
   3. Uncomfortable seating arrangements
   4. Lack of facilities like proper desks and benches

   All the above factors make the students uncomfortable and thus they are unable to pay attention.

2. Environmental barriers: This pertains to the surrounding where the institution is situated. We all know that students are generally tempted by distraction from outside the class. This is more so when there is a TV match or a popular film that is on during the class hours. Under such circumstances students are tempted to view these rather than attend class. The teacher making the lesson interesting by using various media and audio-visual aids can avoid this.
Another environmental factor that creates a barrier for effective classroom communication is the noise inside or outside the classroom, which disturbs the Communication process. This can be taken care of, if the institution is located away from the noisy traffic and away from factories, so that the school is situated in a calm place.

3. **Psychological barrier:** One of the factors here is the lack of attention on the part of the students who are only physically present there, but mentally wandering. This daydreaming will make less learning or no learning at all in the classroom. In such a situation, the teacher should provide learning experiences for the students by actively involving them in the teaching-learning process.

Another barrier is the attitude of the learner. Supposing the students have already developed a negative attitude towards the particular subject or the teacher, they are not attentive. Here too the responsibility rests with the teacher in getting them to start liking the subject/teacher, by making use of strategies, methods and teaching aids that combine with one another to make the classroom communication interesting and thereby effective.

4. **Intellectual barrier:** Learners tend to understand less when their perception is less. This condition arises in teaching-abstract concepts/topics. In order to help them to perceive better, the teacher should use aids and also involve the students in the preparation and use of the same. This 'learning by doing' principle helps the students to get a better perception, which leads to good comprehension, which in turn makes communication effective.

Excessive verbalism on the part of the teacher, inaudibility of speech or very loud speech, great speed of speech, use of unfamiliar vocabulary are some of the other barriers of Communication that the teacher must be aware of and avoid while interacting with the students in the classroom.

'Check Your Progress' - 3
1. How does feedback facilitate effective Communication?

2. Mention the factors that bring about clarity in expression?
3. Name the major barriers of classroom Communication.

4. Mention the factors that contribute to the Physical barriers of classroom communication.

5. What are the factors in the environment that create barriers for effective classroom Communication?

6. How can the noise factor be avoided?

7. Name the Psychological barriers in classroom Communication.

8. How can the teacher overcome the Psychological barriers during classroom Communication?
9. List the factors that contribute to the Intellectual barriers in classroom Communication.

6.6 Let Us Sum Up

- The components of classroom Communication are the teacher, content, media, students and the message (response).
- The two ways in which the teacher affects classroom Communication are the Verbal and Non-verbal Communication.
- A pattern in Communication refers to the relationship between the Sender and the Receiver, and is based on the number of persons involved in the Communication.
- There are three patterns of Communication, namely Chain pattern, Wheel pattern (Radial) and the Star pattern.
- The Wheel and the Star pattern are generally observed in the classroom.
- The Radial pattern is a slight variation of the Polygonal pattern. It does not give scope for Communication between the Receivers, in the Polygonal pattern there is a slight scope for this.
- The effectiveness of Communication is based on several factors.
- Effective Communication are a two-way Communication, effective feedback, clarity of expression, motivation of students that is sustained throughout the lesson, and the use of teaching aids that is instrumental in creating and sustaining motivation and interest on the part of the students.
- The factors that come in way of effective Communication are called the Barriers of Communication.
- Barriers of Communication can be grouped under four categories, namely Physical, Environmental, Psychological, and Intellectual.
- The Physical barriers comprise the aspects of physical discomfort, lack of facilities like benches, desks, ventilation and illumination.
• The Environmental barriers comprise the distraction from within and outside the classroom, like noise and TV, films etc.

• Under the psychological barriers come the aspects of daydreaming, attitude of the student towards the subject and the teacher.

• The Intellectual barriers are found in the lack of perception of abstract concepts, excessive verbalism on the part of teacher, inaudibility of speech or very loud speech, great speed of speech and use of unfamiliar vocabulary.

6.7 Answers to ‘Check Your Progress’

'Check Your Progress' - 1
1. The teacher is the encoder, the content dealt with is the message, the language/verbal symbols or other aids used in teaching comprising the medium and the student/learner who is the decoder/receiver.

2. Verbal and Non-verbal.

3. Counter message sent by the student.

'Check Your Progress' - 2
1. The relationship between the Sender and the Receiver.

2. The number of persons involved in the Communication

3. Radial and the Polygonal patterns.

4. It permits the Sender and all the receivers to communicate with each other mutually.

'Check Your Progress' - 3
1. Feedback facilitates clarification of the topic taught and also provides scope for seeking further information.

2. Good command over the language, apt vocabulary, speed and tone of delivery, and appropriate loudness of voice.

3. Physical, Environmental, Psychological and Intellectual barriers.

4. Physical discomfort, lack of illumination and ventilation, lack of facilities like proper desks and benches.
5. Noise from within and outside the institution, disturbance from TV/cinema.
6. Institution to be situated far from the noisy traffic and factories.
7. Daydreaming, negative attitude of the learners towards the subject and teacher.
8. By making use of strategies, methods and aids that combine with one another to make classroom communication effective.
9. Low perception, excessive verbalism on the part of the teacher, inaudibility of speech, very loud speech, great speed of speech, use of unfamiliar vocabulary.

6.8 References

COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

BLOCK 02
CURRICULUM CONSTRUCTION
B.Ed. CC-03 : TEACHER FUNCTIONS

Block

2

CURRICULUM CONSTRUCTION

Unit-7
Curriculum–An Introduction 119

Unit-8
Components of Curriculum 128

Unit-9
Principles of Curriculum Construction 136

Unit-10
Types of Curriculum 151

Unit-11
Approaches to Curriculum Construction 159

Unit-12
Steps of Curriculum Construction 168
INSTRUCTIONAL DESIGN AND EDITORIAL COMMITTEE

Prof. M. G. Krishnan  Chairman
Vice Chancellor
Karnataka State Open University
Mysore 570 006
Karnataka

Prof. Vikram Raj Urs  Convener
Dean - Academic
Karnataka State Open University
Mysore 570 006

Dr. N. Lakshmi  Course Coordinator
Chairperson - DOSR in Education
Karnataka State Open University
Mysore 570 006

Prof. B. N. Manjunathaiah  Course Editor
Professor – DOSR in Education
Karnataka State Open University
Mysore 570 006

Dr. N. B. Kongwad  Course Writer
Principal
Units 7, 8 & 11
ASNSS College of Education
Sankeshwar 951 313

Dr. Thejasvi Naviloor  Coordinator
Planning and Development Officer
Karnataka State Open University
Mysore 570 006

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In the previous Block you have studied about the concept of teaching. You learnt about Micro Skills, their nature and how to apply these skills in class-room teaching. This Block also explains about various Models of Teaching, the nature of communication and teaching as a process of communication.

You are aware that teaching intends to achieve certain broad aims of education and certain specific objectives in order to bring about desirable changes in students’ behaviour. We impart specific knowledge and understanding, concepts and principles and develop worth-while skills, favorable interests, attitudes and values.

How do we achieve the aims and objectives of education in general and class-room teaching in particular? In order to achieve the objectives we have to provide well-planned educational activities and experiences to students. They may include teaching of specific subject content, well organized and varied activities opportunities to explore, to invent and to innovate, direct and indirect experiences. All such experiences and activities, put together are called curriculum.

A Curriculum is not a sum total of haphazardly assorted activities and experiences. A curriculum is a systematic, purposeful and meaningful plan and process. It should help to realize the objectives of education. It should reflect the aspirations and demands of society. It should guide the teachers to select content, methods of teaching and evaluation techniques appropriately. In fact, curriculum is the pivotal aspect of education system. Hence it should be developed in a systematic manner. In this Block you will be studying all these aspects about curriculum.

There are six Units in this Block. Unit-7 explains the meaning of curriculum and how it differs from syllabus. In Unit-8 you study about the construction of curriculum. Principles of curriculum construction are explained in Unit-9. In Unit-10 you learn about the types of curriculum. Approaches to curriculum construction are explained in Unit-11 and in Unit-12 you learn about the steps of curriculum construction.
UNIT 7 ▫ CURRICULUM—AN INTRODUCTION

Structure

7.1 Introduction
7.2 Objectives
7.3 Curriculum-Concept, Meaning
7.4 Differences between Curriculum and Syllabus
7.5 Let Us Sum Up
7.6 Answers to ‘Check Your Progress’
7.7 Unit-End Exercises
7.8 References

7.1 Introduction

In this Unit you will study about the concept, meaning and various interpretations of curriculum. Curriculum can be called the pivot around which various classroom activities and the entire school programmes are developed. Think of various activities that you carry out with your students and ask yourself why you carry them out with them (students). Also think of the variety of these activities and how these are linked with each other. You may also think of the various activities that other teachers in your school carry out with their students while teaching languages, science, mathematics and social sciences. These educational activities are intimately connected with curriculum studies. Thus this Unit will help you understand why teachers do whatever they do in classrooms and how education can be made more purposeful and better related to life. Besides, your understanding of the concept of curriculum will help you to achieve the intended goals/objectives of education better.

7.2 Objectives

After studying this Unit, you will be able to,

- State the meaning of Curriculum
- Cite various interpretations of Curriculum
- Differentiate between Curriculum and Syllabus.
## 7.3 Curriculum-Concept, Meaning

The term Curriculum is derived from a Latin word “curries” which means racecourse or the body of the courses. Webster’s, Third New International Dictionary defines curriculum as follows:

1. The whole body of courses offered by an educational institution or one of its branches.
2. Any particular body of courses set for various majors (such as Engineering).
3. All planned school activities including courses of study for organized play, athletics, dramatics clubs etc.
4. a. General Education and Training, and  
   b. A work Schedule.

The above definitions provide a traditional view of the concept of curriculum which implies that the curriculum means only subjects taught or offered in a training course.

### Meaning and Definition of Curriculum

Curriculum is derived from Latin root ‘curries that referred to the ‘Course of a chariot race’; whereas, the common dictionary usage is “Course of Study”. Brubachar states that, “it is a runway; a course which one runs to reach a goal; a course of study”. A curriculum is a plan of learning. It can be considered as a programme of courses of teaching and learning. It includes the goals, objectives, content, processes, resources and means of evaluation of all the learning experiences planned for pupils, both in and out of the school as well as in the community.

Now let us take a look at the different definitions of curriculum given by various commissions and eminent educationists:

- “Curriculum does not mean only the academic subjects- but it includes the totality of experiences, that a pupil receives through the manifold activities that go on in the school” - Secondary Education Commission (1952-53)
- “Curriculum defined as all of the directed learning experiences of children and youth under the influence of school”. - American Association of School Administrators (1953)
- “We conceive of the school curriculum as the totality of learning experiences that the school provides, for the pupils through all the manifold activities in the school or outside, that are carried on under its supervision” - Kothari Commission (1964)
● “The Curriculum is the means of attaining the aims of education. Being means to the end, it is not an end in itself”. - Gwyan. J. Minor

● “Curriculum manifests life in its reality”. - Kilpatric

● “Curriculum is the selection, organization and administration of a body of subject matter designed to lead the pupils on some definite life objective.” - Roswell C. Puckett

● “It can refer to the total structure of ideas and activities, developed by an educational institution to meet the needs of students and to achieve desired educational aims”. - A Dictionary of Education- Derek Rowntree (1981)

● “Curriculum embodies all the experiences which are offered to learners under the direction of the school” - R. Roll

● “Curriculum is the whole range of formal studies and learning experiences offered by a school. In most schools subjects studied in the classroom form the chief part of a programme. But a curriculum may also include independent study and investigations; lectures by outsiders; participation in school athletics, plays and concerts; educational television programmes; field trips and work or service projects in the community. A curriculum organizes all learning experiences, to give students the most benefit from them at each level of their school career” - ‘World Book of Encyclopedia (1984)’

● “Curriculum includes all the learners’ experiences in and outside the school that one includes in a programme, which has been devised to help the learner develop mentally, spiritually, physically, emotionally and morally”. - Crow and Crow

Different Concepts of Curriculum

The modern concept of education aims at bringing about desirable changes in the pupil behaviour. Keeping the needs of the students, the goals of the nation, the aspirations of the society, the development of the individual personality and other such factors, suitable educational courses have to be designed, structured and provided to the students, through which he/she can develop the much desired patterns of behaviour. This initiates the process of framing and planning of a good curriculum. Curriculum is a complex phenomenon which can be viewed from several angles. There are several concepts of curriculum.

Curriculum as Plan

Though curriculum is a wide concept which includes various components, all the levels of education should have their own unique type of curriculum. Since it varies from stage to stage, region to region etc., it is to be well planned keeping in mind various factors like aims and objectives, men and material resources available, psychological and philosophical principles etc.
Some procedure is to be followed to plan the curriculum and it has the following steps.

1. Determine the general aims.
2. Set down the basic principles.
3. Determine the total time required and weekly time allotted.
4. Develop a chart showing the scope and sequence each one of the activities.
5. Using the scope and sequence chart, develop an outline of units or topics for each class and give the specific objectives of each unit or topic.
6. Prepare brief statement of general suggestions to the concerned person bearing in mind the general aims and the guiding principles.
7. Formulation of the outline.
8. Plan the preparation of the curriculum.

**Curriculum as Process**

It is said there cannot be a universal, uniform, curriculum. It varies from time to time, region to region, stage to stage etc. Moreover curriculum is not a product rather it is a means or media through which aims and objectives can be realized. Cunningham has said “Curriculum is a tool in the hands of an artist (the teacher) to mould his material (the pupils) according to his ideals (aims and objectives) in his studies (the school).” Question that normally arises is what kind of process is it;

1. **Comprehensive:** Because of its nature and scope of the course syllabus is limited in its scope. Whereas curriculum is so broad that it encompasses curricular, co-curricular and extracurricular activities. It is as comprehensive as that of education. Since education is necessary for the complete, balanced growth and development of children, curriculum is naturally to be highly comprehensive.

2. **Varied:** Needs and aspirations of individuals on the one hand, needs and problems of the society on the other hand are the most influencing factors in curriculum. Since these needs, aspirations and problems vary from individual to individual and society to society. Hence the curriculum is to be varied.

3. **Dynamic:** Whatever may be the curriculum and however ideal a particular curriculum may be, it cannot be an all time curriculum. It should not be rigid and static, rather is should be dynamic, elastic and flexible in its character and change constantly with the needs and ideals of the society. Curriculum in schools in Independent India can never be the same as it used to be in schools during British rule or in Madarasa and Maktubs during the Mughal period or in Gururkulas in ancient India.
4. Multiangular Process: If education is a triangular process, curriculum is which a component of education is a multiangular process. Several factors like teachers, pupils, administrators and other human factors on the one hand, social, political, economic, religious, cultural and such other factors influence the curriculum on the other hand. Methods, strategies, techniques, etc., also influence curriculum. Some experts of curriculum are of the opinion that curriculum has a triangular relationship with educational objectives and evaluation. Thus these two determine the curriculum.

5. Lengthy/Long process: Curriculum development is a lengthy process. It Consists of the following five phases.

1. Formation of objectives.
2. Selection of learning experiences
3. Selection of content
4. Organization of experiences
5. Evaluation.

(Each of these has been discussed elsewhere in this-Block)

Curriculum as Experience

Curriculum consists of all the experiences of students under the guidance of the teacher. It is the total life. No two individuals are alike, so also no two experiences are similar. Slight or wide variations in experiences are likely to be there. After all what is education? It is an interchange of experiences and foregoing the bitter experiences and rationalizing and sustaining the good, useful practical experiences.

Curriculum is considered as the accumulation of experiences, as a network of experiences which enables youngsters, less experienced and inexperienced to have rich and varied experiences. Experience is a matter of interaction of individuals with the environment, an environment that is human as well as physical that includes material and cultural and the institution as well as the local surroundings. Such an interaction includes undergoing- Pleasant as well as not so pleasant experiences.

Curriculum as Objectives

Curriculum is a mirror which should reflect the objectives and fulfill the needs of the people in general and pupils in particular. This was the opinion of all through the year. But, the tendency has been changed in eyes of some educationists. Educators have endorsed the practice of deciding on objectives prior to the selection of institutional activities. That this should not be surprising, since elementary logic dictates that one should know what is to be accomplished before deciding on procedures to accomplish them. We might assume
that, once identified educational objectives guide teachers would exert considerable influence on the nature of the curriculum and the classroom instructional procedures. Thus curriculum can be considered as a set of clearly defined instructional objectives.

**Curriculum as the Programme of Studies**

When asked to describe the curriculum of a particular high school, the informed layman often recites a list of the subjects offered by the school. He is likely to answer: “The curriculum includes English, Algebra, History, Economics etc”. A more specific response would involve a listing of the titles of the courses offered by the school. Furthermore, reflection on our own experiences will serve to remind us that course titles ordinarily reveal very little with regard to learning outcomes and the experiences that students can expect to have while taking the course. For these reasons, therefore, specialists in the field of education prefer to use the term “Programme of Studies” rather than curriculum to refer to a set of school subjects or course offerings.

**Curriculum as Course Content**

The particulars of content in a programme, often is regarded as the curriculum. This concept of curriculum like the one described above, was prevalent among most professional educators before the advent of the curriculum movement. It is extremely simple and indeed tends towards the simple meaning of curriculum. It conceives of curriculum solely as the data or information recorded in guides and text books and over looks many additional elements that need to be provided for in a learning plan. Such a conception of curriculum limits curriculum planning to selection and organization of information that learners are to acquire.

### 7.4 Differences Between Curriculum and Syllabus

Sometimes the terms Curriculum and Syllabus meaning are thought to have the same. But they differ in their meaning and scope. Following points distinguish Curriculum from syllabus:

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Syllabus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Curriculum is a tool in the hands of the teacher to mould his pupils according to his/her ideals.</td>
<td>Syllabus is a course of study, can be taken to mean the specific content of a programme.</td>
</tr>
<tr>
<td>2. Curriculum is a broad based term. Used in general to denote the overall content of education or instruction.</td>
<td>Syllabus, on the other land, is much more specific</td>
</tr>
<tr>
<td></td>
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<td>---</td>
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</tr>
<tr>
<td>3.</td>
<td>It envelop all the activities formal and informal that take place during the interaction of students and other teachers in educational institutions.</td>
</tr>
<tr>
<td>4.</td>
<td>Curriculum determines objectives, content, activities and evaluation</td>
</tr>
<tr>
<td>5.</td>
<td>It is just like a theory on hand for the course of study.</td>
</tr>
<tr>
<td>6.</td>
<td>Curriculum does mean in this case, the academic subjects alone taught by the schools.</td>
</tr>
<tr>
<td>7.</td>
<td>In a narrower sense, it is conceived as the syllabi of school subjects</td>
</tr>
<tr>
<td>8.</td>
<td>Curriculum includes curricular, co-curricular and extra-curricular activities</td>
</tr>
<tr>
<td>9.</td>
<td>It helps to achieve the students aims and objectives of education.</td>
</tr>
<tr>
<td>10.</td>
<td>Its main aim is all round development of the child.</td>
</tr>
<tr>
<td>11.</td>
<td>It includes the entire aims, ideals and objectives of education to be attained</td>
</tr>
<tr>
<td>12.</td>
<td>There is no specific time limitations for the completion of curriculum</td>
</tr>
</tbody>
</table>
‘Check Your Progress’-1

1. What do you understand by the term Curriculum?

2. Name the various conceptions of Curriculum.

3. Distinguish between the terms Curriculum and Syllabus.

7.5 Let Us Sum Up

In this Unit you have learnt that the curriculum is the heart of schooling the educative process. All resources available at school e.g. the school building, equipment, various varieties of instructional materials including books in the library exist for just one purpose— for supporting effective implementation of the curriculum. The entire set of classroom activities, the co-curricular programme as well as the entire evaluation schedule flow from the school Curriculum.

You have learnt about different conceptions of Curriculum as a Plan, Curriculum as Process, Curriculum as Experience, Curriculum as Objectives, Curriculum as the Programme of Study, Curriculum as Course Content and you are able to differentiate syllabus and curriculum in their meaning and scope.

7.6 Answers to ‘Check Your Progress’

‘Check Your Progress’-1

1. Curriculum is a Programme of Courses of teaching and learning.

   (i) Curriculum as Plan
(ii) Curriculum as Process
(iii) Curriculum as Objectives
(iv) Curriculum as Programme Content

2. See section 7.4
d. College work learnt by the teacher in training.
3. Distinguish between Curriculum and Syllabus.

7.7 Unit End Exercises

1. Explain Curriculum and its major characteristics.
2. Explain the various conceptions of Curriculum.
3. How does Syllabus Curriculum differ from?

7.8 References

7. Sitaram Jayaswal - *Principals of Education.*
UNIT 8 □ COMPONENTS OF CURRICULUM

Structure

8.1 Introduction
8.2 Objectives
8.3 Components of a Curriculum
  8.3.1 Objectives
  8.3.2 Content
  8.3.3 Methods
  8.3.4 Evaluation
8.4 Let Us Sum Up
8.5 Answers to ‘Check Your Progress’
8.6 Unit-End Exercises
8.7 References

8.1 Introduction

The modern concept of education aims at bringing about desirable changes in the pupils’ behaviour. Keeping the needs of the students, the goals of the nation, the aspirations of the society, the development of the individual personality and other such factors, suitable educational courses have to be designed, structured and provided to the students, through which they can develop the much desired patterns of behaviour. This initiates the process of planning and framing of a good curriculum.

8.2 Objectives

After studying this Unit, you will be able to:

- List the different components of curriculum
- Explain the various principles or points to be kept in mind while constructing a good curriculum
- Explain different approaches adopted while organizing the content of curriculum
8.3 Components of a Curriculum

Society has always been changing with the passage of time. A school curriculum, naturally, has to be responsive to the needs and aspirations of the society and the nation. That means, it has to be dynamic, otherwise it will lose it relevance.

It can be observed that any curriculum undergoes changes and modifications at certain intervals. The thrust of these changes in the curriculum have been in its components viz. its objectives, content process/methods and evaluation. These components are not independent of each other, but are closely interrelated. A good curriculum is just like a blue print in which the claims of these components are well balanced.

8.3.1 Objectives

Objectives are the most important component of any curriculum. While developing a new curriculum the objectives of that curriculum should be properly selected and stated clearly. The objectives are selected keeping in mind the need of the society, the level of the students and their background. The objectives are important because they determine the content of knowledge, skills and methods of teaching as well as evaluation procedures.

The National Curriculum for Primary and Secondary Education (1955) states that “a good school curriculum, should aim at enabling the learners to acquire knowledge, to develop concepts and skills, inculcate attitudes, values and develop habits conductive to all-round development of their personality, and which are commensurate with the social, cultural, economic and environment realities at national and international levels.”

Thus a good school curriculum aims to:

- Develop language abilities and communication skills
- Create an atmosphere in which students will learn to think critically and constructively
- To seek truth and solve problems through national inquiry
- Help students in establishing values through intimate acquaintance with humanities, arts, natural sciences, and social sciences
- Develop the character of the students including integrity, honesty, judgment, cooperation, friendliness and goodwill
- Prepare the students for a dynamic democratic citizenship
- Develop an understanding of diverse cultural and social systems of people and the country’s composite cultural heritage
- Help the pupil to understand the impact of science and technology
- Develop an understanding of the environment and the need for its protection and an attitude of scientific humans.

8.3.2 Content

The next component is Content. It should be noted that any curriculum cannot be rigid and static. It is dynamic and flexible and changes constantly with the changing needs and ideals of society. Content varies with a change in our aims and objectives. In traditional curriculum, knowledge or acquiring of information was considered as more important. Therefore, knowledge of various subjects formed the core of the curriculum content, in the form of subjects like history, geography, science, languages, mathematics, etc. But, recent changes in educational theory have contributed to a more functional form of curriculum. The focus of attention has shifted from a mere selection and organization of inert bodies of information materials to selections and organizing learning experiences and activities which are of practical usefulness for students. Even the Secondary Education Commission of 1951-53 inducted the then existed curriculum as bookish, theoretical and narrowly conceived. Keeping in view the varied abilities and interest of the students, provision for varied courses and the need for a vocational bias, the Commission recommended certain core subjects common to all, and certain optional subjects. It recommended the inclusion of following subjects:

i) Mother tongue and one other language (Hindi or English) which are essential to meet the requirements of the pupils for daily communication and inter-state communication.

ii) Social Studies and General Science are included with a purpose of explaining the social and physical forces that shape the lives of the people. Craft is to be included for the development of the skill.

iii) Humanities, Science, Technical Subjects, Commercial Subjects, Agriculture, Fine Arts and Home Sciences as Elective groups have to be introduced at the secondary level, which provide wide scope of pupils’ choice. Such a diversification is felt necessary, as it may lead to specialized educational courses and vocations in future.

This curriculum content was introduced in majority of the states. Where multipurpose and unipurpose schools were started. Such a healthy change in the content provided opportunities for pupils to select suit Courses table for their special abilities, needs, interests and aptitudes. It offered them a well outlined, compact and integrated programme.

In 1964-66, it was the Indian Education Commission, (Kothari Commission), which noted the widespread dissatisfaction with the curriculum due to the tremendous expansion
of knowledge during the previous years. It considered the then existed curriculum as an out modeled, inadequate and not properly designed to meet the needs of the modern times. It felt that there was an urgent need to raise, upgrade and improve the school curriculum and its content. Hence it recommended the following modifications in the Curriculum.

- It suggested a common content for the first ten years of education with diversification of studies at the higher secondary stage
- Science and Mathematics as compulsory subjects in these 10 years. Science being linked with agriculture in rural areas and with technology in urban areas
- Social studies as a compulsory subject, for the development of good citizenship and economical integration as well as national unity
- It gave a three language formula (mother tongue, Hindi, and English) with a provision to study a classical language on optional basis from VIII standard.
- Laying emphasis, on manual work at all stages, it introduced ‘Work Experience’ in the form of handwork at lower primary, craft in upper primary, workshop training in lower secondary.’ and finally at the upper secondary stage, an experience in school workshop, farm and commercial or industrial establishments.
- In addition to the above, physical education, social service, participation in community development, moral education etc were brought into the fold of this content

Following the Hansa Mehta Committee’s recommendation, the Kothari Commission endorsed the view that there should be no differentiation in the curriculum content on the basis of sex.

In 1980’s following concerns and priorities gained momentum:

- Preservation of our cultural heritage, a sense of national pride
- Strengthening national identity and unity
- Fighting against divisive forces like regionalism, casteism, parochialism etc.
- Character building
- Respect for Constitutional obligations of the nation
- Promotion and Preservation of environment
- Observation of small family norms
- Conservation of national resources and so on
The above concerns and priorities compelled the Country to frame not only a ‘National System of Education’, but also a National Curriculum for School Education. This appeared in the form of N.P.E-1986 (National Policy on Education). In this context, 10 common core components were identified for framing the National Curriculum content. The following themes have been identified in this common core, which are sought to be made obligatory for all schools in the country:

- History of India’s freedom movement
- Constitutional obligations
- Content essential to nurture national identity
- Indian common cultural heritage
- Egalitarianism, democracy and socialism
- Equity of the sexes
- Protection of environment
- Removal of social barriers
- Observance of a small family norm, and
- Inculcation of scientific temper

It is just a broad framework and does not mean rigid uniformity. States are free to design and implement their system, in line with local needs and demands. The content should be such that it should reduce the existing regional imbalances and ensure every child a minimum standard of education through a built-in flexibility for the teacher the school and the local educational authority.

### 8.3.3 Methods

The third component is the process, method or the mode of curriculum transaction. It has been a common experience of the teachers that the process or methods that are followed for such a transaction, do not cater for the development of different abilities and skills in a balanced manner. Many a times it is also not relevant to the stated objectives of the curriculum objectives like independent thinking, originality, constructiveness, creativity, productivity, scientific temper, etc., get little attention. The prevalent style of teaching is actually transmissive or expository. It puts an emphasis on memorization rather than independent thinking. Teachers stay at the delivery end, while pupils are kept at the receiving end. Thus the delivery system is devoid of interaction between the teacher and the pupils. In fact such an approach has compelled us to follow the present examination system which depends upon memorization.
Now, teacher cannot be a mere transmitter but has to assume the role of a facilitator of learning. Interactive teaching, based on teacher pupil dialogue, is recommended. Hence, teaching-learning strategies may assume a variety of modes and may involve a variety of activities on the part of teachers and learners. Some of them are-observation, demonstration, experimentation, projects, assignments, play-way activities, excursions, role-playing, dramatization, group discussions, discovery learning and so on. The use of these strategies will go a long way in making the transaction of curriculum-child Centred.

8.3.4 Evaluation

Evaluation is the fourth component of the curriculum. It is a known fact that only an effective, meaningful, need-based, rational content, in a good curriculum, ensures the all round development of learners. Only such a material can bring about in them the desirable changes in their behaviour. Evaluation is the component which determines the worth or value of a curriculum i.e., whether its objectives are achieved or not. It measures the extent of achievement of objectives. Hence, it becomes a means for quality control in education. It can be worked out in 3 stages:

- At the outset, the objectives of a course or a unit are stated
- Such objective are defined in behavioural terms
- Development of items which aim at finding out the extent to which the material or the content designed to develop the intended behaviours, stated in the objectives or purposes have been developed or not

But the present evaluation system confines itself to the testing of cognitive abilities and ignores the affective domain of the personality. Only lower levels of mental abilities like memory, knowledge are tested. Also, the system is questionable, as far as its reliability and validity are concerned. NPE-86 has also taken note of these defects. Hence, a few key concepts have been proposed such as ‘Internal’, ‘Continuous’, ‘Comprehensive’, ‘Formative’ Process in to the varied techniques of evaluation, which ensures extensive coverage of syllabus and tests the affective and the psychomotor aspects also along with cognitive aspects.

‘Check Your Progress’ - 1

1. Which are the Components of Curriculum?
2. Which are the themes identified by the NPE (1986) to be included in the common core of Curriculum?

8.4 Let Us Sum Up

In this Unit you have learnt the components of curriculum like objectives, organization of content, methods, and evaluation.

1. Content should be
   a) Rigid  b) Static  c) Flexible

Objectives indicate the purpose to be achieved by a curriculum. Content refers to knowledge of concept and skills to be developed in the students. This content has to be meaningfully organized. Methods are required to implement the curriculum in the classroom. They help the teacher to make students learn the content. Evaluation is required to assess the level of achievement of students leaving the content.

8.5 Answers to ‘Check Your Progress’

‘Check Your Progress’ – 1

1. The components of Curriculum are:
   - Objectives
   - Content
   - Methods
   - Evaluation

2. The themes of common core of a curriculum in India are:
   - History of India’s freedom movement
   - Constitutional obligation
   - Content essential to nurture national identity
   - India’s common cultural heritage
- Egalitarianism, democracy and socialism
- Equity of the sexes
- Protection of environment
- Removal of social barriers
- Observance of small family norms
- Inculcation of scientific temper

3. Evaluation determines the worth of the curriculum that is whether its objectives are achieved or not. It measures the extent of achievement of objectives. Hence it becomes a means of quality control in education.

### 8.6 Unit-End Exercises

1. What is the need for studying the components of curriculum by the teachers?
2. Identify the areas could be included in secondary school curriculum. Justify them.

### 8.7 References

UNIT 9  PRINCIPLES OF CURRICULUM
CONSTRUCTION

Structure

9.1 Introduction
9.2 Objectives
9.3 Curriculum Construction - A Systematic Process
9.4 Principles of Curriculum Construction
9.5 Principles related to Learner and Community
  9.5.1 Child Centredness
  9.5.2 Community Centredness
  9.5.3 Utility Principle
  9.5.4 Need Principle
  9.5.5 Relevance Principle
  9.5.6 Conservation Principle
  9.5.7 Principle of Leisure
  9.5.8 Vocational Preparation
  9.5.9 Futuristic Principle
  9.5.10 Development of Creativity
9.6 Principles related to Organization of Curriculum
  9.6.1 Principle of Variety
  9.6.2 Principle of Readiness
  9.6.3 Principle of Flexibility
  9.6.4 Principle of Activity
  9.6.5 Principle of Comprehensiveness
  9.6.6 Principle of Core Subjects
  9.6.7 Principle of Dynamism
  9.6.8 Principle of Organization
  9.6.9 Principle of Integration
  9.6.10 ABC of Curriculum
9.7 Let Us Sum Up
9.8 Answers to ‘Check Your Progress’
9.9 Unit-End Exercises
9.10 References
9.1 Introduction

In the previous two units of this Block you have studied the meaning of Curriculum and its various components. The next questions that may arise in your mind could be - How to develop or construct a curriculum? What considerations one has to keep in mind in developing a curriculum? What specific principles govern the process of curriculum construction? This Unit attempts to answer these questions. As teachers you have to understand these principles. This will help you when you are expected to construct a new curriculum.

9.2 Objectives

After studying this Unit you will be able to:

- Bring out the systematic nature of curriculum construction
- State the principles of curriculum construction related to learners and community
- State the principles of curriculum construction related to curriculum organization
- Explain the Principles of curriculum construction

9.3 Curriculum Construction A Systematic Process

You are aware that curriculum includes various components and it is an organized and meaningful system. All the components of a curriculum are equally important and they are interrelated and inter-dependent.

The process of curriculum construction is an organized, goal-oriented, systematic and planned process. It is a scientific and technical process involving several steps and it requires the co-operation of many individuals and organizations. The process of curriculum construction involves formulation of aims and objectives, selection of appropriate content, designing learning experiences, specifying methods and techniques of teaching and evaluation and preparation of instructional materials, implementation and evaluation of new curriculum and if need be, modifying the curriculum. All these steps have to be followed carefully and systematically.

Systematic organization, structuring of the whole process into logical sequential, meaningful steps determine the ultimate value of a curriculum. All the components of a curriculum should be well balanced to assure its effectiveness. Hence the process of curriculum construction is considered as a systematic process.
Curriculum construction is considered as a systematic process because of the following reasons:

- Curriculum planning has definite objectives to be achieved.
- Curriculum planning and construction have several components and they are all inter related, interdependent.
- All the components in a curriculum are well organized and inter-related.
- Curriculum construction is done following certain principles.
- The whole process of curriculum planning is logical and sequential in nature.
- Curriculum construction is carried out in a phased manner involving several steps in each phase. At the end of each phase evaluation is done.
- On the basis of such evaluation suitable modifications are done.
- A try-out is done before the final implementation of a Curriculum.
- Curriculum construction is done keeping in mind the needs of learners and the community.
- Many professionals, individuals and experts like parents, students, subject experts, educationists, intellectuals and class room teachers as well as social pressure groups and professional organizations are involved in the process of curriculum construction.

9.4 Principles of Curriculum Construction

We have explained above that curriculum construction is it systematic process and many principles have to be kept in mind while designing, planning and developing a new curriculum. What are these principles and what are the implications of these Principles for curriculum developers? Let us list these principles and in the subsequent sections let us explain these principles and bring out their implications for curriculum framers.

There are several principles of curriculum construction formulated by various curriculum experts. These principles can be meaningfully classified into two groups:

(1) Principles related to Learners and Community to whom the proposed curriculum is being developed.

(2) Principles related to Curriculum Organization and other well-accepted educational principles.
The following are the Principles of curriculum construction:

**Principles related to Learners and Community**

1. Child Centredness
2. Community Centredness
3. Utility Principle
4. Need Principle
5. Relevance Principle
6. Conservation Principle
7. Principle of Leisure
8. Vocational Preparation
9. Futuristic Principle
10. Development of Creativity

**Principles related to Organization of Curriculum**:

1. Principle of Variety
2. Principle of Readiness
3. Principle of Flexibility
4. Activity Centredness
5. Comprehensiveness
6. Principle of Core Subjects
7. Principle of Dynanism
8. Principle of Organisation
9. Principle of Integration
10. ABC of Curriculum

In the following sections let us examine these Principles of Curriculum Construction.

‘Check Your Progress’- 1


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9.5 Principles Related To Learners And Community

Any curriculum must reflect and satisfy the needs and aspirations of learners and community for whom it is intended. Hence, curriculum framers, first, have to identify the needs of learners and community. They should study their aspirations. This helps them reflect these needs and aspirations in the proposed curriculum. The principles related to learners and community help curriculum developers to a great extent.

9.5.1 Child Centredness

The curriculum should be based on pupil’s present needs, interests. The child should be the central focus in the process of curriculum construction. Child-Centredness is a time-honoured and well-accepted concept in all educative processes. This is also true in curriculum construction. The content selection, designing of learning experiences, selection of teaching methods/techniques and even process of evaluation have to be done keeping learner’s or child’s interest and needs. The principle is important because the curriculum is for the child and the child is for the curriculum.

9.5.2 Community Centredness

Being sensitive towards the demands of the community and its aspirations while constructing the curriculum is the principle of community Centredness. The curriculum framers should analyze the aspirations and the demands of the community so that they can be properly reflected in the new curriculum. A community may have several resources like historical monuments, folk-literature, places of interest, places or events of scientific interests, geographical locations with variety of plants and animals, traditions and customs and so on. A curriculum framer can utilize these resources effectively in constructing a curriculum. Thus a good curriculum which reflects the needs and aspirations of a community will be well received by that community.
9.5.3 Utility Principle

What is learnt in the school should be useful for children in their life. This is the utility aspect of Curriculum framers should consider. The usefulness of Curriculum knowledge, principles, facts, skills and attitudes learnt in school must have utility value in life. Hence while designing the curriculum, selecting the content and planning learning experiences the principle of utility should be kept in mind. It is true that some school experiences are directly useful in life as for example scientific skills, motor skills, numerical skills, vocational skills and knowledge in science subjects, commerce, etc., Subjects like history, literature etc also have some utility value in an indirect way. We should not forget that whatever is learnt in school will have some value in life.

9.5.4 Need Principle

While constructing a curriculum the needs of children, community must be kept in mind. A good curriculum should be such that it satisfies the needs of children in particular, community in general. It is better to analyze the needs of children, parents and community while developing a new curriculum. A need survey before starting the design of a new Curriculum will be very useful. Specific courses/programmes are designed to satisfy specific needs of clients. Instructional objectives are formulated on the basis of knowledge of need pattern of learners. Hence curriculum is developed to satisfy the needs of learners.

9.5.5 Relevance Principle

Whatever knowledge intended to be learnt by children should be relevant to social context and community context of learners. This is the principle of relevance. It is no use for children to learn anything which has no meaning or relevance to their context and time of living. What was relevant fifty years ago is not relevant now. Such knowledge, skills and attitudes become irrelevant. Many knowledge, skills and attitudes become obsolete as time passes by. Such content becomes meaningless to learners.

For example, learning archery, classical languages was highly relevant during ancient period, but now their learning becomes irrelevant. Learning to drive automobiles, scooters has become highly relevant now. Similarly, skills and attitudes are relevant to their life context. Without learning them they become misfits to their social context. This principle of relevance to the times should be followed by curriculum framers.

9.5.6 Conservation Principle

A good curriculum must also try to preserve and conserve the social and cultural heritage of a community. Art, music, dance, handicrafts, folk-art, classical and folk-literature festivals/rituals, customs and traditions, language forms, myths, mythologies etc are the components of culture. These cultural and social aspects should also find a place in the
curriculum. There should be enough scope to learn these aspects. In the name of relevance we cannot completely neglect these aspects. A good curriculum should try to conserve the cultural aspects of a community. There must be scope for children to study artistic subjects, literature, social customs and traditions. This is the principle of conservation.

9.5.7 Principle of Leisure

The greatest gift of the present scientific world is abundance of leisure time. Hence curriculum should be designed not only for work but also for leisure. It is said that “A nation’s enlightenment is judged by that nation’s leisure time pursuits”. This makes school life more pleasant and meaningful. Hence, a variety of activities- social, aesthetic, sports, cultural etc should find a place in the curriculum. Healthy, wholesome leisure-time activities should find a place in curriculum. Children should be educated to utilize their leisure time for healthy enjoyable and creative activities.

9.5.8 Vocational Preparation

Preparing children for a vocation is an important objective of education. Vocational and professional programmes are designed keeping the sole objective of preparing learners for a specific vocation. Even in general education curriculum the principle of vocational preparation cannot be neglected. A curriculum must be designed such that students who study that curriculum are prepared to take up some worthwhile vocation to lead their life. They should not become a burden on their family. They should become self dependent and finally self reliant.

9.5.9 Futuristic Principle

The present day society, in particular, the world, as a whole, are fast changing due to tremendous advances in science and technology and even in social sciences. In some fields like physics, bio-chemistry, electronics, computer science, Engineering and Medicine the changes are very fast. Unless we prepare our students to cope up with such changes, we lag behind other advanced countries in technological and economic development. Our students become misfits in the changing technological global context. Hence the curriculum should incorporate changes in scientific knowledge, technical skills, scientific concepts and also changing concepts in social sciences. A curriculum should include as far as possible, the latest knowledge and skills. In other words, a curriculum must be futuristic in its orientation, it should be forward looking. There is need to renew curriculum every now and then to incorporate new changes and to remove unnecessary aspects in the curriculum. A good curriculum should prepare students to face the challenges of the present but also the challenges of the future.
9.5.10 Development of Creativity

In recent decades lot of emphasis is laid on fostering creative abilities of children. Every child has a fund of creative energy. Each child has creative ability of some kind or the other through proper education and guidance these creative talents of children have to be fostered. Developing Creative abilities of Children is considered as an important objective of education. Sufficient scope must be provided in a curriculum to foster creativity. Creativity can be fostered through study of arts, music, literature and science subjects. There should be ample opportunities in the curriculum to foster creative abilities of children that promote divergent and reflective thinking.

‘Check Your Progress’-2

1. What is Child-centredness in relation to curricula?

2. What do you mean by Utility Principle?

3. Match the following

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Creativity Principle</td>
<td>b. Preparing children for vocation</td>
</tr>
<tr>
<td>3. Futuristic Principle</td>
<td>c. Protecting culture</td>
</tr>
<tr>
<td>4. Leisure Principle</td>
<td>d. Developing hidden talents</td>
</tr>
<tr>
<td>5. Vocational Principle</td>
<td>e. Preparing for forthcoming challenges</td>
</tr>
</tbody>
</table>

9.6 Principles Related To Organisation Of Curriculum

In the previous section you learnt about those principles of curriculum construction which are concerned with the students and the community to which the curriculum is intended. There are other principles which deal with the organization of the curriculum. What should be the nature of a curriculum? What is its scope? How should it be organized?
What considerations must be kept in mind to facilitate smooth and effective implementation of a curriculum? In this section we will discuss some principles which should be followed by curriculum developers.

9.6.1 Principle of Variety

You are well aware that individuals differ a lot in their background, physical and psychological characteristics. Students differ in their abilities, aspirations and interests. There are very bright students, a number of average students and some slow learners also. A Curriculum framer should consider these differences while formulating Curriculum objectives, selecting content, activities and learning experiences. There should be variety in subjects of study; methods of teaching, learning activities catering to these individual differences, a curriculum should not be limited only to curriculum activities. Due importance is given to co-curricular activities, out of school activities, creative activities, and community related activities. Variety in school experiences/ activities attracts students and sustains their interests in learning. This is the principle of variety.

9.6.2 Principle of Readiness

A curriculum framer should keep in mind two important considerations. Whether the students to whom the curriculum is intended are physically and psychologically ready to study the Curriculum and whether the required infrastructural and instructional facilities will be made available to teachers to implement the curriculum. These considerations are related to readiness of students and preparedness on the part of school authorities. A curriculum framer should select the content and learning experiences suitable to the maturational readiness and social background of learners. Similarly he should make sure that required facilities will be made available for implementing the curriculum. Otherwise the curriculum loses its purpose and it cannot be transacted effectively A variety of facilities like classrooms, play ground, library, laboratories, furniture, qualified teaching and non-teaching staff, basic facilities, and so on are required to implement a curriculum. Even a very well designed curriculum may fail in the absence of readiness of students and preparedness of facilities.

9.6.3 Principle of Flexibility

This principle refers to easy modifiability of curriculum. Curriculum should not be too rigid, not allowing scope for the teacher to slightly modify the content and methodology to suit local conditions and background of students. There should be enough scope and freedom for the administrators/class-room teachers to modify the curriculum to suite the local conditions. This nature of a curriculum is the principle of flexibility. In advanced countries the curriculum is highly flexible. Teachers can bring in new topics or content, can use innovative methods of teaching and even modify the sequence or level of content to suit learners’ requirements. Unfortunately, in Indian education system curriculum is highly
rigid. Teachers have no freedom to make changes in the content. Students agitate if a
creative teacher brings in new content or uses innovative teaching techniques. Everything
about the curriculum is looked at from the point of view of only passing examinations. Thus
curriculum transaction becomes a routine and void of creative procedures of teaching-
learning.

9.6.4 Principle of Activity

This principle is related to John Dewey’s principle of Learning-by-Doing, his emphasis
in activity-oriented teaching-learning. A good curriculum should provide lot of scope for
activities. In Physical/Healthy Education, Science subjects/Arts and Craft subjects naturally
there is a lot of scope for activities Dewey has suggested Project Method to learn through
projects. When students involve in activities they learn better. Skill learning takes place
effectively and it is not forgotten easily because skills are learnt through activities. Gandhiji’s
Basic Curriculum gives central importance to activities and crafts. Children involve themselves
in activity type of learning situations and enjoy such learning. Hence a curriculum should
provide scope for activities that promote high degree of involvement of students.

9.6.5 Principle of Comprehensiveness

This principle is related to the scope of the curriculum in terms of aims and objectives
of course content, coverage in terms of number of papers and the variety of activities/
learning experiences planned and the evaluation procedures. A good curriculum should aim
to achieve the instructional objectives in cognitive, affective and psycho-motor domains.
Importance is given to development of knowledge, understandings, skills and desirable
attitudes so that there will be scope for all-round development of pupil’s personality. A
variety of specific courses are included. There must be variety in learning activities
experiences. It is better to include both formative evaluation (internal assessment) and
summative evaluation (terminal examination).

9.6.6 Principle of Core-Subjects

A school curriculum should include core-subjects covering essential content and skill
children have to learn. At present, up to secondary level all subjects included in the primary
and secondary school curriculum are essential or core subjects which every child has to
study. At the Higher Secondary and Higher Education levels optional subjects are included
in the curriculum. Even in higher education curriculum some core elements in terms of
general courses are included in addition to optional courses. The logic behind this principle
is that every student of an academic programme has to study some compulsory courses
and some optional courses of his/her choice which provide basic foundation of concepts
and principles.
9.6.7 Principle of Dynamism

This principle is related to periodic revision of curriculum. A curriculum should be dynamic and update in the sense it should be ready to incorporate new content in it and to remove obsolete content or “deadwood” from it. Thus a curriculum is revised after some time to keep pace with the changes in knowledge and skills. In some subjects like science, engineering, computer science and technology such periodic renewal becomes all the more important. Changes are made not only in content but also in the design of the curriculum, evaluation scheme and arrangement of courses.

9.6.8 Principle of Organization

This principle is related to the whole organization of courses of a curriculum. It is related to the sequencing of teaching units in a course and the courses of a curriculum in a proper sequence based on psychological principles and logical principles. The maxims of teaching like simple to complex, particular to general etc are kept in mind in organizing the entire curriculum. If programme is of more than one year the courses are organized for the first and subsequent year based on some considerations. Core course are introduced in the first year and difficult courses and optional courses are introduced in the subsequent year.

9.6.9 Principle of Integration

The curriculum should not consist of a number of isolated, uncoordinated, watertight subjects. The different subjects of the curriculum should be related to each other from the point of view of content/ concept etc. This principle is related to the principle correlation in teaching. A teacher should emphasize the interrelationship between different subjects and he should make students to understanding this interrelationship between different subjects in the curriculum. For example, Mathematics and Physics are interrelated. History and Geography are interrelated. Language studies are also related to study of history. While selecting and sequencing the content of different courses a curriculum framer should keep the principle of integration and correlation in mind.

9.6.10 ABC of Curriculum

This principle is a combination of three principles ‘A’ stands for Articulation, ‘B’ denotes Balance and ‘C’ indicates continuity of learning. These three principles are together known as ABC of curriculum construction.

Articulation is concerned with consistency, continuity and inter-dependence of subject of a particular course. The whole content of a course is organized into smaller units of subject matter, learning, experiences and activities. These units, in turn, are arranged on the basis of a particular sequence according to some psychological and logical principles. There are two types of Articulation- Horizontal Articulation and Vertical Articulation.
Horizontal or Latitudinal Articulation refers to the organization of content with in a different subjects. There is connection between similar ideas with in several subjects- in a grade. Vertical or Longitudinal Articulation refers to the organization of content in such a way that each subject and its units in a grade lead to a higher level of content in the successive grades. Thus the curriculum from pre-primary through secondary to the university level is continuous and each part of its subject matter grows out of the preceding part and contributes to the subsequent parts of the subjects.

If there is no articulation in the organization of curriculum, it leads to gaps leading to confusion. There will not be any relationship between the subjects that are learnt in a grade and subsequent grades. Further, there will not be a proper relation between theory and practice. In other words, the Principle of Articulation helps to evaluate gaps in the content between two units of a subject/ subjects of the curriculum of the same grade and of different grades.

**Balance** refers to representing different objectives of education in the curriculum. A good curriculum should have objectives relating to cognitive, affective and psycho-motor domains of behavior. It should aim at enriching knowledge, developing, understandings, generalizations, developing useful motor skills and developing, desirable interests, attitudes and values. All these objectives should find a place in the curriculum. Depending upon the general nature of an academic programme there may be predominance one type of objective. For example in courses of History, Social, Sciences knowledge objective become important. In Engineering and Science courses skill objectives are emphasized more. In Literature courses attitudes, interests and values are emphasized. However, other objectives also should be included. The goal is to develop a balanced, all round personality of children.

**Continuity** refers to the smooth manner with which learners move from one level or grade of learning to the next. To achieve this smooth transition of learners from one level to the next level, the curriculum should be planned properly providing continuity. Care should be taken not be leave any gaps in the content taught through successive years. Continuity in general, is a term that connects between past present and future. Proper structuring, sequencing and integrating the content helps to maintain continuity in learning.

*Check Your Progress*-3

1. Match the following Principles of Curriculum Construction with their Purpose.

<table>
<thead>
<tr>
<th>Principles</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Principle of Variety</td>
<td>A. Learning -by-doing</td>
</tr>
<tr>
<td>2. Principle of Readiness</td>
<td>B. Interrelations Subjects</td>
</tr>
</tbody>
</table>
3. Principle of Flexibility C. Assimilatory new Content
4. Principle of Activity D. Adopting to Varying needs
5. Principle of Dynamism E. Provision for Varying interests
6. Principle of Integration F. Adopting to Maturational level

2. What is the Principle of Core-subjects?

3. What do you mean by ABC of Curriculum?

9.7 Let Us Sum Up

In this Unit you have learnt about the Principles of Curriculum Construction. These Principles were explained under two groups - (1) Principles relating to Learner and Community and (2) Principles relating to organisation of Curriculum. Principles of Child Centredness, Community Centredness, Utility, Conservation, Leisure, Vocational Preparation and Futuristic View were explained under the first group. Under the second group Principle of Variety, Readiness, Flexibility, Activity, Comprehensiveness, Core Subjects, Dynamism, Organisation, Integration and ABC of Curriculum under which Articulation Balance and Continuity were included.

9.8 Answers To ‘Check Your Progress’

‘Check Your Progress’-1

1. Write any five reasons from section 9.3
2. Principles of Curriculum Construction relating to Learner and Community are:
   a) Child Centredness
   b) Community Centredness
c) Utility Principle
d) Need Principle
e) Relevance Principle
f) Conservation Principle
g) Principle of Leisure
h) Vocational Preparation
i) Futuristic Principle
j) Development of Creativity.

3. Principles of Curriculum Construction relating to organization of Curriculum are:
   a) Principle of Variety
   b) Principle of Readiness
c) Principle of Flexibility
d) Activity Centredness
e) Comprehensiveness
f) Principle of Core Subjects
g) Principle of Dynamism
h) Principle of Organisation
i) Principle of Integration
j) ABC of Curriculum

‘Check Your Progress’-2
1. Child Centredness in Curriculum means that child should be the focus point in all aspects of Curriculum Construction.
2. Utility Principle implies that whatever children learn in school/college-knowledge, skills, attitudes, concepts and Principles must be of some use or Utility in their future life.
3. 1-c; 2-d; 3-e; 4-a; 5-b

‘Check Your Progress’-3
1 1-E; 2-F; 3-D; 4-A; 5-C; 6-B
2. Principle of Core Subjects states that any Curriculum should include some essential subjects which every student should study.
3. ABC of Curriculum shows three important Principles of Articulation, Balance and Continuity which have to be considered while constructing a new Curriculum.

9.9 Unit-End Exercises

1. Justify the statement that Curriculum Construction is a systematic process.
2. Explain the Principles of Curriculum Construction relating to child and community.
3. Explain the Principles of Curriculum Construction relating to Organization of Curriculum.
4. Analyse the Present Secondary School Curriculum in your subject of Choice and find out how far the Principles of Curriculum Construction have been considered in its formulation.

9.10 References

5. Zaor, R., Curriculum Development theory & Practice, Harcourt, Bracu & Winstan, INC, N.Y.
UNIT 10  □ TYPES OF CURRICULUM

Structure

10.1 Introduction
10.2 Objectives
10.3 Types of Curriculum
  10.3.1 Subject Centred Curriculum.
  10.3.2 Child Centred Curriculum.
  10.3.3 Activity Centred Curriculum.
  10.3.4 Craft Centred Curriculum
10.4 Relative Merits and Limitations
10.5 Let Us Sum Up
10.6 Answers to ‘Check Your Progress’
10.7 Unit-End Exercises
10.8 References

10.1 Introduction

For ages, the curriculum was traditionally conceived in terms of subject matter. It will not be surprising to find even today that many people view it as materials or textbooks that are used in the schools. But according to the new concept of curriculum, provision is made for the varying abilities and interests of pupils. This principle of variety operates not only at the individual level, but also at the state, regional or national levels, where the regional or local needs are taken care of. Hence, broadly, a curriculum can be of two types-Subject Centred and Child Centred.

10.2 Objectives

After studying this Unit, you will be able to:

- Name the types of Curriculum
- Explain the Characteristics of Subject Centred Curriculum
- Explain the Characteristics of Child Centred Curriculum
- Describe Activity Centred Curriculum
• Explain Gandhiji’s Craft Centred Curriculum
• Bring out the Merits and Limitations of different types of Curriculum

### 10.3 Types Of Curriculum

#### 10.3.1 Subject Centred Curriculum

Subject Centred Curriculum emphasizes on the mastery over certain types of knowledge and skills through the study of certain subjects as the main objective. Subject Centred Curriculum has been the oldest type of Curriculum. In this type of Curriculum the entire Curriculum is viewed as certain subjects or branches of knowledge every student is expected to study. Thus Curriculum is viewed as a set of subjects of study. During Vedic Period the Curriculum consisted of several subjects like Vedas, Vedanta etc. During Buddhist education some more subjects were added removing Vedic subjects from the Curriculum. During Greek and Roman period Curriculum included a number of Subjects like Philosophy, History, Mathematics etc. These subjects were grouped under two headings - Trivium and Ovadrivitum. The concept of Subject Centred Curriculum continued even in Medieval European Universities.

The following are the Characteristics of Subject Centred Curriculum.

- Greater importance is given to subjects.
- Stress is laid on the teaching of the subjects
- Subject matter is organized before it is presented in the class
- Instruction is for the sake of the knowledge
- Facts are considered more important
- Memorization of facts assumes predominant importance
- Education is confined to a general pattern of instruction
- More emphasis is given to classroom teaching
- It is teacher-Centred
- Evaluation is written in nature and summative
- It is usually verbal in nature and easy to follow

Dewey criticizes the Subject Centred Curriculum in these words: “We violate the child’s nature and render difficult the best ethical results by introducing the child too abruptly to a number of special studies of reading, writing geography etc not related to this social life”.

152
10.3.2 Child Centred Curriculum

The importance of Subject Centred Curriculum continued in Europe till the later part of 19th Century, till Rousseau, the France educationist, advocated his Naturalistic philosophy of education. He forcefully argued that Curriculum was meant for the child and not the child for the Curriculum. He advocated that the child or the learner should be the focal point of curriculum and all educative processes. He pleaded for what he called Child Centred Education. All educational activities to Center round the child. The curriculum should be developed keeping the child's intense, abilities and needs in mind after Rousscace, Pestalloze, who stressed the need of child Psychology, Froebel and Montessori who advocated their own system of educating Young children further emphasized the need of Child Centred Curriculum.

In this type of Curriculum is built upon the needs, abilities, interests and levels of the child or student. It is based on the concept that ‘Life is Education and Education is life’.

The Chief Characteristics of Child Centred Curriculum are:

- The learners occupy the central position in Curriculum Construction
- Stress is on the all round development of the child
- Selection and organization of subject matter involves teacher-pupil planning
- Instruction is imparted for the sake of improving the life of the learner
- More importance is given to the ‘process of acquiring’ facts
- Stress is laid on building skills and attitudes
- Education is regarded as a process of learning of progress and development
- Education is regarded as a means to prepare the learner to be a socially efficient individual
- Emphasis is laid on varied activities and experiences
- It keeps in consideration the individual difference
- Usually this kind of Curriculum is not in the form of written will be final form. There will be flexibility in it. Teacher has to prepare the curriculum with the help of pupil and community. So it differs from group to group.

In this type of curriculum, ‘Education and Teaching are made to suit a child in accordance with his particular needs and interests rather than pushing him into an educational mould’. Various activities and experiences help the learners to acquire knowledge, develop understanding and skills apply knowledge and understanding to life situations. Thus a Child
Centred Curriculum gives enough scope for activities or experiences in the curriculum in addition to knowledge, concepts and understandings.

‘Check Your Progress’-1
1. What is Subject Centred Curriculum?


2. Mention the Characteristics of Subject Centred Curriculum?


3. What do you mean by Child Centred Curriculum?


4. What are the Characteristics of Child Centred Curriculum?


10.3.3 Activity Centred Curriculum

John Dewey who advocated Pragmatic Philosophy of Education designed a kind of Curriculum known as Activity Centred Curriculum. Dewey criticized subject Centred Curriculum and advocated the Curriculum should give importance to variety of activities in order to prepare students to face the problems and challenges of life. Students have to develop useful understanding, attitudes and skills which are of practical usefulness. He suggested project method through which students undertake small project work to collect data about a problem and to analyze the data to find a solution. Thus through the activities involved in project work students learn new things and get various experiences. Similarly other activities like group discussion, experimentation art and craftwork, dramatization etc students can learn new facts, concepts and skills. Students learn well whatever they do
actively. Dewey called this Principle as “Learning-by-Doing” Dewey introduced his new type of Curriculum in his Progressive Schools. Piaget also advocated the importance of activities in Curriculum Construction.

The Characteristics of Activity Centred Curriculum are:

- Activities are in central focus in Curriculum construction
- Learning experiences are given through activities
- These activities are purposive goal-directed and systematic
- Principle of leaning by doing is emphasized
- Direct experience is stressed more than indirect experience
- The entire Curriculum is designed as a series of purposive activities
- Concepts and understanding are learnt through activities
- Activities are selected keeping in mind learners’ needs, abilities and interest. Thus the principle of Child-Centredness is followed.

10.3.4 Craft Centred Curriculum

Mahatma Gandhiji also was a Champion of Child Centred Education. He developed a new system of education called Basic Education which emphasized Child’s needs and interests and which suited conditions of our Country. In this system of education Gandhiji suggested a new type of Curriculum which he called Craft Centred Education. In this type of Curriculum the entire Curriculum is designed keeping a Craft like Spinning or Farming as the Central focus of Curriculum Development. All subjects to be learnt are in relation to the Central Craft.

The Characteristics of Craft Centred Curriculum are:

- One or two crafts are kept as the central focal points of Curriculum. Construction
- Such Crafts are of utility value for students
- All subjects like Mathematics and Science are taught in relation to the Crafts
- Students are prepared to follow the Crafts for their occupation
- Learning of Crafts brings economic value in education
- More stress is laid on learning of Practical Skills
- It promotes dignity of labour among students
This type of Curriculum accepts the Principle of Child Centredness and Learning-by-doing
It prepares students to pursue a selected occupation after their education
It is more or less similar to Activity Centred Curriculum in its nature

10.4 Relative Merits And Limitations

Subject-Centred Curriculum is the oldest type of Curriculum in which the depth of content and its learning is emphasized most. Naturally, it provides scope for learning specific knowledge concepts and understandings. Stress is given to learning of subjects. But as the entire focus is on subjects, the needs, abilities and interests of the child or learner are neglected. Subjects are included in the Curriculum for their own sake and not keeping the learners characteristics in mind, whether children like it or not they have to study all the subjects. This makes some curricular subjects as a burden. Importance is given to learning subject content rather than skills and attitudes.

The concept of Child Centred Curriculum has shifted the focus of Curriculum from subject to the learner or the Child. This is the foremost merit of this type of Curriculum. Subjects are selected, activities are organized and teaching methods are selected keeping Children’s needs, abilities and interests. It takes into account the individual differences among Children.

One limitation of this type of Curriculum is that it is not possible to design a Curriculum for each child. It is practically impossible. All children have to lean some subjects compulsorily. Hence, Core or Compulsory and Optional Subjects are provided in the Curriculum. Equal scope is provided for learning knowledge’s, understanding, concepts, skills and attitudes.

Activity Centred Curriculum and Craft Centred Curriculum emphasize direct experience through Practical activities. This is a good point of these Curriculum Development of Skills and attitudes is given more importance than leaning dry facts, complex concepts, which have little value in life. As Pupils are involved in variety of activities, they develop practically useful skills, evince interest in learning and involve themselves in teaching learning situation. Gandhiji’s Craft Centred Education Prepares Children for a vocation develops self-dependence. But these type of Curriculum tend to neglect proper learning of subject matter. Over emphasis, on activity and Craft makes it difficult to teach all subjects with equal importance.
‘Check Your Progress’-2

1. Define Activity Centred Curriculum.

2. What are the Characteristics of Activity Centred Curriculum?

3. Bring out the meaning of Craft-Centred Curriculum?

4. Mention the Characteristics of Craft-Centred Curriculum?

10.5 Let Us Sum Up

In this Unit various types of Curriculum are examined. In subject-Centred Curriculum, which is the oldest type of Curriculum, emphasis subjects to be included in the Curriculum. After 18th Century the emphasis was shifted from subjects of study to the child as learner. This initiated a Child Centred Curriculum. In this Curriculum Child’s abilities and interests are kept in mind while framing the Curriculum Joh Dewey suggested an Activity Centred Curriculum, which gave importance of learning activities to give learning experiences. In India Mahatma Gandhiji developed a Craft Centred Curriculum in which the Curriculum was developed around a useful Craft as the Central focus. The relative Merits and limitations of these types of Curriculum were also examined.
10.6 Answers To ‘Check Your Progress’

‘Check Your Progress’-1
1. Subject Centred Curriculum gives importance to the subjects of study to be included in the Curriculum.
2. Write the Characteristics of Subject Centred Curriculum from section 10.3.1
3. The Curriculum which gives importance to Child or Learner’s abilities, and interests is known as Child Centred Curriculum.
4. Write the Characteristics of Child Centred Curriculum from section 10.3.2.

‘Check Your Progress’-2.
1. Activity Centred Curriculum is a Curriculum which emphasises activities to give learning experiences to children.
2. Write the Characteristics of Activity Centred Curriculum from Section 10.3.3.
3. In Craft Centred Curriculum the Curriculum is constructed keeping a useful Craft as the Central Focus Point. Gandhiji suggested this type of Curriculum.
4. Write the Characteristics of Craft Centred Curriculum from section 10.3.4.

10.7 Unit-End Exercises

1. Explain the meaning and salient features of Subject Centred Curriculum and Child Centred Curriculum.
2. Show how Activity Centred Curriculum and Craft Centred Curriculum are innovative in their concept and design.
3. Bring out the Merits and limitations of different types of Curriculum.

10.8 References

UNIT 11 ☐ APPROACHES TO CURRICULUM CONSTRUCTION

Structure
11.1 Introduction
11.2 Objectives
11.3 Approaches to Curriculum Construction
   11.3.1 Separate Subjects Approach
   11.3.2 Integrated (Core / Theme Centred) Approach
   11.3.3 Linear Approach
   11.3.4 Concentric (Spiral) Approach
   11.3.5 Pyramidal Approach
11.4 A Critical Appraisal of the existing Curriculum
11.5 Let Us Sum Up
11.6 Answers to ‘Check Your Progress’
11.7 Unit-End Exercises
11.8 References

11.1 Introduction

Educationists have explained several approaches for curriculum construction. Each approach has its own merits and limitations. In this unit you will study about approaches for curriculum construction.

Curriculum development is a specialized area of work which expects a teacher to have a deep understanding of the underlying principles of curriculum and also the skill to systematically designing learning experiences to achieve the socially desired goals set by the society we live in. Curriculum development involves various stages/steps to be followed by those engaged in designing and developing a curriculum. As a teacher you are an important agent involved in the transaction of learning experiences to students. You should have a thorough knowledge of the process of curriculum development. With this understanding you will be able to transact the curriculum more intelligently, with full knowledge of its theoretical background. Moreover, who knows one day you may be one of team member; involved in reviewing, updating and redesigning the curriculum of spool or the State. Educationists
have explained several approaches for curriculum construction. Each approach has its own merits and limitations. In this unit you will study about approaches for Curriculum construction.

11.2 Objectives

After going through this Unit you should able to:

- List the approaches to curriculum construction
- Explain Integrated Approach and Separate Subjects Approach.
- Explain Concentric Approach and Linear Approach
- Bring out the merits and limitations of these approaches

11.3 Approaches To Curriculum Construction

Curriculum must be highly flexible in its content and organization. As we have already discussed about the content component of the curriculum, let us take a brief note of organizing this curriculum material. The following approaches are generally employed in the process of curriculum construction.

- Integrated (Core / Theme Centred)
- Separate Subjects Approach
- Concentric (Spiral) Approach
- Linear Approach
- Pyramidal Approach

Let us try to understand the nature of these approaches and their merits and limitations in the following sections.

11.3.1 Separate Subjects Approach

The Separate Subject Approach is one of the most widely used methods for organizing educational experiences. In this approach the subject matter becomes the basis around which learning experiences are organized and the mastery of subject matter becomes the basis for attainment of educational objectives.

In Separate Subjects Curriculum, the chief responsibility of the curriculum planners is to determine the subjects to be offered by the school and the body of knowledge to be covered within each subject. For example, the subjects or the programme of studies may be divided into areas like English, Hindi, Science, Social Studies, Mathematics and so on.
Merits
Separate Subjects Approach has the following merits.

1. As knowledge has grown tremendously during the previous two centuries it is better if students learn the content of each branch of knowledge separately. Hence, subjects to be included in the curriculum are selected and content to be included in the syllabus is selected for each subject.

2. Helps the class-room teachers to teach the subject of their specialization.

Limitations

1. This is the traditional approach which needs to be modified.

2. Subjects, in recent times, as developed disciplines of studies are emerging as a result of combination of two subjects like Bio-chemistry, Bio-Technology etc. Hence, it seems artificial to put subjects in water-tight compartments. Students should understand the basic unity of knowledge.

3. Its repetitive factor which develops a sense of boredom and sets in dullness and monotony;

4. No freshness in presentation;

5. A sense of familiarity with content but without the fullness of knowledge.

6. The child has to go through the whole course again and again

11.3.2 Integrated (Core / Theme Centred) Approach

In this approach the curriculum is designed keeping in mind some core content or theme to be learnt and understood by students. Instead of preparing curricular content and activities for selected separate subjects like History, Geography, Physics, Chemistry and so on, certain core elements or themes of knowledge are selected keeping the age level, interests and needs of learners as well as the social demands before constructing a curriculum. Then knowledge content is selected from relevant subjects suitable to impart the selected core elements/ themes and arranged in the form of syllabus. Suitable learning experiences and activities are also suggested. As the purpose is to integrate different subjects to teach basic themes this approach to curriculum is called Integrated (Core / Theme) Approach. This Approach was advocated and popularized by John Dewey, Jerome Bruner and Bining during the early part of 20th century. In fact Jerome Brune developed a curriculum about Development of Human beings and Human Society. He called this curriculum as ‘Man-A Courses of Study’ (MACOS). It centers on certain broad and basic themes about man like evolution, food, shelter, clothing, recreation, occupation, social life, reproduction and so on. The Integrated Approach to teach social studies, developed in America. This Approach
was recommended by the Secondary Education Commission (1952). In this Approach content relating to History, Geography, Civics and Economics is presented in an integrated manner, instead of teaching them as separate subjects. But this Approach was done away after the publication of the Kothari Commission Report (1964) and though the title of Social Studies / Science was retained, subjects are presently taught as separate subjects.

**Merits**

1. This approach emphasizes the unity of knowledge.
2. Importance is given to understanding of Core Elements / Themes.
3. Principle of integration is followed in organizing and teaching the content.

**Demerits**

1. As content from different overlapping subjects is taught together students are likely to get confused.
2. It is difficult for teacher to follow integrated approach of teaching.

‘Check Your Progress’-1

1. List the Approaches to Curriculum Construction.

2. What is Separate Subject Approach to Curriculum Construction?

3. What is Integrated Approach to Curriculum Construction?

**11.3.3 Linear Approach**

In this Approach, the entire learning materials are presented in the form of different units or subdivisions, which are arranged or organized on the basis of:
• Logical principles
• Psychological principles
• Using maxims of teaching
• Principle of chronology

Further the whole course may be divided form lower to higher standards. Naturally, every year, the pupils are introduced to study new materials which sustain their interest in the subject and minimize repetition and monotony. This way of presentation is logical.

But this Approach has been criticized for:
• Lack of central themes, purposes or directions
• Instructional material has to be made simple and easy to learn, especially at the earlier stages of instruction
• No provision for adequate selection of topics by teachers
• Lack of repetition, which may make the pupils to forget what they have studied at earlier stages

11.3.4 Concentric (Spiral) Approach

At the outset, this approach may appear to be two different approaches, but the Educational Dictionary and Encyclopedia have considered them as synonyms.

Here, the entire material is arranged and taught in ever widening cycles with increasing details from one standard to another or from one stage to another stage. In other words, the same material is presented again and again, with increasing fullness and more details in every successive standard. For example in ‘Indian History’, a bare outline is given at the lower stages and a complex treatment at the higher stage. The factor of repetition enhances the learners chance to understand much better the curriculum presented before him. This way of presentation is both logical and psychological which takes into consideration age, maturity, interest, ability attitude etc of learner.

Even this Approach is criticized for:
• Its repetitive factor which develops a sense of boredom and sets in dullness
• No freshness in presentation
• A sense of familiarity with content but without the fullness of knowledge
• The child has to go through the whole course again and again
11.3.5 Pyramidal Approach

If the career of a professional or specialist can be analysed as to how he/she has climbed to that level, one can make out the broad based curriculum at the bottom most level to which he is introduced in his early stages of education. From a comprehensive base, he/she moves on to the tip of the pyramid. In the selection and organization of the curricular content to reach the culmination point, one should note here that every preceding stage equips him/her to make a proper selection in the succeeding stages, and finally helps to decide the terminal behaviour or outcome. For example, during the 10 years of school education, the pupil is introduced to a common curriculum where as at +2 level diversification is seen. At the degree and the P.G level, he/she further pin points his/her studies on one particular field and finally he/she specializes in a specific content area at Ph.D., level. When the curricular material is arranged in this method, we call it the Pyramidal Approach.

11.4 A Critical Appraisal of the existing Curriculum

Keeping in view the earlier discussions on the secondary school curriculum let us look as the defects of the curriculum pointed out by the Secondary Education Commission 1953. They are as follows:

- Narrowly conceived - the curriculum is narrowly conceived and there are no broad units of study.
- Bookish - it is bookish and theoretical and neglects practical considerations.
- Overcrowded- it is overcrowded with numerous academic subjects as a result the students as well as the teachers do not bother about the practical aspects of studies.
- Single track - It is single track curriculum. There is inadequate provision for practical and other kinds of activities like games, sports, hobbies, craft etc.
- Dominated by examinations- The teacher is required to teach in terms of examinations and pass percentage.
- Makes a child a passive recipient - the syllabus and method that is followed in a school encourages pupils to accept facts without questioning.
- Neglects individual differences - A common curriculum (syllabus) is followed for children of the whole State. This cannot provide for individual differences.
Let us now look into the existing secondary school curriculum in our state.

- Efforts have been made to replace the Subject Centred Curriculum by Activity Centred Curriculum. This has been fairly successful in science subjects but not so in subjects like History;
- Enough care has not taken in designing the curricular activities. There are such activities which cannot be either conducted by all the schools or followed by all the pupils;
- Curriculum objectives are more or less the same as that of educational objectives in general;
- Not much difference is seen between the objectives at the primary level and the secondary level;
- While organizing the content, linear approach and the concentric approach have been followed. Repetitive factor in organizing the material is more that necessity.
- Activity Centred Approach emphasizes the need for a teachers handbook to implement or conduct such activities. But lack of such a handbook is a great handicap to the classroom teacher.

‘Check Your Progress’ -2

1. What are the criticisms of Linear Approach?

2. Bring out the nature of Concentric (Spiral) Approach to Curriculum Construction?

3. Write the criticisms of the Secondary Education Report (52-53) about the then existed curriculum at Secondary Education Level.
11.5  Let Us Sum Up

In this Unit different approaches to Curriculum Construction were explained along with their merits and limitations. In Separate Subjects Approach, Subjects to be included in the Curriculum or Curriculum is designed around certain basic themes or Core elements to be learnt by the students, and content is selected from different subjects to elaborate these themes. In Concentric (Spiral) Approach the same content is elaborated in detail as we go from a lower class to a higher class. In Linear Approach the learning Materials are presented in the form of Units starting from basic content to more and more complex content based on logical Principles. The Pyramidal Approach is applicable to technical or professional courses, in which curriculum becomes broad based at the lower level and becomes more and more specialized and narrower specialization at the end. In the last part of the Unit the Criticism again curriculum in Indian context by the Secondary Education Commission (53-53) were considered.

11.6  Answers To ‘Check Your Progress

‘Check Your Progress’-1

1. The Approaches to Curriculum Construction are -
   i) Separate Subjects Approach
   ii) Integrated (Core / Theme Centred)
   iii) Concentric (Spiral) Approach
   iv) Linear Approach
   v) Pyramidal Approach

2. In Separate Subjects Approach Curriculum is Construction selecting content from different disciplines and designing separate required member of separate subjects of study.

3. In Integrated or Theme Approach some Major themes to be included in the Curriculum are first identified and then required content to elaborate these themes is selected from different disciplines. Thus content from different disciplines (Subject areas) is presented in an integrated manner.

‘Check Your Progress’ - 2

1. Linear Approach has been criticized for
- Lack of Central themes, purposes or directions.
- Instructional material has to be made simple and easy to learn especially at the earlier stages of instruction.
- No provision for adequate selection of topics by teachers.
- Lack of repetition, which may make the pupils to forget what they have studied at earlier stages.

11.7 Unit-End Exercises

1. Name different Approaches to Curriculum Construction and explain these Approaches.
2. Bring out the merits and limitations of different Approaches to Curriculum Construction.

11.8 References

UNIT 12 □ STEPS OF CURRICULUM CONSTRUCTION

Structure

12.1 Introduction
12.2 Objectives
12.3 Process of Curriculum Construction
12.4 Steps in Curriculum Construction
12.5 Let Us Sum Up
12.6 Answers to ‘Check Your Progress’
12.7 Unit-End Exercises
12.8 References

12.1 Introduction

So far in the previous Units of this Block you have learnt about the meaning and components of Curriculum. We have examined the Principles on the basis of which a Curriculum has to be constructed. We have described the characteristics of different types of Curriculum and in the previous unit we have explained different approaches to Curriculum Construction.

You have understood so far that Curriculum is a systematic Organization of learning experiences in order to achieve pre-determined objectives of education. Naturally, Curriculum, Construction must be a Systematic Process consisting of several steps. It requires lot of Planning and the Co-operation of many individuals like educational administrators, Class-room teachers, subject experts, Curriculum Specialists students and parents. Many organizations like social pressure groups, Parent Associations, Teacher Organizations, Universities and Curriculum Research Institutes, Government Education Departments, Student Unions also participate in the process of Curriculum development. Curriculum Development is a long Process which takes a lot of time and effort. In this Unit you will learn about the various steps involved in the Process of Curriculum Construction.

168
12.2 Objectives

After studying this Unit you will be able to:

- Identify the successive stages or steps in Curriculum Construction
- Explain the steps in Curriculum Construction
- Bring out the importance of each step in Curriculum Construction
- Bring out the role of different individuals and Organizations in the Process of Curriculum Construction

12.3 Process of Curriculum Construction

The following are the steps to be followed in the Process of Curriculum Construction. A glance at these steps shows that these steps relate the Planning for Curriculum Construction, Developing Curriculum.

1. Assessment of educational needs
2. Selection and formulation of the objectives of the Curriculum
3. Selection of Content
4. Organization of Content
5. Selection and Organization of Activities (Learning Experiences)
6. Specification of Methods of Teaching
7. Preparation of Instructional Materials
8. Suggesting Instructional Aids/sources
9. Deciding evaluation procedure
10. Allotment of instructional time
11. Evaluating the new Curriculum
12. Renewing the Curriculum from time to time

Now let us explain these steps in detail.

12.4 Steps in Curriculum Construction

1. Assessment of Educational Needs

The first step in constructing a Curriculum is to assess the needs of the target group
or student group for which the proposed Curriculum is to be developed. Need assessment is very important because any Curriculum should aim at satisfying the needs of students. There should be a good match between the needs of students and the learning experiences the proposed Curriculum is planning to provide.

Any Curriculum aims at bringing about desirable changes in the behaviour of students. Need assessment is important because it helps to know the background of students, their need pattern, their strengths and weaknesses, the expectation of students ‘Parents and their students’ ability and interest pattern. In brief, need assessment helps to prepare a profile of students.

Need assessment is done through systematic planning and collection of required data about students. A systematic survey has to be undertaken to collect data and information about students’ educational needs, their ability and interest pattern, their socio-economic and educational background and the needs of society. Opinions and suggestions are also collected from students, parents, educationists, prominent persons in society.

Educational needs are assessed through a field survey known as felt need survey. Opinions of students and their Parents are collected by administering a questionnaire about the felt needs of students and Parents Data is collected from a sizable sample of students and parents. The collected data are analyzed to know the educational needs of students. Another means to analyze the educational needs is to study and to analyze Policy Documents on education like Commissions Report, Government Policy Statements on education, significant writings by educationists and suggestions of Seminars and Conferences on educational issues. The stated Government’s Educational Objectives also reflect educational needs of students. The needs assessed through survey are known as Felt Needs and those inferred from other sources like Reports, etc., are known as Observed Needs. Priority needs are identified after analyzing both the felt and the observed needs. Combining these two kinds of needs the real needs are identified and their priority is determined.

Thus need assessment provides the basis for developing a Curriculum. Because the entire Planning of Curriculum Construction will be guided by the need pattern and the Priority of needs.

2. Selection and Formation of the Objectives of the Curriculum

Every human activity has some purpose, aim or objective. Education being a meaningful, systematic activity cannot be thought about without aims or objectives. The education system is Planned and designed with a specific aim of bringing about desirable behavioural
changes in students. This single objective has several objectives in it. They are known as Instructional Objectives. You will study about them in greater detail in Block-2 in the Course ‘Technology of Teaching’. At this point it is enough if you know that objectives are guidelines or directions which lead us towards the achievement of the goals of education.

Curriculum is a means to achieve the goals of education. Curriculum Construction is a goal directed, purposive and systematic process. Naturally, it should be developed keeping the Objectives to be achieved through the Curriculum.

Curricular Objectives are important because they guide the Curriculum designers at every step of Curriculum Construction. Hence, they should be selected carefully and formulated clearly. The Objectives of a Curriculum emanate from the needs of the learners for when the Proposed Curriculum is intended. The felt needs and observed needs now have to be translated into specific Objectives of Curriculum. These broad Curriculum Objectives will be translated as specific Instructional Objective by the Class-room teachers while teaching the specific content of the Curriculum.

While selecting and formulating Curricular Objectives the following Considerations must be kept in mind.

a) Matching

The Objectives of a Particular Curriculum should match with the general aims of education. No Curriculum can select an Objective which is contrary to the general broad aims of education. For example no Curriculum can have an Objective of Developing Selfishness in learners. There must be a match between learning of facts and generalizations, a match between learning of skills and their application in real life situations, a match between knowledge, understanding and appreciations, interest and attitudes and values. As far as possible and permissible Curricular Objectives must be broad based, Comprehensive in coverage and varied.

b) Worthiness

The Objectives or goals selected should be of some value for the learner after completing studies. This is the meaning of worthiness of Objectives. These Objectives should be of some value for the society also. Remote, farfetched, unrealizable, Objectives are of no value for the learners. The Objectives must be relevant to the needs of learner and society.
c) **Wording**

The Objectives formulated must be clean and unambiguous in working and meaning. Clear formulation of objectives is very important.

d) **Appropriateness**

The selected and formulated objectives must be suitable to the ability and interest pattern of the learners. They should be appropriate to the learners to whom they are formulated.

e) **Logical Grouping**

The formulated Objectives must be logically grouped and sequenced in terms of knowledge objectives, skill objectives, attitude and values objectives, practical objectives and so on.

f) **Revision**

The Objectives must be revised from time to time keeping in mind the changes in Knowledge World and Society. Whenever Curriculum is revised, it is also necessary to revise the Objectives and update them.

3. **Selection and Organization of Content**

The next step is to select the content required to achieve the Objectives and to organize and sequence of the content meaningfully and logically. The Content is selected from basic disciplines, and various other sources like books, periodicals, hand books and research Publication. The Content is selected, keeping in mind the age level, pattern of abilities and interests and socio-cultural background of learner.

4. **Organization of Curriculum**

After the content is sequenced following logical principles and maxims of learning like simple to complex etc. Then the Content has to be written n simple language and understandable style. Pictures, graphs and other illustrations have to be included to make the content attractive to learners.

5. **Selection and Organization of Activities (Learning Experiences)**

The next step is to select suitable activities to provide learning experiences in order to transact the content in the class-room. These activities include demonstrations, using various audio visual aids, experiments, outside class-room activities like field visits, excursions etc, experiments, projects, library activities and so on. It is not enough if these activities are
merely listed, but it is useful for the teachers if details of organizing such activities at least in outlines about the organization of them. Teachers Manual or Hand Book should contain such details.

6. Specification of Methods of Teaching

After selection and Organization of Content and activities the Curriculum framers must specify the methods and techniques appropriate to teach various topics in the content and for developing skills and attitude. Sometimes multiple methods can be used by a classroom teacher to teach a topic. Various activities can be organized by the teacher to provide learning experiences. A Curriculum Guide contains such details about instructional methods and techniques. In addition to such methods and techniques of teaching a resourceful teacher can think of his/her own Creative and Constructive techniques of teaching. In Science teaching it is all the more important to specify ‘teaching methods and techniques.’

‘Check Your Progress’-1

1. What is need assessment in the content of Curriculum Construction?
2. How is need assessment done?
3. Why Objectives are important in Curriculum Construction?
4. What Considerations are kept in mind while formulating Objectives of Curriculum?

173
7. Preparation of Instructional Materials

A Curriculum needs variety of instructional materials in order to effectively implementing it in the Classroom. These instructional materials include text-books, Teachers’ Manual or Handbook, Students’ Guides, Work Books, Laboratory Manuals, Assignment Books, additional instructional materials, Source Books including Variety of Printed as well as electronic sources like websites, audio-Video Cassettes and CD’s etc. In Distance Education Programme Self-Instructional Materials prepared to suit distance learners’ needs are prepared. After the Curriculum is finalized such instructional materials are prepared. They can be prepared by the Organization which designs the Curriculum or by private enterprises.

8. Suggesting Instructional Aids/Sources

Curriculum framers should also suggest various instructional aids required to teach various subjects in the Curriculum. These aids include Charts, Pictures, Maps, Models, Scientific Equipments, Various laboratory equipments, electronic equipments like Projector, Slide-Projector, Computers, T.V, Tape Recorder, Radio and other Sophisticated Modern Communication devices. It is not only important to list such-aids, but it is also necessary to suggest Sources from which such aids can be obtained. Now-a-days the concept of low-cost and no-cost aids is becoming popular among teachers. A resourceful teacher can prepare his/her won aids which are less-expensive or do not incur any expenditure of money such no-cost aids can be prepared by creative teachers using used tubes, ball-point refill tubes, small bottles, packets etc. A good Teachers’ Guide should give guide lines to prepare such low-cost, no-cost aids.

9. Deciding Evaluation Procedures

Evaluation is an integral part of teaching-learning process. Hence, it is also an important Component of Curriculum. It should design an evaluation scheme to evaluate the achievement of students in relation to the instructional Objectives. Such an evaluation scheme also provides feedback to teachers about the effectiveness of their teaching and in turn effectiveness of Curriculum. An evaluation Scheme includes Periodic tests for formative evaluation, final examination for summative evaluation, allotment of marks for both internal and external assessment, the pattern of question papers. Procedure to evaluate laboratory, skills and other field activities. An Evaluation Scheme must be Comprehensive to evaluate all kinds of instructional Objectives. The ideal situation should provide continuous comprehensive evaluation.
10. Allotment of Instructional Time

This step includes deciding total instructional time in terms of working days to complete the curricular work, total number of periods of instruction/practical work for each subject and for each Unit in a subject. Number of periods for Co-curricular activities should also be specified. This will help teachers in the preparation of Time Table, Preparation of Unit Plans and Lesson Plans. Time required for evaluation should also be specified.

11. Evaluating the New Curriculum

This step and the next step come after the implementation and transaction of the new Curriculum for some years. A new Curriculum should be evaluated after some time in order to assess its effectiveness and to identify the strengths and Weaknesses of the Curriculum. This is known as Curriculum evaluation. Such an evaluation can be done internally or externally. In internal evaluation each institution evaluates the curriculum on the basis of feedback information from students and an analysis of examination results. In external evaluation the new Curriculum is evaluated by an external agency like research scholars, external evaluation teams or Curriculum Research Organizations. Curriculum Evaluation should be done in a Planned and Systematic Manner.

12. Renewing Curriculum from time to time

No Curriculum can remain static, because social changes take place from time to time; advancements in Science and Technology bring about changes in the world of knowledge. A Curriculum should be dynamic and should incorporate these changes in it. Then only a Curriculum can be responsive to change Social and Educational needs of a Society. This is the process of Curriculum Renewal. In this process “the dead wood”, in content, or old and obsolete aspects of Content are removed and new content is included. It must catch up with progress achieved in different disciplines of studies.

In Curriculum renewal not only the content is renewed or updated, objectives, learning activities, instructional materials, methods of teaching and evaluation procedures are renewed suitable. This Curriculum renewal is done on the basis of data obtained from Curriculum evaluation.

Thus Curriculum Construction is a prolonged process including several successive steps. Each step is important and contributes towards the effectiveness of the entire.
‘Check Your Progress’-2

1. What does an Evaluation Scheme include?

2. Why is allotment of instructional time important?

3. What is Curriculum Renewal?

4. Who undertakes Curriculum Renewal?

12.5 Let Us Sum Up

In this Unit you have learnt about the Process of Curriculum Construction, which is prolonged and systematic. Several steps of Curriculum Construction are explained in details. Many individuals and agencies are involved in this process. Teachers, students, Curriculum experts, subject experts, administration and even Parents are involved in the process of Curriculum Construction. Curriculum Construction consists of need assessment of learners, formulation of instructional objectives selection and Organization of content and activities, specifying methods of teaching and evaluation procedures, allotment of instructional time, evaluating the new Curriculum and Curriculum renewal after sometime.
12.6 Answers To ‘Check Your Progress’

‘Check Your Progress’-1
1. In Curriculum Construction need assessment of students is important because it helps to formulate objectives and selection of content best suited.
2. Need assessment is done through a systematic survey and analyzing documents and Policies about Education.
3. Instructional objectives guide the Curriculum framers in selecting, the content and Organizing teaching learning experiences.
4. While formulating Instructional Objectives the following considerations kept in mind.
   i) They should match with the needs and interests of learners.
   ii) They should be worthwhile or valuable to learners in future life.
   iii) They should be clearly stated.
   iv) They should appropriate to the level of abilities and interest of learners.
   v) They should be grouped logically.
   vi) They should be revised from time to time.

‘Check Your Progress’-2
1. An Evaluation Scheme includes both internal and external assessments, periodic tests, assignments and terminal examination.
2. Allotment of Instructional time is important because it helps teachers in preparing the Annual plan, Unit Plan and Lesson plans.
3. In order to include new ideas and best practices and to remove obsolete ideas and Practices a Curriculum should be revised from time to time. This process is Curriculum Renewal.
4. Curriculum renewal can be carried out by an internal agency including educational administrators, teachers and students. External agencies including Parent groups, researchers and Curriculum Organization can also undertake Curriculum Renewal.

12.7 Unit-End Exercises
1. Explain the various steps involved in Curriculum Construction.
2. What is Curriculum Renewal? How do you justify Curriculum Renewal?
12.8 References


COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

BLOCK 03
ORGANISING CO-CURRICULAR ACTIVITIES
## Block 3

### ORGANISING CO-CURRICULAR ACTIVITIES

<table>
<thead>
<tr>
<th>Unit</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit-13</td>
<td>Co-Curricular Activities–An Introduction</td>
<td>185</td>
</tr>
<tr>
<td>Unit-14</td>
<td>Co-Curricular Activities–Classification</td>
<td>195</td>
</tr>
<tr>
<td>Unit-15</td>
<td>Organisation of Co-Curricular Activities-I</td>
<td>207</td>
</tr>
<tr>
<td>Unit-16</td>
<td>Organisation of Co-Curricular Activities-II</td>
<td>221</td>
</tr>
<tr>
<td>Unit-17</td>
<td>Organisation of Co-Curricular Activities-III</td>
<td>241</td>
</tr>
<tr>
<td>Unit-18</td>
<td>Organisation of Co-Curricular Activities-IV</td>
<td>259</td>
</tr>
</tbody>
</table>
INSTRUCTIONAL DESIGN AND EDITORIAL COMMITTEE

Prof. M. G. Krishnan  Chairman  
Vice Chancellor  
Karnataka State Open University  
Mysore 570 006  
Karnataka

Prof. Vikram Raj Urs  Convener  
Dean - Academic  
Karnataka State Open University  
Mysore 570 006

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Mysore 570 006

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Professor – DOSR in Education  
Karnataka State Open University  
Mysore 570 006

Shobana S.  Course Writer  
Lecturer  
Sri KMKG College of Education  
Mysore 570 023

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ICT Course Content 
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INTRODUCTION

Curriculum is the core consideration with reference to the courses they are prepared for. Since the twentieth century, along with the curriculum, the extra-curricular activities have come to play a major role in the school activities.

In recent times, the term ‘extra-curricular activities’ have been referred to as ‘co-curricular activities’, as they dominate the functioning of the school, and also because the aim of modern education is the all-round development of the child. Although these activities have been categorized, given names and given great importance now-a-days, these were also part and parcel of education since the times of the Vedic education. Such activities were well integrated into the educational system and played a vital role in the total development of the pupils.

Such being the long standing importance of these activities, in the following Units of this Block, you will come to know the meaning and the concept of what co-curricular activities is, its need and importance in the field of education. The classification of co-curricular activities and the various activities that can be conducted under each class shall also be discussed.

As you are a teacher, you need to know the principles for conducting co-curricular activities and also the criteria for selecting such activities. We shall therefore discuss these aspects too.

Under the various activities, the items discussed in the following Units will be the objectives of conducting the particular activity and how to organize the same. Six Units are included in this Block. In Units- 13 the meaning and importance of co-curricular activities are explained. You will read about a Classification of co-curricular activities in Unit- 14. In the next three Units of this block Unit- 15, Unit- 16, Unit-17 and Unit- 18 you will study, in detail, about various co-curricular activities which are Organized in schools.
UNIT 13  □  CO-CURRICULAR ACTIVITIES–AN INTRODUCTION

Structure

13.1 Introduction
13.2 Objectives
13.3 Co-curricular activities
   13.3.1 Meaning, Definition and Importance
   13.3.2 Need and Importance
   13.3.3 Objectives
13.4 Let Us Sum Up
13.5 Answers to ‘Check Your Progress’
13.6 Unit-End Exercises
13.7 References

13.1 Introduction

As teachers, you are all aware of the various school programmes that are conducted throughout the academic year. These activities that comprise the calendar of events are done with numerous objectives that are to be realized through them. In this Unit, we shall see what these activities are. Since they are part of the curriculum for school, they are termed as ‘co-curricular activities’. What exactly is the meaning of this? How important are they to the learners? Why is it essential to conduct such activities? What are the objectives to be realized through these activities? We shall now seek answers to these questions.

13.2 Objectives

After you have studied this Unit, you will be able to:

- Define ‘co-curricular activities’
- Explain the concept of ‘co-curricular activities’
- Reason out the need for these activities to be part of the school programme
- Highlight the importance of co-curricular activities
- Recognize the importance of these activities in the development of the individual
- List out the useful aspects of co-curricular activities
- Recall the objectives that are realized by the various co-curricular activities

13.3  Co-Curricular Activities

Until about twenty-five years ago, the school was a place that only taught school subjects like General Science, Social Science, Languages etc. The term ‘Curriculum’ then referred to only the teaching of these subjects. The other activities were looked down upon as encroaching upon and interfering with the smooth performance of the academic activity. Gradually this attitude underwent a slow change. The term ‘Curriculum’ slowly and gradually gave way to the inclusion of multiple activities. This was when the activities termed as ‘Extra-curricular activities’ made their appearance. These activities that led to the mental, physical, emotional and social development in an orderly manner are now rightly termed as ‘co-curricular activities’. The present educational system lays great stress on these activities as education you know is expected to bring about the all-round development of the individual, thus realizing the aims of ‘man-making education’. Moreover, these activities have the full support of the learners as they originate from the interests and abilities of students.

13.3.1  Meaning, Definition and Importance

Co-curricular activities are now considered an intrinsic part of the educational programme in a school. If we go back to the Gurukula system of education, we will recall that the disciples in the Gurukula were asked to fetch wood from the forest, do social service, tend to the garden and also perform physical exercises. Numerous Arts and hobbies were developed in the Ancient Indian Universities like the Nalanda University. Even literary activities were included. The importance of such activities is well highlighted by the following remark made by the Secondary Education Commission: “they are as integral a part of the activities of a school as its curricular work, and their proper organization needs just as much care and forethought. If they are properly conducted, they can help in the development of very valuable attitudes and qualities”. This remark makes clear the meaning of co-curricular activities - those activities that are conducted apart from the formal teaching-learning in the classroom, which only provide the knowledge prescribed. These activities help the learner to learn the art of living by training him in the habits that help him live cooperatively and successfully in a society. Such activities that help to inculcate such habits in the pupil comprise the co-curricular activities.
Before we venture to define ‘co-curricular activities’, we need to define what ‘curricular activities’ are. Any activity that goes into the curriculum of a school is called ‘curricular activity’. Anything and everything that goes on in the school campus within the school hours or after school hours are considered part and parcel of the school curriculum and comprise the ‘co-curricular activities’. To quote the Secondary Education Commission once again, co-curricular activities are “a scheme of hobbies, occupations and projects that will appeal to and draw out the powers of children of varying temperaments and aptitudes.”

In order to explain the concept of co-curricular activities, we will have to resort to recognizing what activities go into making up this concept. This can be interpreted in various ways. As per Dr. Radhakrishnan’s view, they are those activities that help “Release the talents of children and help them to become what they are in potential.” As per the Secondary Education Commission, these activities provide opportunities to the children for developing individual characteristics, abilities and self-confidence. They also provide training in promoting discipline and qualities of leadership.

‘Check Your Progress’ -1

1. Why were activities other than academics shunned in earlier days?

2. What do you mean by ‘Curricular activities’?

3. What do you mean by ‘co-curricular activities’?

4. How does Dr. Radhakrishnan define co-curricular activities?
5. How does the Secondary Education Commission interpret the concept of co-curricular activities?

13.3.2 Need and Importance

As has already been discussed, co-curricular activities help in the all-round development of the pupils, by helping to develop the physical, intellectual, social and emotional aspects. This clearly shows why these activities need to be included in the school programme. In order to put it in a more specific manner, the need for co-curricular activity, the utility aspects of these activities are to be highlighted. Now what are these co-curricular activities? Are they necessary for the all-round development of the child? The different types of activities are the tools that draw out the inherent potentialities in the child. These activities help in the development of very valuable attitudes and qualities. They provide opportunities for self-expression of the child. These activities are essential as they provide outlets for the surplus energy of the students.

The importance of co-curricular activities, although stem out of the reasons for these to be included in the school programme. These may be listed as follows:

- These activities are organized as per the interest of the students.
- They provide relaxation amidst the severe toll of academic work.
- Through these activities, students learn to adjust in their social environment.
- The students develop virtues of fraternity, sympathy, co-operation and affection through these activities.
- A major requirement of any democratic country is the development of the democratic spirit and leadership qualities through which students become aware of their rights and duties. These important qualities are developed through the co-curricular activities.
- The leisure time of pupils is constructively and usefully utilized by participating in these activities and this in turn helps to develop further his interests and hobbies.
- Moral values are developed through participation in these activities, as students learn to be just and honest.
• They provide a means of sublimation of the surplus energy of adolescents, channelising the same into performing constructive, creative and social activities.

• They provide the students an opportunity for developing self-confidence and the habit of sustained effort in any work taken up by them.

The supporters of co-curricular activities put forth the following arguments in-support of including the same in the school programme:

One of the most important requirements of children is their good health and physical fitness, which is achieved through sports and games. It paves the way for the proper growth and development of the body. The functional efficiency of the body can be maintained only when there is a provision for regular physical exercise, organized games and sports and other related activities.

Effective citizenship cannot be built through classroom instruction in civics and politics alone. There must be a co-relation between what the child learns in the civics class and what he practices in life. As such, activities like the students’ self-government should be included as they offer an opportunity to educate pupils in taking responsibilities and sharing responsibilities, exercising self-discipline and develop the required qualities expected of a good citizen.

With a strict implementation of the academic programmes, pupils no doubt exhibit academic brilliance, but more often than not are socially backward, as they lack social adjustment. A balance between scholarly achievement and social adjustment is to be attained. This can be done so by providing opportunities for pupils to grow socially. Activities that help in bringing pupils together and actually practice the art of social living, help them to adjust themselves to their classmates or schoolmates in later life helps them to adjust with the people in the society at large.

The general school instruction does not provide an outlet for emotional expression. The syllabus of the course does not meet the drives, needs and interests of the pupils, especially the adolescents. Therefore co-curricular activities like Art, Music and drama can give emotional training.

‘Check Your Progress’ - 2

1. Give any two valid reasons for including co-curricular activities in the school programme.

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2. Give three important aspects of co-curricular activities.

13.3.3 Objectives

Tompkins divides the objectives of co-curricular activities into three broad categories under which the respective objectives are listed as follows:

**I. Individual Outcomes:**
1. To provide for the constructive use of leisure time.
2. To develop personality.
3. To enrich personality.
4. To achieve self-understanding.
5. To take initiative in individual responsibility and functioning.
6. To learn how to organize a meeting or conference and how to participate in it.
7. To provide opportunity for self-evaluation.

**II. Social Outcomes:**
1. To provide for physical and mental entertainment.
2. To practice working in harmony with others.
3. To develop democratic responsibility.
4. To learn to practice good human relations.
5. To understand group processes.
6. To encourage good student-teacher relations.
7. To increase social contacts.

**III. Civil and Ethical Outcomes:**
1. To establish bonds of understanding of each other without racial, religious, economic or intellectual differences.
2. To put national ideas and values in practical use.
3. To help pupils develop a liking for the school.
4. To provide meaning to curriculum and diversify it.

‘Check Your Progress’ - 3
1. What are the three broad categories of objectives of co-curricular activities as given by Tompkins?

2. Mention any two objectives that can be realized by the individual in the individual outcome category.

3. Mention any two objectives that can be realized by the individual in the Social outcome category.

4. Mention any two objectives that can be realized by the individual in the Civil and Ethical outcome category.

13.4 Let Us Sum Up

Activities other than the teaching-learning of the school subjects were not performed in the school until twenty-five years ago, as they were looked down upon as encroaching upon the smooth performance of academic activity. Although the term co-curricular activity has been of recent origin, such activities have been conducted right from the days of the
*Gurukula* system of education in the Vedic times, when the disciples were asked to fetch firewood from the forest, tend to the garden and perform other such activities.

Co-curricular activities are now considered an intrinsic part of the educational programme in a school. Anything that goes into the curriculum of a school is called ‘curricular activity’. Anything and everything that goes on in the school campus within the school hours or after school hours are considered as co-curricular activities.

As per the Secondary Education Commission, co-curricular activities are “a scheme of hobbies, occupations and projects that will appeal to and draw out the powers of children of varying temperaments and aptitudes.” The need for co-curricular activities to be part of a school programme is attributed to numerous reasons of which the major one’s are that these activities draw out the inherent potentialities in the child, develop valuable attitudes and qualities in the child, and that they provide an outlet for the surplus energy of the adolescents, thus channelising the same into performing constructive, creative and useful activities.

The importance of co-curricular activities can never be exaggerated as they develop virtues; qualities of democratic citizen, get students involved in these activities with eagerness and happiness as they provide a relaxation from the academic work. As per Tompkins, the varied objectives of conducting co-curricular activities in schools can be listed under three major categories, namely Individual outcomes, Social outcomes and Civil and Ethical outcomes.

### 13.5 Answers To ‘Check Your Progress’

‘Check Your Progress’ -1

1. They were looked down upon as encroaching upon and interfering with the performance of the academic activity.
2. Tending the garden, collecting firewood from the forest.
3. Any activity that goes into the curriculum of the school is termed as curricular activity.
4. Anything and everything that goes on in the school campus within the school hours or after school hours and considered part and parcel of the school programme comprise the co-curricular activities.
5. Dr. Radhakrishnan talks of co-curricular activities as those that release the talents of children and help them to become what they are in potential.
6. The Secondary Education Commission interprets co-curricular activities as, “a scheme of hobbies, occupations and projects that will appeal to, and draw out the powers of children of varying temperaments and aptitudes.”

‘Check Your Progress’ - 2

1. Co-curricular activities develop desirable qualities and abilities; they are essential for providing an outlet for the surplus energy of the adolescents. (or any two other reasons given).

2. Provide relaxation amidst the severe toll of academic work; help students use leisure time constructively and usefully; help develop self-confidence and habits of sustained work.

‘Check Your Progress’ - 3

1. Individual outcomes, Social outcomes and Civil and Ethical outcomes.

2. Constructive use of leisure time; develop personality. (Or any two given)

3. Practice working in harmony with others; practice good human relations. (Or any two given)

4. Put national ideas and values to practical use; develop a liking for the school. (Or any two given)

13.6 Unit-End Exercises

1. What is the distinction between curricular and co-curricular activities? Discuss the need of removing the distinction and difference, if any.

13.7 References


UNIT 14  CO-CURRICULAR ACTIVITIES–CLASSIFICATION

Structure
14.1 Introduction
14.2 Objectives
14.3 Classification
   14.3.1 Literary activities
   14.3.2 Activities for Physical Development
   14.3.3 Activities to Develop Citizenship Qualities
   14.3.4 Activities for Aesthetic and Cultural Development
   14.3.5 Craft-related activities
   14.3.6 Leisure-time activities
14.4 Let Us Sum Up
14.5 Answers to’ Check Your Progress’
14.6 Unit-End Exercises
14.7 References

14.1 Introduction

    In Unit 13, we had discussed the need and importance of co-curricular activities. You will now agree that introduction of these activities is essential in schools for the complete education of the children, more so, because these activities have a direct bearing on the civic and moral development of the child. Such being the paramount importance of the co-curricular activities, we need to know what types of co-curricular activities can be conducted in a school. We shall see the various activities, and get briefly introduced to a few major types of co-curricular activities in this Unit.

14.2 Objectives

After studying this Unit, you will be able to:

- Name the types of co-curricular activities
• List out the various activities that can be conducted in the Literary activities category
• Name the types of Physical activities that can be conducted in the school
• Explain the activities that can develop the Aesthetic and Cultural dimensions of the individual
• Identify the activities that help in developing citizenship qualities in the child
• Name leisure-time activities that help students to constructively use their leisure time
• Establish how Craft-related activities help in motor development and self-expression
• Explain the advantages of the various co-curricular activities
• Cite examples of various hobbies that can be taken up during leisure-time

14.3 Classification

It is now observed that progressive schools are devoting time, energy and also providing various facilities to device ways and means for encouraging and organizing co-curricular activities to a very great degree that was not attempted earlier. In the words of J.R. Shannon, “the participation in co-curricular activities was more likely to produce wholesome attractive personalities than routine class work.” But it is necessary that activities should be sufficient in range and variety to provide opportunities for all the pupils desiring to participate in them. Such activities will naturally vary within limits, from school to school depending upon its location, its resources and the interests and aptitudes of the staff and students. Let us now see what these types of activities are that can be conducted.

14.3.1 Literary Activities

Classroom situations provide theoretical knowledge, whereas co-curricular activities supplement the same and provide opportunities for developing them further. Literary activities give practice and improve the written as well spoken abilities of the pupils by encouraging them and providing opportunities to participate in them. Some such literary activities are as follows:

Debates and Discussions: These are academic activities. In a debate, students who are asked to debate on the given topic, speak for or against the motion. This can be conducted with reference to any general topic of interest that may be controversial, and having an effect on humanity, so as to generate interest. The topic for Discussion need not be too controversial. Discussions are of various types, like the panel discussion wherein a panel of members sit at a table and discuss on the same topic where each member gets many opportunities to express his views openly.
Symposium: In this type of activity, a topic is selected and all speakers talk on different aspects of the same topic.

Story-Writing Competition: This activity is more suitable to the middle school pupils. But it can also be used for the High school pupils at a higher level, wherein they are provided opportunities to exercise their imaginative mind in creating fictitious writings, as well as true life stories, as experienced by them. This paves the way for the improvement in expressing their thoughts and ideas.

Essay-Writing Competition: This is a very useful academic activity that can be used to test the knowledge of pupils on various topics, be it a topic pertaining to the syllabus, or a general topic. It also helps to improve expression.

Newspaper Reading: At the present rate of knowledge explosion, pupils need to update their knowledge to keep abreast of the happenings all over the world. By having the activity of Newspaper reading, as part of the Morning Assembly, this objective is realized in a very limited manner.

Library Work: This activity becomes part and parcel of the study of any subject. Any textbook that is prescribed, will never give the recent development, or information. Library is the place that supplements the information pertaining to that topic. Reading of magazines and journals give a lot of information that enriches the pupil's knowledge.

Recitation: Generally this is a language related activity, wherein pupils recite the poems they are expected to memorise. It could also be a self-composed poem that the pupil recites. Thus, this kind of co-curricular activity provides an opportunity for exhibiting the talent of the pupils and also for improving the pronunciation, intonation, vocabulary and so on.

Dramatics: This is an activity that appeals to almost all. This is an art that needs the co-ordination and control of the organs of speech and the muscles. It trains the imaginative abilities of the pupils.

Organizing literary club: Pupils can form a literary club, and under the auspices of this club, the various literary activities can be systematically organized and conducted.

Wall magazine: Another activity that offers scope for exhibiting the various talents of the pupils is to have a regular Wall Magazine that will put up the self-composed poems of the pupils, paintings and drawings, articles written by them, and interesting pieces of information or pictures collected by them.

School magazine: The annual school magazine is another form of written literary expression, wherein pupils express their ideas, views that they can share with others. This
provides an opportunity for cultivating in pupils a clear and vivid style of expression, and also provides a lot of ego satisfaction too.

‘Check Your Progress’ - 1

1. Name any four types of co-curricular activities.

2. Give three examples of literary activities.

14.3.2 Activities for Physical Development

Physical fitness is a very important need of the pupils. Sports and games are therefore to be included in the school programme to promote physical fitness and proper growth and development of the body. The functional efficiency of the body can be maintained only when there is a provision of regular physical exercise. A few forms of physical exercises are as follows:

Mass Drill: The pupils perform exercises together on certain days of the week or on days like the celebration of national festivals. This group activity is rhythmic and calls for a considerable degree of unity and adjustment among the pupils, thus developing valuable attitudes.

Yoga: This is a system of exercises for the body and the mind, controlling the breathing and thus bringing about the improvement of the mental and physical aspects of the pupil. Already many schools have this activity as a part of their physical activities.

Indoor Games: It is but a matter of logical necessity that every school has facilities for indoor games, as all students cannot at the same time be engaged in outdoor games due to the lack of sufficient playground facilities to accommodate all students. Moreover there are students who are interested in various indoor games like chess and carom. Thus such games cater to these students and provide opportunities for participating in competitions, representing their schools and bringing laurels to themselves and their institutions.

Outdoor Games: The playground has been called the cradle of democracy. Each student should therefore be given opportunity for taking part in one game or the other. This
is fully supported by Aldus Huxley when he says that sports inculcates responsible co-operation.

**Athletics:** Athletic activities absorb the pupil’s whole being and develop the full personality of the individual. It has a wholesome effect on the physical, mental, social and moral development of the individual.

**Wrestling:** This is an activity that is suitable for the highly energetic adolescent, whose surplus energy can find an outlet. Pupils interested in this activity could be provided opportunity to develop the same.

**Gardening:** This academic activity, as a co-curricular activity goes a long way in the study of academic subjects like biological science and geography. It also is a kind of leisure-time activity that keeps the pupil engaged in the activity that interests him and might even bring financial dividends in the long run.

Other activities that can be included in this category are boating, swimming, trekking etc. Such activities are generally provided in residential schools. As mentioned earlier, the activities that a school conducts depends on the facilities available there and the locality where it is situated in.

‘Check Your Progress’ - 2

1. Name three activities that bring about physical development.

2. What is the importance of conducting yoga?

3. What is the criterion that decides the selection of co-curricular activities in a school?

14.3.3 Activities to Develop Citizenship Qualities

Effective citizenship cannot be built through classroom instruction in civics and politics alone. There must be a correlation between what the pupil learns in the class and what he practices in life. Therefore activities those give the pupil opportunities to gain practical
experience of sharing responsibilities and exercising self-control should be provided. Few such activities are:

**Mock Parliament:** Every student of today is a citizen of tomorrow. This calls for the awareness of the aspects of democratic administration. One of the ways this can be done is to conduct Mock Parliament which helps the students to get to know how the parliament functions. The direct relay of the same in our TV channels makes this easy as students can now view how the members interact and familiarize with the procedures of the Lok Sabha.

**Students’ Council:** This is a students’ self-government. The Dictionary of Education defines it as “the maintenance of order and the regulations of matters of conduct in schools by elected representatives, chosen from the student body by the students themselves.”

**Co-Operative Store:** This provides for the formation of a society by the students, and through this they buy and sell stationery, books and other school related articles. Through this activity, students get a feel of sales and the knowledge of maintaining accounts.

**Visits to Places of Social Interest:** When students visit such places they get to learn the importance of such places which might be the birthplace of a renowned freedom fighter, a social leader who had done yeomen service for the state or the country, the silent worker who brought progress to the community around, and so on. Visiting such places awakens in the students’ mind a longing to serve the society or the country.

**Organization of Camps:** Camps like the N.S.S. and N.C.C. go a long way in motivating the students to imbibe the spirit of social service and patriotism.

**Community Living:** As the goal of education is ‘man-making’, living in close proximity of the community gets the students to know how inter-dependent the people in the community are, what are the problems people face in their day-to-day lives, how to improve their livelihood, what can be done to bring this improvement and so on.

‘Check Your Progress’ - 3

1. Name three activities that help to develop citizenship qualities.

2. How does the Dictionary of Education define Students’ Council?
14.3.4 Activities for Aesthetic and Cultural Development

Aesthetic sensibility cannot be discussed and taught in the ordinary classroom teaching. They have to be provided by way of experiences provided through appropriate co-curricular activities. Some such activities are given below:

**Music and Dancing:** All forms of music, either vocal or instrumental, develop the aesthetic sensibility of the students. This is essential for the harmonious development of the students.

**Drawing and Painting:** Students interested in drawing and painting derives great satisfaction out of these forms of expression. Indulging in such activities not only gives them pleasure, but also paves the way for providing opportunities for improving their capabilities in these activities. They are a means of maintaining sound mental health.

**Variety Entertainment:** In a variety entertainment programme, students interested in various activities can participate and exhibit their talent. This provides an opportunity for students of varied aptitudes and abilities to mingle together, thus creating an environment for attitudes like co-operation, adjustment, sympathy, appreciation etc. to develop in them.

**Celebrating Festivals:** School, as you know is a miniature society. Here we find students belonging to different religions, castes and regions. Celebrating festivals of different regions and religions helps in them understanding each other better and also brings about a unity among them.

Decorating the school, organizing exhibitions, conducting fancy dress competitions, arranging flower show etc., are some of the other activities in this category.

‘Check Your Progress’ - 4

1. Name three activities that may pave the way for aesthetic and cultural development of the individual.

2. Give one advantage of celebrating festivals in schools.

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201
14.3.5 Craft Related Activities

Craft forms an important part of the curriculum of school programme. These activities concern motor development and also pave the way for the pupils to appreciate the value of good workmanship. Some of the craft-related activities are:

**Paper Folding, Cutting And Mounting:** Using materials like colored paper, a pair of scissors or a knife, ordinary sheets of paper and paste, the craft teacher demonstrates patterns, and the students repeat and alternate the pattern, thus develop ability in designing.

**Clay Modeling:** Using clay, real objects and a board or a slate, pupils are shown how to make a model of the object. The models prepared increase in difficulty. This helps to establish in the minds of the pupils a connection between geometrical shapes and objects of art.

**Toy Making:** Toys being a source of joy for children, they can be taught to make toys with paper and cardboard, cloth stuffed with cotton wool, sawdust and fiber.

**Needlework:** This activity has constructive and decorative qualities. But as it is not a very interesting activity, the craft teacher should arouse the interest of the students. This is possible only by a trained teacher, who can get the pupils to make garments and household necessities in a skilful manner.

**Weaving:** Pupils may be trained to weave scarves, towels, belts and bags in a variety of patterns and textures.

**Sculpturing:** This is the art of arranging and altering plastic or rigid materials. This is achieved by carving, mounding and other procedures.

**Graphics:** This is an expression of art produced by printing from various screens, stencils, types such as etching, block-printing, photography etc. Other craft-related activities are knitting, Bookbinding, Leatherwork, Basket-making etc. Where academics are concerned, making of teaching aids like models, charts, maps etc. are craft-related activities. The subject teacher, taking the help of the craft teacher in preparing these items, could train pupils. The earlier mentioned activities could be taught to students as per their interest and aptitude.

‘Check Your Progress’ - 5

1. Mention three craft-related activities that can be conducted in schools?

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202
2. How can craft-related activities be used to enrich academics?

14.3.6 Leisure-Time activities

These are those activities that pupils engage themselves in, when they are free. Naturally they will be doing so, only in those they are interested in. Such activities take the name of ‘hobbies’. These activities provide some sort of recreation to students as they engage in activities that provide them a reprieve from the drudgery of classroom environment, which becomes monotonous at times for them. When such activities are not made available to pupils, they seek recreation in wandering, gossiping, gambling and other such anti-social activities. Therefore, it is the responsibility of the school to provide opportunities for students to indulge in hobbies that provide healthy recreations. Hobbies can be of the following types:

i. Stamp collection (philately)
ii. Coins collection (Numismatics)
iii. Album making
iv. Photography
v. Collecting things like pictures, stones, or anything curious that interests the individual.

‘Check Your Progress’ - 6

1. What name is give for activities that are taken up during leisure?

2. Mention three leisure-time activities that students can engage themselves in.

203
14.4  Let Us Sum Up

- Types of co-curricular activities are-literary activities, activities for physical
development, activities to develop citizenship qualities, activities for aesthetic and
cultural development, and craft-related activities and leisure-time activities.

- Some activities that can be conducted under the literary category are debates,
discussions, essay writing, story-writing, school magazine, wall magazine etc.

- Mass drill, yogasanas, indoor and outdoor games, gardening are a few activities
that can be conducted for bringing about physical development.

- Activities like conducting mock parliament, having a students’ council in the
school, visiting places of social interest are a few activities that develop citizenship
qualities in students.

- Music and dancing, drawing and painting, variety entertainment, celebrating festivals
are some activities that help in the development of aesthetic and cultural
development in the individual.

- Craft related activities can be conducted both as academic as well as non-
academic activities. Academic activities that are craft-related are preparation of
teaching aids like models, charts, maps etc. Some non-academic activities are
basket making, book binding, clay modeling, knitting etc.

- Leisure time activities or hobbies as they are generally called help the pupil to
come out of the rigid routine of studies and academics. Some such hobbies are
stamp collecting, coin collecting, album making and photography.

- Social welfare activities are those that help the students to give to the society
something by way of service. activities like first aid, boy scouting, girl guiding,
Red Cross etc. are some such activities.

14.5  Answers To ‘Check Your Progress’

‘Check Your Progress’ -1

1. Literary activities, activities for physical development, activities for developing citizenship
qualities, activities for aesthetic and cultural development.

2. Debates discussions, elocutions.
‘Check Your Progress’ - 2
1. Indoor games, outdoor games, wrestling (Or any three given).
2. Brings about improvement of the mental and physical aspects of the individual.
3. The activities that a school conducts depends on the facilities available there and the locality where it is situated in.

‘Check Your Progress’ - 3
1. Mock parliament, students’ council, and co-operative store. (Or any three given)
2. “The maintenance of order and the regulations of matters -of conduct in schools by elected representatives, chosen from the student body by the students themselves.”

‘Check Your Progress’ - 4
1. Music and dancing, drawing and painting and variety entertainment.
(Or any three given)
2. Celebrating festivals of different regions and religions helps in pupils understanding each other better and also brings about a unity among them.

‘Check Your Progress’ - 5
1. Clay modeling, toy making, sculpturing. (Or any three given).
2. By preparing teaching aids like charts, maps, models etc. and also train the pupils in preparing the same.

‘Check Your Progress’ - 6
1. Hobbies.
2. Numismatics, philately, photography.

14.6 Units-End Exercises
1. Give a broad classification of co-curricular activities with three kinds of activities that can be conducted under each category.

14.7 References


UNIT 15 ORGANISATION OF CO-CURRICULAR ACTIVITIES-1

Structure

15.1 Introduction
15.2 Objectives
15.3 General Principles
15.4 Criteria for Selection of Activities
15.5 Let Us Sum Up
15.6 Answers to ‘Check Your Progress’
15.7 Unit-End Exercises
15.8 References

15.1 Introduction

We have now come to terms with the fact that organizing co-curricular activities in schools is a must for the all-round development of the child. Stating the importance of these activities, The Secondary Education Commission observes, “They are as integral part of the activities of a school as its curricular work and their proper organization needs just as much care and forethought. If they are properly conducted, they can help in the development of very valuable attitudes and qualities.” Reiterating the role of such activities in the development of the individual, it further remarks, “we do not visualize this school merely a place of formal learning whose main concern is to communicate a certain prescribed quantum of knowledge, but rather as a living and organic community, which is primarily interested in its pupils in what we call ‘gracious part of living’. The art of living is a much more comprehensive concept than the acquisition of knowledge, however intelligently planned. It includes training in the habits and graces of social life and capacity for co-operative group work. These can only be cultivated in the context of social life and the many co-curricular activities that must find a recognized place in the school.”

Having thus established the necessity for having co-curricular activities in schools, let us now see how these activities are generally conducted. These cannot be conducted haphazardly without any objectives. Moreover, certain principles have to be borne in mind
in planning and conducting co-curricular activities in schools. Let us first see what these principles are, that have to be followed in conducting co-curricular activities, what activities are selected and what criteria the selection of these are based on.

15.2 Objectives

After you have studied this Unit, you will be able to:

- List out the general principles that need to be borne in mind before organizing co-curricular activities.
- State the criteria for selecting a particular co-curricular activity.
- List out the criteria to be followed in selecting any activity.
- Reason out why these criteria have to be given due consideration.
- Analyze the principles as to the necessity in their being adhered to.
- Conduct co-curricular activities effectively in school.

15.3 General Principles

There are a few principles which when followed diligently, results in making co-curricular activities more useful, educative, interesting and meaningful. These principles can be classified into the following categories:

1) Selection of activities: Since the criteria for selecting activities will be dealt with in detail in Para 15.4, I will barely mention the criteria here. They are:

   a) Number of activities  
   b) Resources  
   c) Educational value of the activity  
   d) Activity to be in accordance with pupils’ interests  
   e) Activity shall be the means to an end and not the end in itself  
   f) Activity to suit the size, educational level of the pupil and individual interest of the pupil  

2) Providing Time and Place: In order to conduct co-curricular activities in a serious and organized manner, a scheduled time and place to conduct the same should be
provided. It is desirable to conduct the activities within the school hours by providing a schedule in the school timetable. This allows for students to get opportunities to mingle with and gain both experience as well as training in citizenship.

As regards the place, the concerned authorities should specify this. If it an outdoor activity, the place could be the playground. If the school does not have a sufficiently large playground to accommodate the students, a nearby playground could be utilized and prior information given to students sufficiently early. An indoor activity may be conducted in the general hall as this can accommodate all the students since this is where any function is conducted.

3) Providing Motivation: Even though they have the interest and ability in certain activities some pupils require being motivated. Motivation can be provided in a number of ways. The pupils when joining the school could be given a list of activities that are conducted in the school, and asked to register as a member of the club/society for the respective activity. Another way would be to leave the organization of the activities to the pupils, so that they take more interest and are naturally motivated in participating in the activities. A third way of motivating pupils would be to award prizes and merit certificates for the creditable performances. When eminent dignitaries who are invited to the school distribute these prizes, it makes the pupils proud and also motivates the others too.

4) Providing Advice: The role of advisers of the co-curricular activities, as suggested by the Secondary Education Commission is as follows: “while the students should be encouraged in every way to stand on their own feet and develop these activities through their own initiatives, the teachers should be at hand to help and guide them so that their educative possibilities may be fully exploited and they may ensure that students take part in one or more of those activities.”

Though all staff members are associated in the activities, each one may be the adviser for a particular activity. If the group is large, then junior members may assist the adviser. To be a successful adviser, the staff member should have the knowledge of the specific activity, the purpose and function of the activity. He should also have the experience in organizing the same in order to be in a position to guide the pupils to conduct the activity smoothly.

5) Providing Equal Opportunities: In holding office as well as participating in the activities pupils should be given equal opportunities. Care should be taken to see that nobody is allowed to neither occupy many offices nor participate in too many activities.

6) Aptitude as the Basis: Membership of the organization and participation in the activity should be preferably given to those who have a special aptitude for that. This
should be taken care of by the staff adviser who could help pupils select activity as per their aptitude.

7) Small Size Membership: Each organization for an activity should comprise of a small group so that it facilitates better co-ordination, co-operation and participation.

8) Having Definite Objectives Behind Activities: Any activity conducted should have worthy objectives to be realized in conducting the same. Such objectives should make the students and teachers aware. This makes provision for the evaluation of the end of the activity, after it has been conducted. Realization of the objectives brings a sense of achievement and satisfaction, paving the way for further motivation.

9) Having a Code of Rules: Each organization should have a written code of rules with the name, objectives, membership, method of electing office-bearers, duties of office-bearers and all other necessary details about it included. It can also have the name of the sponsor entered therein.

Over and above these principles, some general suggestions to conduct co-curricular activities so as to derive the maximum benefit from these, may be listed as follows:

1. Necessary equipment should be provided for these co-curricular activities. For example, if a drama has to be enacted, the public address system, the curtains, lights, costumes etc. have to be provided so as to get the pupils to get used to conducting the activity in the right manner and proper spirit of the activity.

2. The teachers who are in charge of the activity may lead the team, but the staff members should equally share the duties regarding the activity, without burdening the staff-in-charge alone.

3. A calendar of events of the year, at the beginning of the academic year should be prepared, specifying the time, place during which the various activities are to be conducted. This prepares both the staff and the students to plan the activities sufficiently early and making necessary arrangements for successfully conducting the activities. Such a timetable schedule should be circulated aiming the staff and students.

4. The activities should reflect the ideals and practices of the institution so that they bear uniqueness in relation to the particular institution.

5. Although funds may be allotted and are made available for organizing the activities, great care should be taken in spending the same. Unnecessary expenses should be avoided and funds should be judiciously and usefully spent. The staff adviser should keep a close watch on this and the members will gradually adopt this too.
6. The activity organized should not be for the sake of showing off but to achieve the prescribed aim. When this principle of realizing the objective is adhered to, the activity succeeds in achieving the same and naturally this gains public recognition and is appreciated by all.

7. It is essential that a written record of all the activities conducted in an academic year be maintained. This should include the name of the activity, nature of the activity, expenses incurred, participation of students, equipments/instruments required etc. This record comes in handy when preparing the annual report of the school. It also serves as a reference for following years.

‘Check Your Progress’ -1

1. Why should certain principles be followed in conducting co-curricular activities?

2. What is the significance of co-curricular activities as per the Secondary Education Commission?

3. List out four major principles that have to be followed for successfully conducting co-curricular activities.

4. Mention how pupils can be motivated to participate in co-curricular activities.
5. What is the basis for participation in various activities?

6. Why should activities be organized in small groups?

7. What is the utility of maintaining records of the activities conducted during the academic year?

15.4 Criteria For Selection of Activities

In the opinion of the Secondary Education Commission, co-curricular activities provide opportunities to pupils in developing individual characteristics, abilities and self-confidence. They also give training in promoting discipline and leadership qualities. Such being the expectation from the various co-curricular activities conducted in institutions, the criteria for selecting the activities must be given due importance. In 15.3, where the general principles for conducting co-curricular activities were discussed, a mention of the criteria to be borne in mind while selecting the activities was made. Let us now discuss these criteria in some detail.

1. Number of activities: This is the first and foremost criterion that has to be considered. The number of activities selected should neither be too many nor too less. They should be sufficient in number so as to provide enough opportunities to all pupils to participate. If they are too less, pupils will be restricted in participation. If there are too many, it places heavy strain on the pupils, teachers and resources.

2. Resources: Activities are to be selected keeping in mind the availability of funds for conducting the same. Selecting activities, which call for too much expense, will be uneconomical.
3. **In accordance with interests of pupils:** Unless the activities interest the pupils, they do not come forward to participate in them. And it is not advisable to force pupils to participate in something they have no interest as without the willing participation of pupils in any activity, neither objectives nor values is realized.

4. **In accordance with the size and educational level of the pupils:** Different activities cater to different schools in different areas and grades of pupils. Those that are suitable for urban areas may not suit schools in rural areas. The activities suitable for primary level will not be suitable for the high school. All this should be kept in mind in the selection of co-curricular activities.

5. **Fulfill the needs of adolescent period:** Adolescent is a critical period of stress and strain. The surplus energy that the adolescent has should be properly channelised for constructive utilization of the same and the co-curricular activities can be the way this can be achieved. This therefore results in the development of a healthy, balanced individual.

6. **Help development of moral characteristics:** Participating in co-curricular activities should develop moral traits like honesty, justice, politeness, discipline and obedience. These go into building up a good character.

7. **Help development of special interests:** Co-curricular activities should help pupils in identifying their inherent talents and skills and develop the same to their potentiality.

8. **Educational value of the activity:** When we talk about educational values, it includes values pertaining to all areas of development of the individual, as the broad goal of education is to bring about the all-round development of the individual. Let us see what these values are:

   i. **Physical value:** These activities should provide a channel for the proper utilization of energy of the pupils. This helps them in the normal growth and development of the body and the mind. Physical activities like athletics, sports and games contribute towards realizing this value.

   ii. **Psychological value:** The co-curricular activity should be instrumental in providing an outlet for the satisfaction of attitudes like curiosity, constructiveness, self-assertion and so on. Since adolescence is the peak for such instincts, the activities selected should help in the sublimation of such instincts.

The peer group influence being great during this period, group activities are enjoyed greatly by pupils of the Secondary School. Even pupils, who are dull in the classroom, seem to come alive during these group activities and their self-perception improves giving them self-confidence when applauded for the laudable performance in the activity. Thus
positive emotional development is a major advantage of group activities, which should be included in schools.

iii. Academic value: This is of two types - theoretical and practical. Theoretically this is taught in the classrooms. Taking the example of a subject like Science, scientific hobbies provide opportunities for supplementing the theoretical knowledge in Science. Thus all subjects like Geography, Language, Library activity, excursions/field trips etc., supplement learning.

iv. Civic value: Experiences of civic life should be provided to pupils in order to develop in them the awareness of rights and duties of a citizen of tomorrow. Since school is a society in miniature, it has to reflect the society around. Therefore activities like the Students’ Self Government, organizing School Panchayath, co-operative store etc, which provide the necessary experiences, should be part of the co-curricular activities of a school.

v. Ethical value: The activities should train pupils in character development by providing opportunities for acting in obedience to the group and school authorities. It should also develop traits of truth, love, non-violence and justice. In short, each activity should contribute to the inculcation of moral ideas, because such traits are acquired, when opportunities are provided for practicing them, as they cannot be taught,

vi. Social value: Social traits are also not learnt from books or lectures. These are acquired only from practical experiences Co-curricular activities should therefore provide opportunities for developing these traits like co-operation, sincerity, fellow feeling, loyalty, group discipline etc. Group activities should provide experiences for the development of such traits.

vii. Cultural value: Many programmes presented under co-curricular activities are in the name of ‘cultural programmes’. Activities like folk-music, folk dance, dramatics, and celebration of religious, social and national festivals and so on, impart knowledge of culture. We can therefore conclude that when activities are selected keeping in mind the criteria mentioned above and included in the co-curricular activities of the school, will undoubtedly pave the way for the all-round development of the pupil. Although guidelines for conducting co-curricular activities are followed, we cannot claim that they are without any limitations. Let us now see what these defects and limitations are:

Limitations of co-curricular activities:

i. Interference with studies: When students or teachers give more emphasis to co-curricular activities, there is a very great possibility of the pupils neglecting their studies. It is an undeniable fact that academics are the major concern of every parent and also the
pupil. Pupils are over-enthusiastic about participating in numerous activities; are bound to miss classes for practice and out of the school participation of competitions frequently. The recognition and laurels they earn for themselves and their school tends to be the first priority. This results in their falling back in academics. Therefore, care should be taken to see that the co-curricular activities are well balanced with the curricular in such a way that neither is over-emphasized.

ii. Excessive responsibility on the staff: A great responsibility rests on the staff adviser, who has to stay back long hours after school in order to attend to the activities. Though ideally these activities should be conducted within the school timetable, it is not practically possible, as many activities have to be performed outside class hours. Some such activities are games, practicing for variety entertainment, preparing for an exhibition etc. This calls for a great sacrifice on the part of teachers, as a lot of stress and strain and time is involved in preparing and conducting these activities. Therefore, the time for these activities should be judiciously adjusted as far as possible during the working hours and only when it is inevitable should the teachers and students made to stay back after school hours.

iii. Failure to achieve actual purpose: A specific activity is conceived and planned for achieving specific, objectives. But many a time, realizing these objectives is given the last priority. This happens when planning is not given the importance it calls for. Let me explain this with an example. Students, who want to stage a play, show great interest in the costumes, settings, curtain, selling tickets, getting cosmetics for the make-up, arranging for the light and sound system etc. whereas, the actual plot construction, dialogue delivery, direction etc. which are the major aspects from the educational point of view, are neglected.

iv. Inadequate facilities: Under the heading “principles to be followed in conducting co-curricular activities”, we had discussed about providing facilities for the organization of co-curricular activities. These facilities like playground for sports and games, funds for all kinds of activities, necessary equipment etc. may not be available in every institution. Therefore, in order to conduct co-curricular activities, the school has to make some makeshift arrangements as far as the playground and equipments etc. are concerned. As for the non-availability of funds, this can be solved to a certain extent by getting the people in the nearby community to sponsor.

Despite the hurdles that an institution may anticipate in organizing and conducting co-curricular activities, it is a widely observed phenomenon that every school has in its calendar of events, at least a few regular activities that are conducted, overcoming the obstacles they face. Unless this is done, the interests, abilities, and energy of the adolescents go unnoticed. There is also a danger that these may be misused thus leading to the development of antisocial elements in future.
‘Check Your Progress’- 2.
1. Mention four main criteria for the selection of Co-curricular activities.
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2. Why it is not desirable to force pupils in participating in activities that they are not interested in?
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3. List out the various Educational values that can be realized through Co-curricular activities.
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4. How are psychological values developed through Co-curricular activities?
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5. Name two ethical values that can be developed through Co-curricular activities.
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6. Name two activities that develop Civic values.
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7. Name two activities that develop Cultural values.

8. Mention four social traits that can be developed through group activities that are conducted as co-curricular activities?

9. Mention three limitations of Co-curricular activities.

10. Under what circumstances do Co-curricular activities interfere with studies?

15.5 **Let Us Sum Up**

- The concept of Co-curricular activities was known and practiced in the Ancient Vedic Age in the Gurukula where children fetched wood from the jungle and tended the kitchen garden.
- It was also found in the Ancient Greece in 400 B.C., where activities like debating, games and dramatics were given great importance.
- Co-curricular activities draw out the best in the child and man–body, mind and spirit.
- The importance as stated by the Secondary Education Commission is that they help in developing valuable attitudes and qualities.
It reiterates that they also teach the art of living, train in the habits and graces of social life and capacity for group work.

The general principles to be followed in conducting Co-curricular activities are:

- Selection of activities
- Providing time and place
- Providing advice
- Providing equal opportunities
- Aptitude as the basis
- Small size membership
- Having definite objectives behind activities
- Having a code of rules.

Other suggestions that facilitate the organizing of co-curricular activities are:

- Providing necessary equipment
- Sharing of duties regarding activities by all the staff members
- Activities to reflect the ideals and policies of the school
- Judicious use of funds
- Realizing the objectives prescribed for the particular activity
- Maintaining a record of all the activities conducted in an academic year

The criteria to be borne in mind while selecting activities are:

- The number of activities - neither too many nor too few
- Resources to be made available for conducting the activities
- Activities to be in accordance with the interests of pupils
- Activities to be in accordance with the size and educational level of the pupils
- Activities should fulfill the needs of adolescents
- Activities should develop moral characteristics
- Educational values of activities - physical, psychological, academic, civic, ethical, social and cultural

Limitations of co-curricular activities are:

- Interference with studies
Excessive responsibility on the staff
Failure to achieve actual purpose
Inadequate facilities

15.6 Answers To ‘Check Your Progress’

‘Check Your Progress’- 1.
1. Principles should be followed to make co-curricular activities more useful, educative, interesting and meaningful.
2. They can help in the development of very valuable attitudes and qualities.
3. Selection of activities, providing time and place, providing motivation, providing equal opportunities.
4. The pupils when joining the school could be given a list of activities that are conducted in the school, and asked to register as a member of the club/society for the respective activity.
5. Having an aptitude for that particular activity.
6. It facilitates better co-ordination, co-operation and participation.
7. This record comes in handy when preparing the annual report of the school. It also serves as a reference for following years.

‘Check Your Progress’- 2
1. In accordance with interests of pupils, in accordance with the size and educational level of the pupils, fulfill the needs of adolescent period, educational value of the activity. (Or any four mentioned.)
2. If there are too many activities it places a heavy strain on the pupils, teachers and resources.
3. Physical, psychological, academic, civic, ethical, social and cultural.
4. Due to peer group influence being great during adolescence, even those pupils who are dull in the classroom, come alive during these group activities, and their self-perception increases, giving them self confidence, resulting in positive emotional development.
5. Non-violence and justice. (Or any two mentioned)
6. Students’ Self Government, organizing School Panchayath. (Or any two mentioned)
7. Dramatics, celebration of religious, social and national festivals. (Or any two mentioned)
9. Interference with studies, excessive responsibility on the staff, failure to achieve actual purpose, inadequate facilities.
10. When students or teachers give more emphasis to co-curricular activities.

15.7 Units-End Exercises

1. Explain the concept of co-curricular activities. Explain the organization of any four of them.
2. Explain the role of co-curricular activities in training the character and developing interests of pupils.

15.8 References

In the previous Unit i.e. Unit 15, we had discussed about the general principles for conducting co-curricular activities and also the criteria to be followed for selecting co-curricular activities in schools. Keeping this in mind, we shall now go into certain co-curricular activities that are generally conducted in a majority of schools.
As you are in-service teachers, you might be familiar with a few of them and would have also conducted them. Therefore, when we talk about co-curricular activities, the very first activity that comes to your mind will be the School Assembly with which a school starts its day’s curricular activities. Then there are the other activities that go to make up the calendar of events in an academic year of any educational institution. Some of these are the School Day, Sports and Games, National Day Celebration etc. For the benefit of conducting such activities in a befitting manner, let us now discuss what the objectives of conducting such activities in a school are and how these can be organized to be conducted in a successful manner so as to realize the objectives.

16.2 Objectives

After you have studied this Unit, you will be able to:

- State the objectives of conducting the School Assembly
- Organize the School Assembly in a befitting manner
- Explain what is meant by Students’ Self Government
- Bring out the advantages of the Students’ Self Government in a school
- List out the Sports and Games activities that can be conducted in a school
- Bring out the importance of Sports and Games in the all-round development of the individual
- Organize the celebrations of National Days effectively in schools.

16.3 Prayer/School Assembly

This is an activity that is performed in every school and also one that heads the list of activities on a working day, with all the members of staff and students assembled together.

16.3.1 Objectives

- **To arouse a feeling of belongingness and unity:** When students of different classes assemble together they develop a sense of belongingness to the school.

- **To develop a sense of spirituality:** With a prayer to God, that has no reference to any particular religion, there is a sense of spirituality and unity among the students and staff assembled there, which helps in developing an emotional stability among them.

- **To inculcate a spirit of patriotism:** Singing of the National anthem and taking the national pledge by every student reiterates their duty towards their country and this constant reminder helps in the building up of qualities of citizenship.
• **To provide a common platform for announcement of changes and innovations:** The head of the institution can utilize the School assembly to announce any minor changes in the program for the day without disturbing the classes thereafter.

• **To instill discipline among students:** The students are expected to come well dressed in their uniforms and take proper positions. They are also expected to maintain silence and be well behaved when the assembly is in progress. Thus the School assembly provides opportunities for training in discipline.

• **To provide source of inspiration:** When achievements of the students are announced in the morning assembly, it motivates and inspires others too, to participate in various competitions and secure prizes.

• **To provide opportunities for ego satisfaction:** When announcements of achievements are made, the concerned students feel proud of their achievement and this reinforcement provides the ego satisfaction.

• **To develop positive habits:** Attending the Morning assembly regularly develops the habits of punctuality and regularity.

• **To unify the school:** The Morning assembly provides an opportunity for the school to come together as a family and plan together as a single unit, for the improvement of the institution, when the staff and students share their experiences and problems.

• **To develop leadership qualities among students:** It is generally seen that a group of students lead the prayer and the National anthem, with one of them giving the command. This can be done on a rotation basis, providing opportunities for all to come and lead the activities, thus helping to instill leadership qualities in them.

• **To encourage good audience behavior:** The staff present at the School assembly will supervise the student behavior and with their co-operation students are encouraged to depict good behavior as expected from a descent audience. This results in the students developing good citizenship qualities too.

• **To provide an opportunity for the Head Master of the institution to present problems and seek solutions to the same:** The Head Master might need to point out certain undesirable acts that had been observed among students and at the morning assembly he/she might suggest courses of action that can tackle the problem constructively.
16.3.2 Organisation

For the School assembly program to be conducted well, it has to be organized bearing certain points in mind, which may be listed as follows:

- Students and staff should come, stay and disperse in a disciplined manner.
- Gossiping and whispering should be checked.
- The atmosphere should be calm and serene.
- Students’ leading the assembly in the prayer and singing of the national anthem should be given turns so as to provide opportunities for all and expose them to facing large audiences and get out of stage fear and develop confidence.
- Faults of individual pupils should not be pointed out in the assembly, but the bad conduct pertaining to a general nature could be addressed in the Morning Assembly.
- Sermonizing should be avoided in the morning assembly. Frequently talking about the shortcomings of pupils creates a wrong impression, for it inflicts hurt on those not at fault.
- Including activities like daily news reading and the thought for the day would provide opportunity for improving reading and speech ability.
- The prayer that is sung should be of a general nature, without reference to any particular religion, so that it is of a secular nature. This inculcates the ideology of secularism among students.
- The class teachers should be given the responsibility to check the neatness and clearliness of students so as to gradually develop these habits in the pupils.
- The school band could be made to play while leaving the assembly, so that it makes for a disciplined way of dispersing and also provide an opportunity for learning to march properly.
- Important announcements regarding the school activities or programs, results of competitions and games should be made. Such announcements make way for better preparation by all for the effective functioning of the school.

When the School Assembly of an institution is conducted effectively, it creates a good impression on any visitor who visits the school and this enhances the image of the school. W.R. Smith considers the School Assembly as the focusing center of all forms of co-curricular activities.
‘Check Your Progress’ – 1

1. What aspect of the School Assembly develops spirituality and unity among the students?

2. What is the purpose of making the students take the national pledge during the morning assembly?

3. How does the Morning assembly help in training in discipline among students?

4. What aspect of the Morning assembly helps in motivating and inspiring the students?

5. What aspect of the morning assembly helps to develop leadership qualities among students?

6. What is the role of the teacher in conducting the morning assembly?
16.4 Student’s Self Government

It is considered the duty of every school to develop citizenship qualities in students. In a democratic country like ours, this is all the more required. One of the ways this is done is by involving them in activities that train for adult life. This is made possible by associating the students in the management of the school. One such way to realize this is to have a Students’ Self Government.

By Students’ Self Government it is meant that the students are permitted to participate in the organization, administration, functioning and control, by delegating to them the powers and responsibilities. Goods Dictionary of Education defines ‘Students’ Self Government’ as ‘the maintenance of order and the regulation of matters of conduct in school by elected representatives chosen from the students’ body by the students themselves’.

Having known the meaning of the concept of Students’ Self Government, let us now see why this is necessary. The first necessity as already mentioned is to mould the students into good citizens of tomorrow. The second is that, since the school is a miniature society, a good school has to reflect the outside society and in a democratic set-up of our society, Students’ Self Government is the way of reflecting this.

16.4.1 Objectives

The objectives for having a students’ Self Government in a school may be listed as follows:

To provide opportunities to respect authority and exercise authority: this is a sign of the successful working of democracy. Students should not be blind followers but trained in exercising authority when required.

To help students practice tolerance and follow the principle of give and take: school being a miniature society, the whole group is heterogeneous in nature and thus a major requirement of democracy is the practice of tolerance that paves way for the policy of ‘live and let live’.

To help students to learn to rise above narrow considerations of group, caste, religion and language: a school comprises of students from various backgrounds, class, creed, language and region. When the Students’ Self Government needs to tackle problems among students of various backgrounds, they get trained in tolerating the differences among students.

To provide opportunities to students in decision-making: as the Students’ Self Government body needs to take decisions on policy matters concerning the successful functioning of the school, students gain experience in taking quick decisions.
To provide opportunities to students in developing leadership qualities: successful democracy depends on good leadership. Students participating in the administration and academic activities of the school through the Students’ Self Government, acquire experience in gaining leadership qualities.

To help students realize the rights and responsibilities of a citizen: as part of the activities of the Students’ Self Government, the concerned body of members is required to initiate actions in tackling problems. To perform this successfully, an awareness of the rights and responsibilities of the individual is very essential. The Students’ Self Government provides this training.

To familiarize students with the mechanism of the system of government: through the functioning of the Students’ Self Government, students are made familiar with the process of administration and the related activities. They develop ability to discuss issues intelligently and control parliamentary procedure.

To provide opportunities to students for co-operative action: when students respond to actual requirements of the school community in a practical way through the Students’ Self Government the sense of responsibility galvanizes them into co-operative action.

To provide opportunities to develop self-discipline: when students obey laws and rules framed by them, they willingly do so and this inculcates discipline in them.

16.4.2 Organization

The organization to promote self-government is known by different names in different schools, like School Union, Parliament, and Student Panchayat. Students select the members to this and teachers nominate some. By the formation of the Students’ Self-government, it is clearly understood that the students are delegated powers in various aspects of the functioning of the school, and means a government of the students, for the students and by the students. Here, pupils are made responsible for most of the activities concerning the management of the school.

While discussing the organization of the Students’ Self-government let us first see what are the ways in which it has been done to date. The earliest form was the ‘informal type’, wherein the senior pupils co-operate with the staff in organizing functions, assisting in the sanitation of the school and maintaining order. In the second type, which is the ‘specific service type’, some elected senior students are made in charge of specific tasks like roll call, organizing sports, supervising study-rooms etc. In the third type called the “Simple Council type”, a proper student council is elected by the students. This council of students
is made in charge of school affairs. Another form of council called ‘the Complex Council’, which is more elaborate, has separate bodies of pupils in charge of specific activities like the Legislative body that corresponds with the State Assembly. A fifth type is the ‘school city type’, which corresponds to the municipal organization in a city functioning similar to the municipality of a city.

Generally in organizing the Students’ Council, various committees can be formed like discipline, health and cleanliness, games and sports, social activities etc. Teachers should be advisers for every committee. A convener secretary is there for every committee. There should also be an executive committee for the Students’ Self government, which is comprised of the convener secretaries of all the committees. The duration of the student council shall be one year.

The Students’ council should function on the basis of certain principles like the following:

- The students should have specific and limited functions so that the functioning of the Students’ Self-government does not interfere with the administration in taking serious policy decisions like exams, closing for vacation, observing a holiday etc.
- Teachers should train students for citizenship so as to become responsible members of society and having democratic ideals.
- Guidance should be provided to members of the Self-government group by the staff so that there is no misuse of power;
- Criteria should be framed for disqualifying office-bearers so that no complacency sets in among them.
- A proper environment has to be maintained for students’ involvement.
- The formation of Students’ Self-government should be gradual.
- The size of the students’ body should neither too small nor too big, but representative of all classes should be included.
- There should be a written constitution specifying responsibilities and duties of authorities and members.
- All materials and facilities should be provided for the proper functioning of the body.
- An account of income and expenditure should be maintained.
- The primary motto of the Students’ Self-government should be the development of the pupils and that of the institution, neither taking a back seat.
- The office bearers should neither be given too much freedom nor restricted too much, for both these are equally harmful to the welfare of the pupils as well as the institution.

**Advantages of Students’ Self Government:**

1. Co-curricular activities can be organized more effectively.
2. Teachers get better opportunity to get to know their students due to the proximity created by the contact between them.
3. It inculcates habits of self-reliance, independent judgment, leadership qualities, respect for law and authority, and a sense of responsibility. Students also realize the values of co-operation, adjustment, and democratic citizenship, sympathy, impartiality and tolerance.

‘Check Your Progress’ - 2

1. What is meant by Students’ Self-government?

2. What are the five types of Students’ self-government?

3. How does the ‘informal type’ function?

4. How is the ‘simple council type’ different from the ‘complex council type’?
5. Mention two major principles that should be borne in mind with regard to the organizing of the Students’ self-government.

6. Why it is advisable for the Students’ self-government to be given limited functions?


16.5 School Day

Every school celebrates Annual School Day during the last term of the year. As this is a routine activity every year, and included in the events of the academic year, the teachers who will be responsible for guiding the students in various activities will be informed well in advance, so that they have sufficient time to prepare the students for these, in their spare time.

16.5.1 Objectives

- To provide opportunities for the school-community interaction.
- To provide opportunities for students for exhibiting various talents.
- To honor prizewinners of various competitions conducted throughout the year.
- To inform about the various events conducted and also the achievements of the school by reading the Annual Report.
- To provide a free mingling of pupils of all classes through the various cultural items presented.
16.5.2 Organisation

The celebration of the School Day is an event that pupils eagerly look forward to. In organizing the activities for this day, the principal/headmaster of the school may convene a meeting of the staff members and allot them various responsibilities in connection with the activities for the day. The responsibilities may include the arrangements for the following:

- School banner (the presentable condition of the same).
- Public address system
- Staff advisers for the various cultural activities
- Welcome speech
- Compeering
- Inviting the chief guest
- Printing of invitation cards
- Making arrangements for receiving the guests
- Dais and hall arrangement and decoration
- Refreshments
- Seating arrangements for the audience

Activities that may be organized on the Annual School Day are:

- Reading the Annual Report on the activities conducted during the academic year, highlighting the achievements and also giving a hint regarding the future shape of things.
- Introducing and welcoming the guests.
- Prize distribution to winners in the various competitions conducted during the academic year.
- Speech by the guest, management representative and students’ representative.
- Cultural program comprising of group songs, group dances and skits.

The Annual School Day celebration should be done in such a manner so as to be an inspiration to all the stakeholders of the institution, like the students, parents, and school authorities. This is achieved by involving as many staff members and students as possible. The parents of the pupils should be received warmly and the report may acknowledge the support provided to the institution by the parents and the community at large. This paves
the way for their continued co-operation, which is of utmost importance to the successful functioning of any educational institution.

‘Check Your Progress’ - 3
1. Mention two major objectives of conducting the Annual School Day.

2. What is the role of the teachers as far as the preparations of the Annual Day celebrations is concerned?

3. Why is it essential to acknowledge the support of the parents and the community?

16.6 Sports and Games

Sports and games are very important for the physical as well as mental development of the child. It is therefore essential that the school understands the purpose of including sports and games as a part and parcel of the co-curricular activities of its regular programs. These can be realized through the resourcefulness of the persons in charge of these activities, with the proper timely guidance of the head of the institution.

16.6.1 Objectives

- To conserve health of the pupils.
- To develop healthy habits.
- To develop sportsmanship and qualities of leadership.
- To develop traits of alertness, courage, self-confidence, fair play, perseverance, judgment, foresight and judiciousness.
● To develop social qualities like co-operation, team-spirit and self sacrifice.
● To develop all-round personality of the pupils.
● To redirect surplus energy of adolescents to fruitful activities.
● To provide opportunities for training for citizenship.

In short the objective of conducting sports and games in schools to quote the Secondary Education Commission “to mould the character of students in addition to providing recreational facilities and contributing to their physical well-being”.

16.6.2 Organization

In order to derive maximum benefit from games and sports, these activities should be conducted bearing in mind the following points:

● Provide opportunities to very pupil in the school, thus bringing in the democratic aspect. Pupils should be formed into small groups and these groups should be rotated for participating in the various activities of sports and games.

● A timetable that allots various periods to the different groups should be framed so that special practice can be given to all at their fixed time.

● The equipments that are essential for various sports and games should be provided in sufficient quantity so that they are made available to all pupils.

● A qualified physical instructor is to be appointed on full time bases to provide necessary training and guidance and for the activities to be performed efficiently and effectively. He may also seek the help of the other staff members on rare occasions when needed. This also provides opportunities for those teachers who have an interest in such activities to put their knowledge and aptitude to positive use.

● Pupils should also be involved in organizing the tournaments and games as this gives them a sense of satisfaction of having been a part of the organizing committee.

● Winners of events and matches in the school matches as well as inter-school matches should be awarded prizes, so as to motivate them further.

● Healthy competition should be encouraged between the teams, so that the outcome of the matches is taken in the spirit of sportsmanship.

● A mention of the individual pupil’s achievement in the sports and games should be recorded in the pupil’s cumulative record and school leaving certificate for further reference and progress.
Games that are economical by way of less/no requirement of equipments should be introduced, so that finance is not a constraint for the conduct of games, like kho-kho, kabadi etc.

Group games should be encouraged more than individual games.

Conducting inter-school tournaments and competitions help in developing fraternal feelings and sympathy and also opportunities to interact with pupils of different schools.

Activities on the playground go a long way in the development of the personality of the pupil. They present a healthy diversion from the routine activities-of the school.

‘Check Your Progress’ - 4

1. Mention two important objectives of conducting sports and game.

2. What objective is achieved by conducting sports and games, according to the Secondary Education Commission?

3. How can the democratic element be introduced into the sports and games activities?

16.7 National Day Celebrations

India as a nation celebrates certain days as National Days. The National festivals that are thus celebrated are the Independence Day and Republic Day. These two days are declared as central holidays. Though the offices and educational institutions do not work on these days they have some programs to celebrate these national Festivals. The schools and classrooms especially are well decorated to reflect the festive atmosphere.
16.7.1 Objectives

- To bring about national unity
- To develop patriotism among pupils
- To develop secularism among pupils
- To develop democratic values of equality, fraternity and liberty among pupils
- To develop discipline among pupils
- To develop respect for the national flag

16.7.2 Organisation

Every year we celebrate August 15th and January 26th as National festivals. These are celebrated with great fervor and enthusiasm in the schools. Several programs are organized to celebrate these important days.

The activities for the day should be planned well ahead under the guidance of the staff adviser. Other than the staff adviser, the music teacher and the sports master have a considerably major role in preparing the students to participate in the cultural programs and drill/exercises, respectively.

The officers and members of the students’ council under the guidance of the staff adviser, the physical instructor, and the arts teacher have to chalk out the program. The aspects that need to be discussed and finalized relate to the following:

- Deciding the speakers for the day.
- Arranging the conveyance for them, if necessary.
- Informing about the time and venue of the celebration.
- Selecting appropriate items for presenting on the stage.
- Purchasing prizes/mementos for the creditable performances of students and guests respectively.
- Practicing the songs/dances/drills for effective presentation.
- Alloting responsibilities to students like compeering the program, introducing the chief guests, welcome speech and vote of thanks, and distribution of sweets, recording the day’s activities for the Annual Day Report.
- Ascertaining the proper condition of the National Flag, erecting the pole for the flag.
- Arranging for the purchase of necessary materials like flowers, decorating materials etc. as per requirements.
The agenda for the special day’s program on the Independence Day and the Republic Day may be as follows:

- Hoisting the National Flag
- Dhwaja Geethe
- Singing of patriotic songs
- Speech by the guest
- Speeches by the students on significance of the day, duties and responsibilities of a citizen, sacrifices made by freedom fighters and great personalities in gaining freedom and in the progress of the country.
- Mass drill/exercises
- Skit based on patriotic theme
- Singing of the National Anthem
- Distribution of sweets

The celebration of National festivals is the duty of every Indian. When these are celebrated in schools, it provides the students of today an opportunity to get an insight into how patriots had to struggle for the independence of the country. It resolves them into strengthening the nation and also cherishes the hard earned freedom. The speeches enlighten them on the rights and duties of a citizen. Talks about the great personalities inspire and motivate them into following their footsteps and working for a better and more united, secular India. These attitudes can also be fostered in students by arranging for competitions like essay writing and elocutions on these days or related topics which can be conducted earlier to the function, and prizes distributed to the winners on the festival days.

‘Check Your Progress’ - 5

1. Mention three objectives of celebrating the National Days.

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2. How can students be inspired and motivated to follow the footsteps of the great patriots?

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In an educational institution the general co-curricular activities include the following:- the School Assembly, celebration of National Days, School DAY, Spoils and Games, organization of Students’ Self-government etc.

The School Assembly achieves the purpose of inculcating a spirit of patriotism, helps to develop positive habits like punctuality, discipline, and also provides an opportunity to the head of the institution to identify and solve problems.

The staff and students share the responsibility of effectively organizing the School Assembly, a major part resting on the staff and student representatives.

A Students’ self-government helps in maintaining order in an institution as the elected representatives of the students initiate the regulations of the school.

A few major objectives of the Students’ Self-government are to provide opportunities for developing leadership qualities in students, familiarizing them with the mechanism of the system of government, develop self-discipline and also familiarizing with the process of administration.

The successful functioning of the Students’ self-government depends upon the guidance provided by the staff; students having specific and limited functions without letting it affect serious policy decisions, not losing sight of the major objective of improving the institution and the pupils.

The celebration of the School Annual Day is a regular feature of every school. This is celebrated to provide a free mingling of pupils of all classes as well as with the community. It also informs about the various events conducted and the achievements of the school.

Sports and games are part and parcel of the co-curricular activities of any educational institution, keeping in view the objectives of conserving the physical and mental health of the students.

Such activities help to develop traits of alertness, courage, self-confidence, fair play, perseverance, judgment, foresight, judiciousness and co-operation.

For successfully conducting the activities of sports and games, these should be allotted regular periods in the timetable, involving groups of students.

The objectives of celebrating National Days like August 15th and January 26th, is to bring about national unity and develop patriotism among pupils.
16.9 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1
1. Singing of prayer songs with no reference to any particular religion.
2. To inculcate the spirit of patriotism.
3. The students are expected to come well dressed in their uniforms and take proper positions. They are also expected to maintain silence and be well behaved when the assembly is in progress. Thus the School assembly provides opportunities for training in discipline.
4. When achievements of the students are announced in the morning assembly, it motivates and inspires others too, to participate in various competitions and secure prizes.
5. Providing opportunities for all to come and lead the activities of the Morning Assembly, like singing the Prayer and the National Anthem helps to instill leadership qualities
6. Responsibility to check the neatness and cleanliness of students so as to gradually develop these habits in the pupils.

‘Check Your Progress’ - 2
1. By Students’ Self Government it is meant that the students are permitted to participate in the organization, administration, functioning and control, by delegating to them the powers and responsibilities.
2. Informal type, Specific Service type, Simple Council type, Complex Council type, Legislative Body type, School City type.
3. By pupils co-operating with the staff in organizing functions, assisting in sanitation of schools and maintaining order.
4. The Complex Council type is more elaborate with separate bodies in charge of specific activities.
5. To train students for citizenship and democratic ideals.
6. So that the functioning of the Students’ Self-government does not interfere with major policy decisions.

‘Check Your Progress’ - 3
1. Provide opportunities for school-community interaction and provide a free mingling of pupils of all classes through various cultural activities.
2. Taking up the responsibility concerning the various activities connected with the School Annual Day.

3. For getting the continued co-operation for the successful functioning of the institution.

‘Check Your Progress’ - 4

1. Conserve health of pupils; develop traits of alertness, courage, self-confidence, judgment etc.

2. “To mould the character of students in addition to affording recreational facilities and contributing to their physical well being.”

3. By allowing groups of pupils to participate in rotation in various sports and games activities, so that every pupil participates in at least one activity.

‘Check Your Progress’ - 5

1. To bring about national unity
   To develop patriotism among pupils
   To develop secularism among pupils

2. Talks about the great personalities inspire and motivate them into following their footsteps.

16.10  Unit-End Exercises

1. Explain the objectives and organization of the Students’ Self-government.

2. Bring out the importance of organizing Sports and games in schools. How can you effectively conduct these activities?

16.11 References


UNIT 17  ORGANISTION OF CO-CURRICULAR ACTIVITIES-3

Structure

17.1 Introduction
17.2 Objectives
17.3 Fairs and Exhibitions
   17.3.1 Objectives of arranging Exhibitions
   17.3.2 Organization
17.4 General/Hobby Clubs
   17.4.1 Objectives of forming Hobby Clubs
   17.4.2 Organisation
17.5 Excursions and Field Trips
   17.5.1 Objectives
   17.5.2 Organization
17.6 Museums and Special Corners
   17.6.1 Objectives
   17.6.2 Organization
17.7 Let Us Sum Up
17.8 Answers to ‘Check Your Progress’
17.9 Unit-End Exercises
17.10 References

17.1 Introduction

In Unit 16, we had discussed the objectives and organization of a few co-curricular activities. Although in this Unit too we will be dealing with a few more co-curricular activities, there is a difference between the earlier ones and those discussed here. The earlier ones were general in nature, whereas the ones discussed, like Fairs and Exhibitions, field trips, Excursions etc. are subject related. You will see that these activities can be resorted to so as to enrich the knowledge and understanding of concepts in subjects like General Science, Social Science taught in schools. As a result, this will help you as teachers
to organize co-curricular activities which will help you to deal with the teaching of the subjects more effectively and efficiently, by bringing out better clarity and understanding of the topics/concepts among your pupils.

17.2 Objectives

After having studied this Unit, you will be able to:

- Bring out the importance of conducting Fairs or Exhibitions
- Successfully conduct Fairs or Exhibitions in school
- Establish subject related Hobby-clubs in school
- Organize a field trip successfully in the school
- Arrange Excursions to places of historical/ geographical/industrial/botanical/zoological interest
- Evaluate the utility of organizing Exhibitions
- Inculcate in pupils the aptitude for preparing exhibits
- Interpret the strengths and weaknesses of an Excursion/field trip/exhibition, for further improvement

17.3 Fairs and Exhibitions

An exhibition is a collection of items displayed. In a school exhibition, the exhibits are those prepared by the pupils of the school. This is a technique to exhibit the talents of the pupils. These exhibitions that are arranged in schools are usually planned to communicate to the parents and the public, the creativity and imagination of the pupils in preparing these items. Thus they depict to the community the progress made by students in the various educational projects undertaken by them from time to time.

The types of exhibits that may be displayed in a school exhibition are:

- Models prepared by students
- Products prepared by students like embroidered cloth, baskets, paintings, dolls etc.
- Albums containing collection of coins, postage stamps, photographs, herbarium, insects, portraits etc.
• Charts depicting problems of general interest
• Tools, equipments etc.

Exhibitions can be arranged on various subjects like Science exhibition, Geographical exhibition, Art and Craft exhibition, Photographic exhibition, Home Science exhibition etc. While planning the exhibition, the following points given by Edgar Dale will be very useful as tips:
• Have a central theme for the exhibits
• Place the exhibits where it is certain to be seen
• An exhibition is seen, not read - so make your labels short and simple. The labels should be uniform and legible
• Motion attracts attention; so having dynamic exhibits serves to attract the visitors.
• Be sure that the exhibit is well lighted
• Color may add interest and attractiveness
• Sound and various mechanisms add attraction

17.3.1 Objectives of arranging Exhibitions
• To reveal special talents of pupils
• To foster creativity among pupils
• To provide an opportunity of expression through art forms
• To encourage cooperative spirit among pupils
• To reveal to the parents and community the achievement of pupils in various fields other than academics
• To motivate pupils in preparing exhibits
• To provide psychological satisfaction to those who are actively involved in the preparation of the exhibits.
• To demonstrate the progress made by pupils in the projects undertaken by pupils.

17.3.2 Organisation

Exhibitions must be an annual affair of a school. All sections of the school should contribute the exhibition. In order to achieve success, planning for the exhibition must be
done right from the beginning of the academic year. The teachers must guide the pupils in the preparation of the exhibits, and in arranging the same. For an exhibition to be conducted successfully, the following points may be considered as guidelines:

- The exhibits prepared should be as varied as possible
- Each exhibit should be properly classified and labeled
- Exhibits should be made of durable material so that they are not easily damaged
- Care should be taken to see that the exhibits are kept in cases to protect from dust and possible damage
- A record of every exhibit should be maintained
- Exhibits should be properly labeled; labels should be uniform and legible
- Too many exhibits should not be crowded in a room
- The rooms where the exhibits are kept should be well lit
- Working and static exhibits should be intermingled so as to avoid overcrowding
- Sections should be devoted to art, creative work and meaningful themes
- Educational films can also be screened to attract the attention of the pupils
- The entire campus should be clean and potted plants could be placed at suitable points for decorative purposes
- In organizing exhibitions, the teachers should be appointed as guides
- The organization should be a co-operative effort between the students and pupils
- The pupils who are rested with the responsibility of explaining the exhibit should be conversant with the details of the same
- Publicity should be given about the exhibition and the nearby schools may be invited to visit
- The parents and guardians should be specially invited
- Judges could evaluate the best exhibits and prizes could be awarded
- Visitors’ book should be maintained for entertaining their suggestions.

Values of exhibition:

- Fosters self-activity where individual interest, skills and talents are exhibited.
- It has a pedagogic value where the pupils’ understanding is expressed in their exhibits.
Team spirit is encouraged in conducting an exhibition.

Values like vocational value; aesthetic value, cultural value and ethical values are realized in varying degrees in organizing and conducting the exhibition.

With parents visiting the exhibition, the parent-school contact is improved further.

**The role of the teacher:** The teacher will guide the pupils in the preparation of the exhibits, organizing and displaying the exhibits, training the volunteers in explaining to the visitors about the exhibits that they are in charge of.

The products prepared under the work experience or SUPW program also can be exhibited during exhibition. As only volunteers will have opportunity to actively participate in organizing the exhibition, others may be given opportunity by arranging for musical programs, short plays etc. so that all these activities create a festive atmosphere.

The importance of exhibitions is well conveyed by the famous psychologists Crow and Crow who asserts that the exhibition is an excellent learning aid that depicts the materials or samples of pupils’ work. He further adds,” in every classroom, a certain section should be reserved for the display of such materials. Many school have display cabinets in their corridors; some have exhibit rooms where materials of current interest, or the handiwork of pupils themselves is displayed. There are available in many school systems, collection of pictures, objects and other interesting materials that are circulated from school to school. Exhibits of the pupils’ work in the fields of art, home economics, Science, Social Studies and other related subjects are resources of great pride to the young people, and they excite the interests of other pupils, of parents, and of other lay people.”

‘Check Your Progress’ -1

1. Name three types of exhibits that can be prepared.

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2. Name three types of exhibitions.

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3. Mention three important objectives of conducting exhibition.

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4. Mention points to be taken care of while preparing exhibits.

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5. Mention three guidelines to be followed while exhibiting the exhibits.

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6. What is the role of the teacher in conducting exhibitions?

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7. Mention three values that are realized by exhibitions.

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17.4 General / Hobby Clubs

Leisure time interests find their expression in the clubs that are organized under various subjects in school. The students utilize their leisure time to engage in activities that they are interested in. In recent times the school takes upon itself the responsibility of training its pupils to utilize their leisure time constructively. Based on this requirement is the formation of clubs. The interests of the youth in Secondary School stage have to be creatively channelised and widened so as to fix good habits of engaging in useful hobbies.
On a broad basis, hobbies can be classified into those that satisfy the interests of an intellectual character that are related to the school subjects like language, history, science etc. hobby clubs that are formed in relation to these subjects are History clubs, Science clubs, Language clubs etc. Other than these subject related clubs, pupils interested in arts and fine arts can form Music club, Arts and Dramatic club etc. A third category of hobby club involves service-oriented activities like Scouts and Guides, Red Cross etc. which are fostered by central agencies and provide necessary facilities to the school students to participate in the same.

A hobby is a social necessity in modern times. School days are the right time for laying the foundations of a hobby. A hobby club is an organized body having members of common interests engaged in purposeful activities during their leisure times. Depending on the specific interests of the students of the students, hobbies can be of the following types:

- Collection of various items like stamps, coins, parts of plants, insects, feathers, fossils, stones, pictures etc.
- Artistic hobbies like drawing, painting, clay/plaster of Paris modeling, toy making, sculpture, embroidery etc.
- Scientific hobbies like preparation of various items involving knowledge of Science, such as soaps, detergents, radio repairing, photography, preparing improvised apparatus, repairing electrical appliances of daily use etc.
- Literary hobbies like writing poems, stories, for magazines etc.
- Craft hobbies like spinning, weaving, basket making, knitting, embroidery, tailoring, kitchen gardening etc.

17.4.1 Objectives of forming Hobby Clubs

The various objectives of forming hobby clubs may be listed as follows:

- To help in engaging pupils in activities of interest
- To widen and deepen interest of pupils
- To help in developing and fostering creativity in pupils
- To provide a relief from the monotonous day-to-day work
- To provide a substitute for games when facilities for this are not available
- At times to provide economic self-sufficiency to pupils
To provide opportunity for practicing a worthy ideal
To motivate and enrich school work
To provide opportunity for development of the child

17.4.2 Organisation

It is the responsibility of the school to provide the necessary resources for the formation of the hobby clubs. Let us see the criteria to be borne in mind in organizing this:

- First of all, a variety of hobby clubs should be introduced for catering to the varied interests of the pupils.
- Pupils must be given the freedom to opt for the membership of the club of their choice/interest.
- The school timetable should have a fixed schedule for conducting the activities of the hobby clubs.
- Teachers who have a knowledge of the activities should guide the students in the activities of the club.
- Records of the activities conducted should be maintained.
- Sufficient finance must be made available for conducting the various activities of the clubs.
- Accounts of the expenses incurred should be maintained.
- If products are made out of these activities, these could be sold and accounts of the sales could be maintained.

A major factor to be taken into consideration is the safe-keeping of the items like the collection of stamps, coins, albums etc. that are prepared by the pupils under the auspices of the various clubs. These are to be preserved and saved from being spoilt.

‘Check Your Progress’- 2

1. What is a hobby club?

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2. What are the three broad types of hobby clubs?

3. Give two objectives of hobby clubs.

17.5 Excursions and Field Trips

Anything learnt from books or from others do not provide for any first hand experience. Therefore it may not be out of place here to mention that full knowledge cannot be acquired in the classroom situation. In order to give those experiences, the pupils can be taken out on an excursion/field trip. The field trip is an educational trip undertaken, that makes it possible for the pupils to acquire real experience in a real life situation.

The excursions can be of various types like historical, geographical, industrial, botanical, or zoological. In a historical excursion, pupils may be taken to visit places of historical importance like forts, historical buildings, etc. Geographical excursions may be made to lakes, forests, hills, dams, etc. Industrial excursions can include factory visits, visit to a bank, etc. Botanical excursions can be made to botanical gardens and so on.

17.5.1 Objectives

- To acquaint pupil with his environment: Taking the pupils on an excursion to the bird sanctuary or a forest nearby his place, provides him with the opportunity of getting familiar with his environment.

- To supplement and enrich teaching-learning experiences: When visits are arranged in connection with the subjects, the information given in the class is supplemented and enriched by the excursion. Such visits bring reality and clarity to the theoretical information given in the classrooms.

- To provide opportunities for group activity and active participation: Students are given opportunities to plan and organize the trips, which thus become a group activity with scope for active participation.
To bring variety in teaching-learning: Students following the monotonous routine that is practiced in the classroom find a welcome change in the excursion thus infusing enthusiasm among them.

To develop qualities of leadership and co-operation: When the pupils organize educational trips, they are provided with opportunities to develop leadership qualities that are acquired in planning and organizing a trip. Since this is a group activity, it also infuses co-operation and unity among the pupils.

To develop aesthetic sense: An excursion made to places famous for its natural environment, create and develop love for nature and an appreciation for the beauty of nature.

To foster emotional and national integration: The excursion made to regions outside, provide opportunities for pupils to mingle with the people there and get to know more about them and this makes them realize the affinities and diversities between themselves and the people there. This brings about an emotional and national integration among the people of different regions of the county.

17.5.2 Organization

In organizing an excursion, the major consideration is the planning aspect, which should be done judiciously. Planning has to be done right from deciding the place to be visited, dates for making the trip, reservation to be made for the required mode of travel, lodging facility, etc. Information regarding all these aspects is to be got sufficiently in advance in order to plan properly.

Before starting to go, certain essentialities that are to be considered are as follows:

- The teacher as well as the pupils should decide the utility of the excursion as to its role in supplementing the classroom activities and experiences.
- The educational aims as well as the recreational aims of the excursion should be borne in mind.
- The pupils should be guided as to the ‘why’, ‘what’, and ‘how’ of the places and things to be seen.
- Girl pupils should be put under the charge of a lady teacher.
- Committees of students may be formed to take charge of various aspects like seating in the bus/train, counting heads at intervals to confirm that nobody is missed at any point, serving food, getting to see to the cleaning of utensils, dormitory organization, maintaining discipline etc. all this helps in the smooth conduct of the excursion.
Pupils should be advised to make a note of the entire excursion by way of entering important aspects of the excursion, in a diary.

This will also help in evaluating the excursion, and as the views and entries are of different individuals, many points of view emerge, which provide scope for an elaborate discussion and evaluation.

The evaluation done will be helpful in avoiding the mistakes committed and strengthening the good aspects in future trips.

‘Check Your Progress’ - 3
1. What purpose is served by a field trip?

2. Name two types of excursions.

3. Mention any two objectives of conducting excursions.

4. How do excursions enthuse the pupils?

5. How can emotional and national integration be achieved through excursions?
6. What is the major consideration in organizing excursions?

7. Mention three areas where planning is a must?

8. On what should the pupils be given guidance?

9. How does formation of committees help in organizing excursions?

10. What is the purpose of evaluating an excursion?

17.6 Museums and Special Corners

The word Museum is derived from a Greek work ‘Muses’, considered being the Goddess of poetry, music, literal arts and sciences. From this, we can safely consider that museum is a place where articles related to arts, music, literature and science are kept. A Museum is undeniably an agency of education.

A ‘special corner’ is a place in every classroom that is reserved for the display of materials that are prepared by pupils. These specimens are changed at intervals. Such a section motivates the other pupils to make efforts in preparing such materials.
A school museum generally exhibits specimens of production of the pupils. While on this aspect of exhibiting items in a museum, it would not be out of place to quote Khan Bahadur Mian M. Afzal Hussain, a former Vice Chancellor of Punjab University - “No scheme of education is complete without paying attention to this aspect in question”.

17.6.1 Objectives

The objectives of having museums and special corners in schools could be listed as follows:

- To satisfy the various instincts of the child like the instincts of curiosity, constructiveness and acquisition.
- To channelise the creative energies of the child in preparing specimens and exhibits. This brings him emotional satisfaction.
- To encourage the talented pupils in exhibiting their originality.
- As a method of correlating various subjects in the school.
- To exhibit practical talents in conducting scientific experiments and using the same as teaching aids.
- To encourage and evaluate the originality, creativity and power of application of knowledge of pupils.
- To motivate pupils who had the interest or aptitude earlier.
- To act as a means of developing contact with the community and bringing the school and the community together.
- To act as a means of fetching income for the school, by the sale of articles produced.
- To derive publicity by getting high authorities to inaugurate the museum.
- In the words of the Secondary Education Commission, “to educate the public at large and give them a realistic approach.”
- To develop aesthetic sense of the pupils.
- To supplement the knowledge of different subjects like nature study, science etc.
- To promote power of observation.

17.6.2 Organization

A school museum must be divided into various departments, corresponding to the subjects taught and work done in the school, like:
- Art and painting (drawing, painting, modeling etc.)
- Craft (weaving, knitting, embroidery etc.)
- Home industry (soap making, candle making, basket making etc.)
- Geography (specimens of stones, minerals, rocks etc.)
- Zoology (specimens of birds, insects, animals etc.)
- Botany (album of leaves, plants, seeds etc. botanical specimens)
- Physics (improvised apparatus, small machines like telephone, radio etc.)
- Social studies (charts, models, album of items of historical, geographical, economical importance)
- Teaching aids (audio-visual aids, charts, models)
- Home science (jams, syrups, pickles etc.)
- Books (manuscripts, books)

You have now seen the types of exhibits that can be prepared under various departments. Now let us see what has to be done regarding the preparation of such exhibits. Pupils should prepare exhibits on the basis of their interest, ability and aptitude. The teacher should guide them in selecting the materials and in the process of preparation.

The next aspect, which is also the most important one too, is the arrangement and display of these exhibits. The first step in this direction is the setting up of the museum room. There should either be a room spacious enough to include all sections or different rooms for various sections. In the former case, the name of the section should be displayed and in the latter case, the room allotted for the specific section should display the signboard above the door prominently. The exhibits should be arranged in a non-congested way.

Next comes the care of the exhibits. In order to prevent any damage or spoiling of the exhibits, these have to be preferably kept in containers, labeled and arranged systematically on the tables or shelves. A request should be made, preferably in writing, kept by the shelves or on the table, prohibiting the public from touching or damaging them. The items should be well taken care of, maintained well and dusted occasionally. Then comes the aspect of providing the details of the exhibits. Under this, the details of the preparation or collection of the item, their utility, name of the producer or collector, cost of the item, and the selling price, if it is to be sold, should also to be written.

Any activity should be evaluated, to know the weakness and strengths, for the sake of improvement. Placing a visitors’ book for the visitors, who may be requested to record
their impressions about the exhibits and the maintenance of the museum and also give valuable suggestions, would go a long way in bringing about improvement in all aspects concerning the museum. Any activity when judged and rewarded creates further interest and motivation among the pupils. As a means of providing this reinforcement, judges may be appointed to assess the exhibits in the museum.

A final word of caution should be made regarding this co-curricular activity of organizing a museum, as it is for any other. Organizing a museum and preparation and arrangement of exhibits should not be done at the cost of the academic activities in the classroom.

‘Check Your Progress’ - 4

1. What do you mean by a ‘special corner’?

2. Mention two main objectives of having museum in schools?

3. List out the sections that can be had in a museum.

4. Mention two main points to be borne in mind regarding the care of the exhibits.

17.7 Let Us Sum Up

- An exhibition is a valuable co-curricular activity, which is a collection of items prepared by pupils or pupils and teachers, and provides an opportunity for the pupils to reveal their creativity and imagination.
• A variety of exhibits are classified and labeled and exhibited in rooms that are well lit.

• Hobby clubs as a co-curricular activity, helps in organizing activities of interest that can be organized based on subjects, wherein pupils can be given freedom to choose the membership for the club they are interested in.

• Excursions and field trips are co-curricular activities that very greatly supplement the curriculum in the sense that what cannot be learnt from the classroom situation is learnt through firsthand experience.

• Such trips help pupils to get acquainted with their environment and provide opportunities for group activity, to develop aesthetic sense and qualities of leadership and co-operation.

• A school museum generally exhibits specimens produced by pupils.

• When exhibits are displayed in a certain section of the classroom earmarked for the same, such a section is termed as a ‘special corner’.

• Museums and special corners satisfy the various instincts of curiosity of the child and the creative energy.

• A school museum can be divided into various sections like Art and painting, Craft, Home industry, Geography, Zoology, Botany, Physics, Social science, Teaching aids, Home science and Books.

17.8 Answers to ‘Check Your Progress’

‘Check Your Progress’- 1

1. Models, albums containing coins, stamps, and charts.


3. Reveal special talents of pupils, foster creativity and motivate pupils.

4. Variety made of durable materials, popular, difficult and easy exhibits should be prepared.

5. The exhibits should not be exhibited in a crowded manner, working and static exhibits should be intermingled, and exhibits should be properly labeled.

6. Guiding students as to the preparation of exhibits, organizing and displaying the exhibits, training the volunteers in explaining to the visitors about the exhibits they are in charge of.
7. Vocational, aesthetic and ethical.

‘Check Your Progress’ - 2

1. An organized body having members with common interest engaged in purposeful activities.

2. Those that satisfy the interest of intellectual characteristics
   a. Those that satisfy artistic interests
   b. Those that involve service oriented activities

3. Help pupils in engaging in activities of interest and Provide relief from monotonous work in school.

‘Check Your Progress’ - 3

1. Experiences that cannot be given during classroom teaching are provided by a field trip.

2. Historical, botanical (or any of the two given).

3. To acquaint pupils with their environment, to supplement teaching-learning experiences.

4. By providing a way of teaching out of the monotonous routine followed in the classroom.

5. When trips are made outside the state, pupils get opportunity to mingle with people of other languages and regions, which bring about emotional and national integration.

6. Planning.

7. Deciding the place to visit on the basis of the educational aims to be realized, arrangements for travel and lodging, getting enough information on the places.


9. In aspects of discipline and smooth conduct of excursion, through delegating duties to groups and leaders.

10. To avoid mistakes committed and strengthening good aspects in future trips.

‘Check Your Progress’ - 4

1. A section of the classroom reserved for display of exhibits prepared by pupils.

2. To encourage talented pupils in exhibiting their originality; to evaluate the originality, creativity and power of application of pupils.
3. Art and painting, Craft, Home industry, Geography, Zoology, Botany, Physics, Social studies, Teaching aids, Home science, Books.

4. Prohibiting the public from touching or damaging them and dusting them occasionally.

17.9 Unit-End Exercises

1. Mention four co-curricular activities related to school subjects that can be conducted in schools.

2. What are the objectives of conducting exhibition in schools? How will you organize one in your school?

17.10 References


UNIT 18  ORGANISATION OF CO-CURRICULAR ACTIVITIES — 4

Structure

18.1  Introduction
18.2  Objectives
18.3  Literary and Cultural activities
   18.3.1  Objectives
   18.3.2  Organization
18.4  Social Service
   18.4.1  Objectives
   18.4.2  Organization
18.5  Observation of Special Days (I.E, Birthdays of Famous Personalities International Days)
   18.5.1  Objectives
   18.5.2  Organization
18.6  Guest Lectures/ Special Lectures
   18.6.1  Objectives
   18.6.2  Organization
18.7  Let Us Sum Up
18.8  Answers to ‘Check Your Progress’
18.9  Unit-End Exercises
18.10 References

18.1  Introduction

In Unit 14.3.1 you have already been introduced to some literary activities. But it was only a brief one. In this Unit, we shall discuss a few literary activities in some detail. Along with the literary activities we shall also see a few other activities too.

It is a fact that we as members of the society are enjoying the benefits of it in varying degrees. Therefore, in return we need to give back the society at least to some extent. Participating in social service activities does this. We shall see a few such activities that pupils can perform so as to become useful contributors to the society.
As teachers you would have observed certain special days in your school. Special Days i.e. the birthdays of famous personalities include the most celebrated ones like Children’s Day (Pundit Jawaharlal Nehru’s birthday) and Teachers’ Day (Dr. Radhakrishnan’s birthday). How such days can be celebrated in a befitting manner will be discussed here.

Effective teaching learning in the school is enriched by an important co-curricular activity called guest lecture or special lecture. These can be arranged so as to enrich the knowledge and understanding of the students pertaining to their course or studies or even in a general way by creating awareness of the world and the happenings in various fields. In this Unit we shall see how such activities can be organized.

18.2 Objectives

After you have studied this Unit, you will be able to:

- List out a few literary activities that can be conducted in schools
- Organize literary activities like debates, discussions, school magazine etc. in your school
- Guide pupils in conducting cultural activities in school
- Inculcate in students the urge for social service
- Organize activities for observing special days in the school
- Arrange guest lecturers relevant to the various school subjects/topics so as to enrich pupils’ knowledge by supplementing that acquired in the classroom

18.3 Literary and Cultural Activities

Of the literary and cultural activities, let us first deal with the literary, with regard to the objectives and organization of the same and then move on to the cultural activities.

**Literary activities:** Expression is an important ability that has to be developed through education. The ability to communicate one’s thoughts and feelings effectively is essential for successful participation in society and in personality development. Literary activities foster such abilities in pupils. Among such activities we shall discuss a few of them in the oral as well as the written category.

18.3.1 Objectives

The objectives of conducting literary activities in schools are numerous. Let us now attempt to list out the major ones:
- To provide opportunity for creative work and self-expression.
- To train youth in the art of communicating ideas fully, clearly and effectively.
- To organize ideas and reason out logically.
- To cultivate in pupils a clear and vivid style of oral/written expression.
- To bring about a link between school and community/day-to-day life.
- To provide a medium for discussing common school issues.
- To project the school ideal before the pupils.
- To give authentic information regarding the school to the pupils, parents, other schools, patrons etc.

18.3.2 Organization

As the basic criterion of any literary activity is the power of expression, these activities can be broadly categorized into the oral and written activities. Let us first discuss a few oral activities.

DEBATES: This activity has important educational values. In this activity, the debater has to investigate a problem/issue. He has to convince the audience that his views on the topic are correct and worth accepting. Therefore, the points made by the debater should be delivered with clarity and force and in an emphasized manner. Such being the demand made on the debater that it helps the pupil to develop the ability to analyze the facts pertaining to that particular issue and organize these in a systematic manner. A very important point to be kept in mind by the debater is that he/she has to exercise self control and should never indulge in violent retorting or ridiculing of his opponent. He should show courtesy to his opponent and have self-confidence in sticking to his point of view.

As for the topics that are selected for the debate; these should pertain either to the course subjects or the day-to-day life of the students, or issues of national and international importance. Unless the topic is of interest, the pupils will not be eager to collect necessary material to substantiate their views on the particular issue. In this aspect the teacher plays a major role, for it is the teacher who has to guide and assist the pupils in selecting the topic and the materials so that second-hand and ill-organized material are not mechanically presented by the debater. The teacher could make a list of topics relating to the various course subjects, or those related to school life, current topics or social life of the community. This could be done by taking the suggestions of the pupils and then allow the pupils to select the subject of their choice/interest. The teacher should then guide the pupils in regard
to the source of information and in selecting and organizing the same. After the pupils have done this, the teacher should constructively criticize the prepared material.

**DISCUSSIONS:** A discussion is an exchange of ideas that results in active learning with all the members of the group participating in it actively. The teacher will direct discussions and the students are encouraged to express their views and observations. For this to take place fruitfully, it has to be well planned. The responsibility of this rests with the teacher who has to plan, organize and conduct it effectively. For an effective discussion to materialize, the teacher has to follow certain principles, which may be listed as follows:

- The topic for discussion is related to either the school subjects or the common needs and interests of the participants. Be what it may, the students are motivated to discuss if the topic is of vital importance to them.
- The students should have enough information about the topic they are to discuss, so that each one of the participant is in a position to actively participate in it.
- Students should be encouraged to express their thoughts and ideas in a proper manner and in correct language.
- The teachers should stimulate the students to ask thought-provoking questions and at the same time encouraged to think on their own.
- If the teacher finds that the discussion is going away from the topic or that it is prolonged unnecessarily, he/she should discontinue the ineffective discussion.
- The students should be encouraged to evaluate the progress of the discussion.
- The conclusions that are arrived at should find a place in the classroom application, or day-to-day life.

**PUBLIC SPEAKING:** This activity has a high social value as well as an intellectual value since it involves the training of leaders in social action. Pupils develop the ability of persuading the audience through their persuasive expression of their views. They train in speaking animatedly, so as to keep the audience spellbound.

The major advantages of this literary activity are that it provides scope for acquiring knowledge of topics of current interest and improvement in oral expression.

**DRAMATIZATION:** This is a co-curricular activity that can be used with reference to any subject, be it History, Science or Mathematics. Yet, this form of co-curricular activity has not been popularly used in schools in India as in other foreign countries. It is an art involving the co-ordination and control of the organs of speech as well as the muscles of the body. This activity gives a lot of scope for expression of ideas and emotions that the
pupil wishes to convey. Training in this activity helps the pupil to become less self-conscious and more confident.

This activity can be usefully employed with minimum requirements by selecting simple one-act plays. These will not require long time for rehearsal. Neither will it need elaborate equipments. Moreover, the pupils who are trained in dramatics acquire training in various areas like arranging the stage, preparing costumes, writing dialogues, directing the play. Over and above all, the pupils get opportunities for cooperative work and this provides scope for good social training. And like any other oral literary activity this also helps in developing his speech ability, originaly and ingenuity.

In this, the role of the teacher is to guide the pupils in selecting a play that will not require elaborate preparation, equipment and too much time. The school library should also have books that can provide sufficient guidance in all spheres of production of drama like, selection of play, direction, costume making, make-up etc.

The importance of dramatics has been very eloquently asserted by Dr. Jaswanth Singh, who says, “It provides a healthy outlet to adolescent urges and needs of pupils. If properly planned and integrated with the academic programme of the school, it can become a very effective vehicle of instruction.”

Let us now discuss a few written literary activities.

SCHOOL MAGAZINE: The school magazine is an effective way of providing an outlet for the expression of feelings of students. Students can write articles like a story/ incident/essays etc. that can be scrutinized by the editor of the magazine. The editor could also be a member of the staff, who can also guide the students in selecting appropriate topics on which to write. When the students find their articles printed in the School magazine, it gives them immense pleasure and satisfaction. Teachers can also write articles. As the magazine carries news of the school, it helps to establish the popularity of the school far and wide as it reaches different people through the pupils of the school.

The school magazine can be started with a wall magazine. For the wall magazine, the pupils can give articles in manuscript. These articles can be displayed on a board hung on the wall. Before displaying them, corrections should be made wherever necessary. If necessary, the pupil should be asked to re-write the article, when mistakes are numerous. The duration for which these should be displayed could be a week or a fortnight. This depends on the number of articles received from the pupils. If there are more articles, then the duration may be reduced and if less, the duration could be increased. The wall magazine facilitates in preparing the Annual School magazine, as those articles found good can be included in the School magazine.
The content of the School magazine could include short stories, essays, students’ self-composed poems, notes on current topics, school news like the activities conducted in the school etc. The role of the teacher here is not only to advice but also motivate the students to contribute to the magazine. It is also very essential that the teacher has a good command over the language and school events so that it is possible for him/her to handle material given by the students. As an adviser, he should provide constructive criticism and correct the material provided.

The publishing of the Annual School Magazine will depend on the availability of funds in the institution. It is an undeniable fact that this literary activity improves the literary taste of the pupils. It also serves as a link between the school and the community. From the students’ point of view, the Annual School magazine may be a stepping-stone to becoming future writers, poets and philosophers.

**ESSAY WRITING:** This is form of co-curricular activity, which is very frequently practiced in any school. It is an activity, which provides scope for the students to exhibit their knowledge on various topics. Generally the topics for this will be those of public interest or connected with the school subjects like History, Science, Civics or the contemporary condition of the society. The list is not-exhaustive.

The teacher who is in charge of this will have to announce topics that are of interest to the students and also guide them as to the source of information. In organizing literary activities, especially the oral ones, it is always better to plan class wise/grade wise or one for the whole school. The class/grade activities provide for a smaller society of students who can gain experiences to be made confident to face a larger crowd of older students in future.

**CULTURAL ACTIVITIES:** These are those activities that depict the particular society. When we talk about customs, they are nothing but those activities passed on from one generation to another. These vary from region to region, and state to state. The activities that can be listed under this category are: performing arts like dancing, singing, playing on musical instruments, enacting skits and plays, etc.

Conducting these cultural activities in school has many advantages. Firstly, they are based on the interest and aptitude of the pupils and thus provide an opportunity for them to exhibit their talent. For some, it may be the stepping-stone to a further full-fledged profession or occupation that helps them to lead a satisfactory livelihood and achieve name and fame from far and wide.
‘Check Your Progress’- 1
1. Into what categories can literary activities be classified?

2. Give two examples each for the oral as well as written literary activities.

3. What is the role of the teacher in a debating activity?

4. What is the advantage of public speaking as a literary activity?

5. What is the role of the teacher in the literary activity of dramatization?

6. Give two examples of School publications.
7. Give four examples of the content that could be included in the School magazine.

8. What is the role of the teacher in the publication of the School magazine?

9. On what topics can the activity of essay writing activity be organized?

10. Give three examples of Cultural activities.

18.4 Social Service

According to the Eshwar Bhai Patel Review Committee, Social Service activities include:

- Cleaning slum areas
- Digging drainages
- Educating adults
- Attending to the sick
- Helping the poor
- Laying roads etc.

If such activities have to be performed by the pupils, they can be done through movements like the Boy Scouting, Girl Guiding, The Junior Red Cross Society, NCC, and
ACC. Let us now go into the objectives and organization of these one by one.

18.4.1 Objectives

Going by the objectives of the individual activity would help you to recall them. Therefore, we shall go into the objectives of each activity one by one:

BOY SCOUTING:
1. To harness the potentialities of adolescents for the benefit and service of the community
2. To realize the aptitudes and potentialities by providing a variety of activities
3. To sublimate tendency, curiosity, restlessness, assertiveness and heroism

GIRL GUIDES:
1. To help girls attain maximum powers as a woman
2. To promote health and well being of the pupils through a network of physical activities
3. To contribute to the mental health of adolescents
4. To provide fruitful channels for expression of various tendencies
5. To train aesthetic sensibility through observing beauties of nature
6. To promote spirit of adventure through camping and outdoor life
7. To provide efficient training in activities developing citizenship qualities
8. To provide training in useful activities of daily life like first aid, nursing, kitchen-gardening etc.

THE JUNIOR RED CROSS SOCIETY:
1. To promote health, personal hygiene, school hygiene and community hygiene
2. To provide service to others, especially health
3. To promote fellowship among people of all countries

18.4.2 Organisation

As we have individually discussed the objectives as the various movements, so also we will discuss the organization of these one by one.

BOY SCOUTING AND GIRL GUIDING: Sir Robert Baden Powell initiated Boy
scouting Movement in 1908 and this was introduced in India in 1911. The Girl Guiding Movement was started for the girls, as an alternative for Boy Scouting.

Scouting is a multipurpose activity for boys in the age group between 11 and 18. They are initially expected to take a solemn pledge to obey the Scout Law. The ‘Code of ten’ law relates to honor loyalty, obedience, friendliness, usefulness, courteousness, cheerfulness, thrift and cleanliness. The training has three grades. The scouts have a special uniform. They learn the use of rope and sticks, learn first aid, social service, organize campfires, picnics and outings, learn how to lead a camp life and live together with team spirit. They get trained in all aspects of independent life.

The Girl Guides have activities including cooking, nursing, first aid, singing, dancing, games, drill and social service. The training is given in three stages, for girls below 11, for girls between the age of 11 and 16, and for girls above 16.

These two movements namely The Boy Scouting and girl Guiding, through co-operative activities help in the development of ideals of citizenship and co-operation. This is possible because of pupils of all castes, creed, color and religion being together for all activities. This teaches them toleration, fellow being, sympathy and self-sacrifice. They are trained in rendering social service like flood relief work, adult literacy work, first-aid and nursing. The activities they undertake, give importance for manual work and dignity of labor.

In organizing these activities of the Boy Scouting and Girl Guiding movements in schools, a few points have to be borne in mind. These are:

- A group should not exceed 32 pupils.
- A trained Scoutmaster should guide the boys.
- A preliminary training should be given to the selected ones in training in getting them to know the ten code laws, pledge, loyalty to the group, tasks and functions.
- Produce necessary equipment like uniforms, ropes, badges first aid material, camping material and books.
- Provide opportunities to work in rural areas.
- Camps must be started at far off places.
- Recreational activities like music, campfire, dramatics etc. must be organized.
- Evaluation of the work done must be undertaken.
- A record of all the activities should be maintained.
   Outstanding work must be recognized by giving badges or other rewards.

**THE JUNIOR RED CROSS SOCIETY:** This is the school branch of the Red
Cross Organization. Like the other two movements, the Boy Scouting and Girl Guiding, this is also a voluntary, non-government, non-sectarian organization. The programmes conducted by the Junior Red Cross Society are also on personal health and service to others who are in need. It brings together pupils of all castes, creed and nations. The activities basically train the pupils for citizenship. The difference between Boy Scout and Junior Red Cross Society is that the Boy Scouts gives importance to moral and social aspect whereas the Junior Red Cross Society gives importance to health and local communal life.

**THE INDIAN RED CROSS** lays special emphasis on activities connected with personal and school hygiene. As such, activities connected with these are given prominence in the Junior Red Cross Society. These are achieved by the following activities:

- Making posters illustrating health rules.
- Acting plays related to the theme of health, representing health rules and at the same time providing entertainment for the community.
- Conducting exhibitions and discussions by members to spread knowledge of health.
- Training in swimming for life-saving purposes.
- Formation of health squads.
- Co-operating with the public health staff in preventing spread of diseases such as malaria, plague, smallpox, cholera and improving sanitation.
- Providing service to other young people like visiting the sick, making toys, making garments for the sick, providing food, clothing and other necessities for the homeless.

While organizing the activities, a teacher should lead the pupils as the adviser for the Junior Red Cross Society. The group should elect its office bearers and draw the activities of the programme. The finance for this should be mobilized by the members by saving pocket money, by the sale of garden produce from the garden maintained by them, sale of articles made, entertainment organized etc.

The Junior Red Cross Society develops social responsibility, civic consciousness in the youth, and as a co-curricular activity, it also motivates interests in academic subjects like Geography, History, Civics and Languages.

‘Check Your Progress’ - 2

1. Mention two objectives of the Boy Scouting Movement.

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2. What two important objectives the Girl guiding Movement may realize?

3. What does the ‘code of ten’ relate to?

4. What does the Boy Scout Movement train the boys for?

5. What activities are the girls trained in, in the Girls Guiding Movement?

6. Why should a preliminary training be given to the group selected for the Boy Scouting?

7. What are the major differences between the Boy Scouts Movement and the Junior Red Cross Society?

8. Mention two important objectives of the Junior Red Cross Society.
9. How is finance mobilized for the activities of the Junior Red Cross Society?

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18.5 Observation of Special Days

Special days may be taken to be those days on which virtuous, famous personalities were born and days on which globally significant events occurred or initiations were taken for the welfare of mankind. On all such days, functions and festivals are organized reflecting the school’s social and academic commitment to promote the welfare of mankind, with reference to the special theme of the day.

Several institutions earmark a particular day to remind mankind of the importance of the days like the importance of Red Cross, the Founding day of UN, World Human Rights Day and International Population Day etc.

18.5.1 Objectives

The objectives of observing special days are related to the particular special occasion. But generally all such days have a few common objectives as follows:

- To recall with reverence the ideas, ideals and values practiced and upheld by such persons to inspire students.
- To help students to emulate to the extent possible, the lofty ideals for which these persons stood.
- To highlight the theme of the day’s celebration.
- To sensitize students to discharge their role as future leaders of the community.
- To increase awareness of issues which demand acting globally and think globally.

18.5.2 Organisation

Before going into the activities that are conducted on such special days, let us first list out such days that are generally celebrated in schools. A few of these important days are:

- Jawaharlal Nehru’s birthday (Children’s Day)
- Dr. Radhakrishnan’s birthday (Teachers’ Day)
- Gandhi Jayanthi
Now coming to the organization of activities on such days, it is imperative that it should be done so with maximum student involvement activities such as essay writing, elocution, pick and speak, books exhibition, pictures and posters exhibition etc. could be conducted. A formal function where a chief guest can be invited and asked to give a talk on the personality can also be arranged. The school should place a garlanded portrait of the personally on the dais.

An interesting discussion on the theme /person can also be arranged and persons who have a good knowledge of the same or had known the personality personally well could be invited to give the talk. Such activities help to bring awareness of this personality to the students, so that they get to know more information about the personality or the topic.

Towards the end, prizes could be distributed to the best essay, speech etc. and this to be given off to the prizewinners, by the chief guest of the day, so as to motivate more students to participate in such activities.

‘Check Your Progress’ -3
1. What are special days?

2. Name three days that are special days in schools.

3. Mention one major objective of celebrating special days in schools.
18.6 Guest Lectures / Special Lectures

Guest lectures are characterized in effective educational strategy to enhance and enrich quality academic inputs in any child-centered, reformed school administration. Guest lecturers, by definition, experts and renowned resource persons with whom the school must establish a good academic networking. It is known in East USA that Einstein visited some schools and interacted with school children with a high academic output educational agenda. A good school has no choice but to have a live and regular panel of such resource persons to share their knowledge and scholarship with school teachers and pupils. For example, in a city like Mysore, a good school can deploy the finest academic input through special lectures in content subjects from astronomy to Zoology, or in curricular activities from debating and dramatics to professional music and dance, not to forget the enormous expertise available for the school in Physical Education. There is no need to make a hard and fast distinction between Guest lectures and special lectures. In fact, school administrators known for their success, use this system to provide a unique edge and force to academics.

18.6.1 Objectives

- To discuss significant current topics connected to the curriculum, locality, state and nation.
- To substantially supplement the knowledge acquired from the textbooks.
- To update knowledge regarding significant advances in the various school disciplines.
- To identify noteworthy current affairs that affect man and the world.
- To explain significant details about people, places and events that are the focus of the special lecture programmes.

18.6.2 Organization

Generally textbooks and reference books are the major source of information for students and teachers. There are instances and topics for which such reference materials are not available. In such a situation, it is the responsibility of the concerned teacher to seek out experts in the particular discipline and area of knowledge and seek his/her guidance in enriching the knowledge of the pupils. This also helps the teacher to acquire the knowledge that he/she lacked and motivate him/her to update his/her knowledge so as to become more resourceful.

The system of arranging Guest Lectures must be done imaginatively and keeping in mind the requirement and relevance of the lecture. In organizing a Guest Lecture, following points are to be given due consideration:
The resource person should be an expert who can deliver the goods.

The lecture should be such as to cater to the level of the school pupils.

The language used by the resource person should be simple and lucid so as to be comprehended by the pupils.

Whenever there is an opportunity, the lecture should be clubbed with demonstrations.

Organizing Guest Lectures has nowadays become more of a necessity due to the gap the pupils face in situations when textbooks are not updated to include recent advances in every field. Thus it is the responsibility of the concerned subject teacher and the institution to develop a good rapport with the community as well as the experts in various disciplines so that such resources are profitably utilized for updating the knowledge of the teachers and pupils.

‘Check Your Progress’ - 4

1. What is a Guest Lecture?

2. Mention two objectives of conducting Guest Lectures.

3. What two major points have to be considered while arranging for lectures?

4. Why a Guest Lecture is considered a necessity nowadays?
Let Us Sum Up

- Literary activities have the scope of providing opportunities for creative work and self-expression. These can be of two types - oral and written.
- Both these types of activities train the youth in the art of communicating ideas fully clearly and effectively.
- Oral activities like debates and discussions, public speaking etc. help to cultivate in pupils a clear and vivid style of expression.
- The School magazine is an effective medium for the pupils to express their ability in writing stories, articles, essays etc.
- Cultural programmes are greatly enjoyed by pupils due to the varied activities that they participate in as per their interest and aptitude, which provide an opportunity for the pupils to exhibit their talent.
- The various Social Service activities like Scouting and Guiding, NCC, etc. play a great role in harnessing the potentialities of adolescents for the benefit of the community. They also promote the mental health of the adolescents and help then in developing citizenship qualities.
- Special Days like the birthdays of famous personalities and founding days of organizations like UN are celebrated to remind mankind of the contributions of the personalities to the welfare of the mankind. These celebrations help to recall the ideas, ideals and values practices by such persons and thus inspire students.
- Guest lecture are characterized to enhance and enrich academic as well as Para-academic inputs in a school. This is performed by getting expert resource persons to share their knowledge and scholarship with the schoolteachers and pupils.
- The topics for the Guest lecture could be one that substantially supplements knowledge in the textbooks or of a current topic connected with the curriculum, locality, state or nation.

Answers to ‘Check Your Progress’

‘Check Your Progress’- 1
1. Literary activities can be classified into two categories - oral and written.
2. Oral activities like debates and dramatics. Written activities like school magazine and essay writing.
3. Guide students in selecting a topic, access information with reference to the topic and how to organize the same.
4. It provides scope for acquiring knowledge of topics of current interest and improvement of oral expression.
5. Selecting a play which will not require elaborate preparation, equipment and too much time.
6. School magazine and wall magazine.
7. Short stories, essays, self-composed poems, school news on the school activities conducted.
8. Motivate the students, correct the materials given by the students, and as an adviser provide constructive criticism.
9. Topics connected with the school subjects, topics of public interest, topics connected with the prevalent conditions in the society.
10. Performing arts like dancing, singing, playing, on musical instruments, enacting skits and plays.

‘Check Your Progress’ - 2
1. To sublimate tendencies like curiosity, restlessness, assertiveness and heroism and to realize the aptitudes and potentialities by providing a variety of activities.
2. To help girls attain maximum power as a woman and to train emotions.
3. It relates to honor, cheerfulness, and cleanliness.
4. The boys are trained for the use of rope and sticks, organize camp fires, picnics and outings, learn how to lead a camp life and live together with team spirit, generally in all aspects of independent life.
5. Cooking, nursing, first aid, singing, dancing, games, drill and social service.
6. To get them to know the ten code laws, pledge loyalty to the group, tasks and functions.
7. The Boy Scouting gives importance to moral and social aspects whereas the Junior Red Cross Society gives importance to health and local community life.
8. Provide personal hygiene, school hygiene, community hygiene and promoting fellowship among people of all countries.
9. By pocket money saved by members, sale of garden produce from the garden maintained by them, sale of articles made and entertainments organized.
‘Check Your Progress’ - 3
1. Special days may be taken to be those days on which virtuous, famous personalities were born and days on which globally significant events occurred or initiations were taken for the welfare of mankind.
2. Teachers’ day, Children’s day, Gandhi Jayanthi.
3. To recall with reverence the ideas, ideals and values practiced and upheld by such persons to inspire students.

‘Check Your Progress’ - 4
1. Lectures by experts who can throw sufficient light on an important topic so as to sufficiently enlighten the pupils and teachers on the topic that they require.
2. To discuss significant current topics connected to the curriculum, locality, state and nation. To substantially supplement the knowledge acquired from the textbooks.
3. The lecture should be such as to cater to the level of the school pupils. The language used by the resource person should be simple and lucid so as to be comprehended by the pupils.
4. Organizing Guest Lectures has nowadays become more of a necessity due to the gap the pupils face in situations when textbooks are not updated to include recent advances in every field.

18.9 Unit-End Exercises
1. What are the literary activities that could be organized in a school?
2. As a teacher how would you organize a debate in your school for high school students?
3. What is a Guest lecture? What are the points to be kept in mind while organizing a guest lecture in your school?

18.10 References


COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

BLOCK 04
EVALUATION AND DATA PROCESSING
Block

4

EVALUATION AND DATA PROCESSING

Unit-19
Evalution–An Introduction 285

Unit-20
Techniques and Tools of Evaluation–An Introduction 295

Unit-21
Tools of Evaluation–An Introduction 308

Unit-22
Test Items, Rating Scales, Check Lists, Anecdotal Records—An Introduction 320

Unit-23
Classification and Graphical Representation of Test Data 337

Unit-24
Processing of Test Data 345
INSTRUCTIONAL DESIGN AND EDITORIAL COMMITTEE

Prof. M. G. Krishnan  
Chairman  
Vice Chancellor  
Karnataka State Open University  
Mysore 570 006  
Karnataka

Prof. Vikram Raj Urs  
Convener  
Dean - Academic  
Karnataka State Open University  
Mysore 570 006

Dr. N. Lakshmi  
Course Coordinator  
Chairperson - DOSR in Education  
Karnataka State Open University  
Mysore 570 006

Prof. B. N. Manjunathaiah  
Course Editor  
Professor – DOSR in Education  
Karnataka State Open University  
Mysore 570 006

M. Kubendrappa  
Course Writer  
Lecturer  
National College of Education  
Shimoga 577 201

Dr. Thejasvi Naviloor  
Coordinator  
Planning and Development Officer  
ICT Course Content  
Karnataka State Open University  
Development and Delivery  
Mysore 570 006

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Evaluation is a word that is familiar to every teacher and it is considered as an essential component of educative process. However the word is used in too many different contexts and its meaning is vague. Evaluation may be said to be the process by which judgements of the educational status or achievements (If students are formed. The main emphasis in classroom evaluation is on the extent to which learning outcomes are achieved. How much more accurately and quickly can a p does multiplication problem? How much greater is his understanding of the number system? Has he made any improvement in working with other pupils in small groups without constant supervision? Answers to such questions can be given through, evaluation.

This Block helps you to understand the process of Evaluation and processing educational data of students. This Block consists of six Units. Unit 19 explains the meaning and concept of evaluation, the characteristics of evaluation and types of evaluation. In Unit 20 different techniques of evaluation are explained. Characters tics of good tool and types of tests are also explained.

Unit 21 Explains tools of evaluation. It includes classification of test items, type of items, meaning, characteristics of well balanced question paper and steps in construction of question paper. In Unit 22 the techniques of Rating Sc1aes, Check lists and Anecdotal records are described. Unit 23 deals with graphical representation of test data. It explains about the preparing of Frequency Distribution Table, importance of graphical representation of data, construction of polygon, histogram and pi diagram.

Unit 24 contains information about processing of test data. You will learn about processing of test data of students. You learn about measures of Central Tendency, Measures of variability and Co-efficient and Correlation.
UNIT 19 EVALUATION–AN INTRODUCTION

Structure

19.1 Introduction
19.2 Objectives
19.3 Evaluation
   19.3.1 Concept, Meaning
   19.3.2 General Principles
   19.3.3 Characteristics of Good Evaluation Programme
19.4 Types of Evaluation
   19.4.1 Formative Evaluation
   19.4.2 Summative Evaluation
   19.4.3 Process Evaluation
   19.4.4 Product Evaluation
   19.4.5 Achievement Evaluation
   19.4.6 Diagnostic Evaluation
   19.4.7 Placement Evaluation
19.5 Let Us Sum Up
19.6 Answers to ‘Check Your Progress’
19.7 Unit-End Exercises
19.8 References

19.1 Introduction

Evaluation is an integral part of education. At any point of time we are expressing our dissatisfaction with the system of education and say it is evaluation which has failed to assess the achievement of the pupils very accurately. There is an urgent need to establish faith in the evaluation system among the learners. In order to improve the process of education, continuous evaluation of sub systems is necessary. Evaluation as a sub system in the process of education needs to be improved continuously to assess the achievement of pupils in different school subjects and other personality traits. Due importance must be given to understand the process of evaluation and its application. This would help the
learners know their strengths and weaknesses in learning, and the abilities of the teacher in the curriculum construction.

Like education, teaching and learning, evaluation is also a highly generic term. It is a broad concept covering a variety of activities and processes. Evaluation involves judgement - value judgement based on sound criteria. As a process evaluation is not only a comprehensive one but also continuous one. Collection of relevant evidence is important. For this it uses a variety of appropriate tools focus on persons - students and teachers, processes and products, institutions and programmes, on the total system or component thereof. In this Unit, you will be learning about the concept and meaning of evaluation, general principles of evaluation and characteristics of evaluation programme. In the later part of the Unit you also learn about the types of evaluation. Evaluation is a systematic process. It is based on sound principles. These principles provide direction to the evaluation process and serve as criteria for appraising the effective of evaluation. Now let us learn about the principles of evaluation.

19.2 Objectives

After learning the Unit you will be able to:

- define Educational Evaluation
- explain the means of Evaluation
- state the principles of Evaluation
- state the characteristics of good Evaluation tools
- explain different types of evaluation
- differentiate Formative and Summative Evaluation
- differentiate Process and Product Evaluation
- differentiate achievement and diagnostic evaluation
- explain placement evaluation

19.3 Evaluation

19.3.1 Concept and Meaning

Educational evaluation is the process of ascertaining the extent to which the pre-determined objectives of education have been achieved by the learners. Evaluation makes use of qualitative result for its qualitative judgment.
Evaluation = Measurement + Value judgement

Evaluation is not synonymous with measurement. But it is depending on measurement and the pre-determined objectives (standard). Evaluation refers to the act or process of determining the value of something. In Education it means estimating the probable worth of the activities involved in the teaching learning process, judging the worth of methods or devices or techniques of teaching used. Evaluation helps the classroom teacher to estimate the various outcomes of the activities organised for pupil’s learning.

Evaluation includes measurement which is the process of quantifying the pupils’ performance of achievement. Evaluation is more than measurement. It includes qualitative assessment/discrimination also, although evaluation includes measurement it is not synonymous with it. From the instructional point of view, evaluation may be defined as “a systematic process of determining the extent to which, instructional objectives are achieved by pupils”.

Here you find two important aspects.

a. Evaluation implies a systematic & continuous process.

b. Evaluation always assumes that educational objectives have been previously identified and properly formulated.

Without previously determined objectives we cannot judge the exact of educational progress. Evaluation includes both qualitative and quantitative description of pupils’ behaviour and value judgement concerning the desirability of that behaviour.

According to James M. Boadfield “Evaluation is the assignment of symbols to phenomena in order to characterise the worth/value of a phenomenon with some standards. In education, it is a study designed to determine the effectiveness of instruction in respect of an individual child, a group of children or school programme”.

19.3.2 General Principles

- Evaluation should be specific to the purpose. It is both formal and Non-formal.
- Evaluation is both objective and subjective.
- It is both a process and a product.
- It is both formative and summative.
- It is both qualitative and quantitative.
- It depends upon tools and techniques.
- It is a comprehensive and a continuous process.
1. The purpose of evaluation should be carefully defined. Hence the instructional objective to be achieved should be clearly determined and defined. The evaluator should be aware of these objectives. Defining the objectives help us to decide what is to be evaluated. This principle provides a guide to plan the evaluation programme.

2. Appropriate evaluation tools / techniques should be selected so that, evaluations is done properly. They should be in accordance with the aims and objectives of evaluation and suitable to the students to be evaluated. Care should be taken in selecting appropriate tools and techniques. A wide variety of tools and techniques should be selected.

3. Evaluation should be as comprehensive as possible. Several aspects of behaviours have to be assessed by using a variety of evaluation techniques. To get a complete picture of pupils’ achievements, there is a need to combine the results using a variety of tools and techniques of evaluation.

4. Proper evaluation techniques require an awareness of their limitations as well as their strengths. Some of the evaluation techniques are fairly good measuring instruments, while a few tools are crude. An evaluator should be aware of possible errors in evaluation and should have mastery in using them, so that the results are free of errors.

5. Evaluation must be both qualitative and quantitative. Qualitative procedure helps us to describe the aspects valued in qualitative terms. For example social, emotional and moral behaviour are better evaluated qualitatively. Quantitative evaluation helps to assess achievement or characteristics in terms of amount or level. Abilities and achievements are better evaluated quantitatively.

6. Evaluation is a means to an end, not an end in itself. The use of evaluation techniques imply that definite useful purpose will be served by them and that the teachers are clearly aware of the purpose. Proper decisions must be taken about the use of evaluation results before implementation of evaluation programme. No evaluation procedure should be used unless contributes to the improvement of instruction and guidance of students.

7. Persons concerned with the task of evaluation must have a thorough knowledge of evaluation procedures. They should be well-versed in administering tests, scoring and interpretation of results.

8. Evaluation should be as objective as possible. Many errors and limitations in evaluation occur due to personal bias, wrong attitudes, prejudices and negligence of evaluators. These factors reduce the objectivity of assessment. Care should be taken to reduce such errors in evaluation.
9. Evaluation results must be used appropriately and effectively. There should be transparency in the evaluation procedures. Feedback should be provided to teachers, students, administrators and parents.

10. Evaluation should be continuous. It is a common practice to evaluate students at the end of a course or term. This is also necessary to help students to go further. But educationists emphasise continuous evaluation of students. It help teachers and students continuously, periodic tests and casual observations help in continuous evaluation.

19.3.3 Characteristics of a Good Evaluation Programme

   a) **Validity**: If the evaluation tools test what it might to test then that tool is said to be valid. For example, the tool or an instrument used to know your height should show your height. If it shows anything other than the height, then the tool is invalid.

   b) **Reliability**: If the evaluation tool reveals consistency while measuring at different intervals then the tool is said to be reliable.

      **Note**: A reliable tool may not be valid but the valid tool is reliable. Validity implies reliability but the reverse is not true.

   c) **Objectivity**: If the tool gives very accurate results what it supposed to give then that tool is said to the objective.

   d) **Discrimination**: One of the characteristics of a good evaluation tool is discrimination i.e. it should be able to separate the good from the bad or it should be able to divide the big group into small sub-groups of similar abilities.

   e) **Practicability**: The evaluation tool must be simple and easy to on a large scale and it should be affordable by majority.


“Check Your Progress” - 1

1. Define Evaluation

2. List the principles of evaluation
3. What are the characteristics of a good evaluation tool?

19.4 Types of Evaluation

One of the distinctive features of evaluation process is the use of large variety of procedures. Hence there are many types of evaluation depending on the purpose and procedure followed. In this subsection you will study them. They are:

a. Formation Evaluation
b. Summation Evaluation
c. Process Evaluation
d. Product Evaluation
e. Achievement Evaluation
f. Diagnostic Evaluation and
g. Placement Evaluation

19.4.1 Formative Evaluation:

If we evaluate when a thing is in the process of making then that evaluation is called formative evaluation. In the educational Evaluation if the teacher evaluates the day to day performance of the learners then that evaluation is called formative evaluation. It is assessing at each stage of development or in simple words it is periodical examination in the process of development. For example, while constructing the house we evaluate the quality of work at different stages before going ahead with the work (It is to check and ascertain the quality and continue the work)

19.4.2 Summative Evaluation

Summative Evaluation describes judgments about the merits of an already completed programme, procedure or product. It is giving grades or marks at the end of the course for the purpose of promotion. It is not coming to conclusion by one observation or one instance. Take into account good number of observations before arriving at conclusion by this chance factor is eliminated. It is a whole approach to evaluate an object.
Summative evaluation is more useful to maintain regularity and discipline among the learners and teachers. It demands regular study and thorough attention throughout the year. The learner has to keep in mind that each day is an examination day. Because “There is no teaching without testing”

**9.4.3 Process Evaluation**

Education is both a process and a product; so evaluation is also a process and a product.

**Process evaluation:** It is evaluating when a thing is in the process of making or it is giving weightage for different stages of an answer. For example, in Mathematics the examiner is not giving full marks just by looking at the answer. He looks at different steps and how the student has arrived at the answer this is process evaluation.

**Another Example:** In science practical-examination the student may not get the exact answer at the end of the experiment. But the examiners observe the performance at different stages of experiment and give marks accordingly. Even though the answer is not correct the student is awarded marks for the process.

**19.4.4 Product Evaluation**

It is evaluating the desired outcome or result at the end of the process or programme. After the completion of any work if the work is evaluated as a whole then that evaluation is called product evaluation:

**Illustration 1:** In Mathematics if the teacher evaluates only by looking at the expected answer then that evaluation is product evaluation.

**Illustration 2:** In any craft work, if the finished product is evaluated with certain criteria then that evaluation is called product evaluation.

**Illustration 3:** A newly constructed house is evaluated with certain principles of construction then that evaluation is called product evaluation.

**Example 4:** In evaluation the end result or the performance of the pupils in the examination is evaluated with reference to the standard answer, then that evaluation is called product evaluation.

**19.4.5 Achievement Evaluation**

If the purpose of a test is to know the achievement of the pupils in different subjects then that test is called achievement test. The purpose of an achievement test is to determine the extent to which the educational objectives have been achieved by the pupils. The
The purpose of this test is promotion to the next class or giving grades or ranks to the learners based on their academic achievement. This is also called as teacher made achievement test. The achievement test contains sample test items constructed by the teacher.

At the end of the year the school is interested to know the achievement of the pupils in different subjects that the school has taught for the purpose of promotion to next higher class. This is achievement evaluation.

19.4.6 Diagnostic Evaluation

If the purpose of a test is to know the specific difficulties of the learners in learning a subject then that test is called diagnostic test. In this type of test an elaborate test items are given to know the strong and weak points of the learners if the teachers prepares a plan to overcome the specific problems of the learners in learning a subject then that is called as remedial teaching.

Example: In Mathematics the teacher has to know the strong and weak points of the learners then the teacher has to prepare a programme that helps the learners to overcome the difficulties in learning in the diagnostic test all possible test items are given about the unit or topic then only the teacher is in a position to know the specific area of weakness in a unit.

19.4.7 Placement Evaluation

If the purpose of test is to give the ranking like first, second, third ..... etc in the subject then that evaluation is called placement evaluation. At the end of the year the teachers are interested to give the ranking or placement in their subjects to the pupils based on their performance in the examination. This is a simple test for the purpose of promotion and grading. It is to find out the position of the learners in a group with respect to learning.

Example: When the athletes complete in any sports event generally the competitors are given places as first second third etc this is placement evaluation.

‘Check Your Progress’ - 2

1. List the types of Evaluation.

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292
19.5 Let Us Sum Up

In this Unit, you studied about the meaning and concept of evaluation, principle of evaluation and characteristics of Evaluation. You studied that Evaluation is a systematic process of determining the extent to which the instructional objectives are achieved by pupils.

i. Evaluation is a systematic process and continuous process.

ii. Evaluation always assumes that educational objectives have been previously identified and properly formulated. Evaluation includes measurement and qualification assessment.

You studied the principles of evaluation. There the purpose should be carefully defined, appropriate tool / techniques should be selected, it should be comprehensive as far as possible, it should be both qualitative and quantitative etc; You also studied the qualities of a good evaluation tool. They are validity, reliability, objectivity discrimination power & practicability.

In the last part of this unit, you studied about the different types of evaluation and their importance. They are formative evaluation, summation evaluation, process evaluation, product evaluation, Achievement evaluation, diagnostic evaluation and placement evaluation.

19.6 Answers to ‘Check Your Progress’

‘Check Your Progress’ - 1

1. Evaluation can be defined as a system process of determining the extent to which, instruction objective are achieved by pupils.

2. Refer section 19.3.2

3. Characteristics of a good evolution tool are: (VROCDP)
   - Validity
   - Reliability
   - Objectivity
   - Discrimination power and
   - Practicability

‘Check Your Progress’ - 2

1. The types of evaluation are:
   - Formative Evaluation
• Summative Evaluation
• Process Evaluation
• Product Evaluation
• Achievement Evaluation
• Diagnostic Evaluation and
• Placement Evaluation

19.7 Unit-End Exercises

1. Prepare an Achievement Test (any subject) in for the class you are teaching and analyse the responses.
2. List the defects of the present day examination system.
3. What reforms you would suggest to improve evaluation system at school level?
4. Explain evaluation as both a process and a product.
5. Differentiate the tools and techniques of evaluation.
6. Bring out the importance of continuous evaluation.

19.8 References

UNIT 20 □ TECHNIQUES AND TOOLS OF EVALUATION AN INTRODUCTION

Structure

20.1 Introduction
20.2 Objectives
20.3 Techniques and Tools - Differences
20.4 Need for a variety of Techniques and Tools
20.5 Most used Techniques - Measuring relative Merits
   20.5.1 Testing
   20.5.2 Observation as a Technique
20.6 Characteristics of a Good Tool
   20.6.1 Reliability
   20.6.2 Validity
   20.6.3 Objectivity
   20.6.4 Comprehensiveness
   20.6.5 Practicability
20.7 Types of Tests - Meaning, characteristics Relative Merits
   20.7.1 Criterion Referenced Test (CRT)
   20.7.2 Norm Referenced Test (NRT)
   20.7.3 Teacher Made Test (TMT)
   20.7.4 Standardised Test (ST)
20.8 Let us sum up
20.9 Answers to ‘Check Your Progress’
20.10 Unit-End Exercises
20.11 References

20.1 Introduction

A large number of tests are being used by teachers these days. The tests are conducted to determine the level of achievement of the pupil in various school subjects. In this unit, a wide variety of tools and techniques are described to assess all round development of
pupils’ personality. In this unit you will be presented with characteristics, merits and limitations of different tools and techniques. In the last part of the unit criterion referenced, normal referenced, teacher made and standardised tests are discussed.

20.2 Objectives

After going through this Unit you will be able to:

- Differentiate between tools and techniques
- List the needs for a variety of tools and techniques
- Explain various types of testing and their merits and limitations
- Explain the characteristics of a good tool
- Explain the characteristics, merits and limitations of Criterion Referenced, Normal Referenced, Teacher Made and Standardised tests in depth.

20.3 Techniques and Tools-Differences

Now, let us study about different techniques and tools of evaluation.

The technique of evaluation is method or procedure in carrying out a scientific or mechanical operation or a degree of expertness shown in the method procedure or in carrying out an operation. The technique of evaluation in the field of education is the degree of skillfulness dexterity shown in the process of collecting information or evidences with regard to a characteristic quality of a person or performance process.

The term tool literally means implement or appliance for an operation. In educational evaluation it is a means of collecting evidences for students’ performance.

20.4 Need for A Variety of Techniques and Tools

There is a great need for variety of techniques and tools of evaluation the reasons are as follows:

1. There are individual differences. One individual differs from the other in his capacities.
2. To test the different aspects of growth and development of an individual.
3. To test the personality of the individual
4. To test the individual interest, attitude, Aptitude, Values etc.
5. To test an individual’s achievement in cognitive, affective and psychomotor domain

20.5 Most Used Techniques–Measuring Relative Merits

20.5.1 Testing: There are three types of testing a pupil’s ability, knowledge, skill etc.

Oral Tests: Meaning: Oral examination is a face-to-face question-answer activity between the examiner and the examinee. It is generally used by teachers in classroom situations to measure the actual level of knowledge gained by the students.

Merits of Oral Tests
- Help to probe into pupils insight
- Help to identify and analyse pupils presence of mind
- Pupils cognitive affective and psychomotor abilities can be evaluated
- Pupils spontaneity and mannerism can be evaluated

Limitations
- Tend to be subjective
- They are usually unplanned
- They are time consuming
- Oral examination may open doors of prejudice, partiality and discrimination.
May cause unnecessary anxiety, fear, tension in the pupil

a) Written Examination

Meaning: In this type the pupils give their responses in writing. This is the most popular means of evaluation at all levels of education. If it is based on rote memory and recall questions it will lead to cramming.

Types of written test

| Essay | Short answer type | Very short answer type | Objectives |

Merits of Written Tests

1. A written test can provide us a reliable, stable and valid type of evaluation
2. It can be planned carefully, keeping in view the objective, contents and learning experience
3. Easy to construct and use several students can be evaluated at a time out at various
4. Easy to construct and use
5. Easy to list educational aims

Limitations

1. Difficult to give equal importance to all units
2. Difficult to assess the quality of the answer
3. The examiner may be carried away by the flowery language or hand writing of the pupils (In assay type)
4. There is less reliability and more subjectivity.
5. Leads to clustering

Performance Test

Meaning: Performance test, tests the ability of the pupil or pupils in manipulating objects. Performance tests are used when pupils’ achievement is expressed by means of a ‘product’ or a ‘procedure’ which is a direct indication of the pupils’ skills understands and application. Evaluating speech, performance in music, physical education, laboratory work, necessitates performance test
Merits
1. Performance tests are widely employed particular in clinical practice.
2. They are essential in the examination of persons with language handicaps.
3. They are a good supplement to verbal tests

Limitations
1. Performance test does not measure the same thing as verbal tests
2. Single Performance tests are less reliable than verbal tests
3. These tests are time consuming and involve personal bias

‘Check Your Progress’-1
1. How can the language ability of the language handicap be measured?

2. You want to know the skill of drawing the map of India in your students. Which type of test can you use?

3. Which test come to your help in answering the spontaneity and mannerism of your pupils?

4. Among the following test which is easy to construct and correct?
   a) Oral     b) Performance     c) Written

20.5.2 Observation as a Technique
Meaning: Observation is one of the most ancient and widely used instruments of assessing personality observation have been defined as “Measurement without instruments”
In education, Observation is the most commonly employed at all measurement technique.

1. Observation can be done in partially controlled situations
2. Observation can be done in free situations also

**Merits**

1. As the actual behaviour of the child is recorded it is more reliable and objective.
2. It can be used in every situation.
3. It is adaptable to both the individuals and groups.
4. This method can be used with children of all ages.
5. It can be used with some training and experience. Almost all teachers can use it.

**Limitations**

1. There is a great scope for personal prejudice and bias of the observation.
2. Only overt behaviour of an individual is observed. This overt behaviour does not provide reliable information regarding the internal process.
3. Observation is subjected to two kinds of errors sampling error and observation error.
4. Problem-solving skill in cognitive domain is difficult to evaluate in this system.

‘Check Your Progress’-2

1. Which are the places where a teacher can observe the pupils?

2. Why is the technique of observation used by the researches?
20.6  Characteristics of a Good Test

Whenever we have to construct a test or make a selection out of many available tests, we have to ensure that the test is up to the mark, suitable and has some good points we must be sure of some of the requirements which make the test good. In this Sub-Unit we shall discuss the criteria of a good test one by one.

![Technical aspects of a good test](Image)

20.6.1 Reliability

A measurement procedure is reliable to the expert when it provides constant results on repeated measurements. Consistency of results means that an individual obtains same score on repeated measurement. According to Anne Anastasi, “Reliability refers to the consistency of the scores obtained by the same score individuals when re-examined with the same test on different occasions or with different sets of equivalent items or under other variable examining condition”

20.6.2 Validity

Validity of a test means truthfulness. If a test measures what it intends to measure, it is said to be valid. Every test has certain objectives of its own. It is constructed for some specific purpose and so it is valid for that purpose. A test of English for 8th standard is valid for 8th student alone.

20.6.3 Objectivity

A test is objective when the scorer’s personal judgement does not affect the scoring. In an objective test, test item can readily be scored as right or wrong.

Example: 1) The true false type 2) The matching type

20.6.4 Comprehensiveness

A test is comprehensive if it tests all the aspect of behaviour
20.6.5 Practicability

A test should be practicable and it means that a test can be administered easily in a less time and cost and it should be easily scorable.

‘Check Your Progress’ - 3

Match the Following

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reliability</td>
<td>a. Personal prejudices</td>
</tr>
<tr>
<td>2. Validity</td>
<td>b. Wide coverage</td>
</tr>
<tr>
<td>3. Objectivity</td>
<td>c. Consistency</td>
</tr>
<tr>
<td>4. Comprehensiveness</td>
<td>d. Truthfulness</td>
</tr>
</tbody>
</table>

20.7 Types of Tests Meaning, Characteristics Relative Merits

There are many types of questions based on Administration, Standardisation, Scoring and Traits to be measured. Now let us understand some of the tests.

20.7.1 Criterion Referenced Test (CRT)

CRT ascertains an individual’s status with reference to a well defined behaviour domain. It enables one to describe what an individual can do without reference to the performance of others:

CRT measurement tells about the absolute standard or quality of the attained knowledge of an individual. It describes a pupil’s performance in terms of his mastery of the content in a well defined content domain or his achievement with respect to a specific instructional objective or criterion for success. Objective based question find place in these test and the teacher, thus can aim at constructing a balanced test paper to find out how far the objectives set or the methods used are appropriate.

Characteristic of CRT

1. Its main objective is to measure students’ achievement of curriculum based skills.
2. It is prepared for a particular grade or course level.
3. It has balanced representation of goals and objectives.
4. It is used to evaluate the curriculum plans instruction progress and group students interaction.
5. It can be administered before and after instruction.
Merits:

1. To discover the inadequacies in learner’s learning and assist the weaker section of learner to reach the level of other students through a regular programme of remedial instruction.
2. To identity the master learners and non-master learners of a class
3. To find out the level of attainment of various objectives of instruction
4. To find out the level at which a particular concept has been learnt.
5. To better placement of concepts at different grade levels

Limitations

1. CRT tells only whether a learner has reached proficiency in a task area but does not show how good or poor is the learner’s level of ability.
2. Task included in the criterion-referenced test may be highly influenced by a given teachers interest or biases, leading to general validity problem.
3. It is important for only a small fraction of important educational achievements. On the contrary promotion and assessment of various skills is a very important function of the school and it requires norm-references testing

20.7.2 Norm-Referenced Test (N R T)

Meaning: NRT is designed to measure the growth in a student’s attainment and to confer the level of attainment with the level reached by other students and norm group

Characteristics

1. Its basic purpose is to measure students’ achievement in curriculum based skills.
2. It is prepared for a particular grade level.
3. It is administered after instruction.
4. It classifies achievement as above average, average or below average for a given grade.

Merits

1. In aptitude testing for making differential prediction.
2. To get a reliable rank ordering of the pupils with respect to the achievement we are measuring.
3. To identity the pupils who have mastered the essentials of the course more than the others.
4. To select the best of the applicants for a particular programme.
5. To find out how effective a programme is in comparison to other possible programme.

Limitations
1. Test items that are answered correctly by most of the pupils are not inched in there tests because of their in adequate contribution to response variance. There will be the items that deal with important concepts of course contact
2. There is lack of congruence between what the test measures and what is stressed in a local curriculum
3. Norm-referencing promotes unhealthy competition and is injurious to self-concepts of law scoring students

20.7.3 Teacher Made Test (TMT)

Meaning: TMT are prepared by teacher for local use, gaining knowledge and mainly personality, interest, aptitude of the pupils.

Characteristics
1. The attempt to assess comprehensively to the extent and degree of students progress with reference to specific classroom activities.
2. The teacher is at liberty to conduct the tests any number of times to any class.

Merits
1. They motivate the students.
2. They are simple to use.
3. They provide information for a report on the progress of students.
4. They provide immediate feedback.

Limitations
1. They are often ambiguous and unclear
2. They are either too short or too lengthy
3. They do not over the entire content
4. They are usually hurriedly conducted
20.7.4 Standardised Tests (ST)

Meaning: Tests which are administered on a very large group by teacher, psychologists, educationists, researchers for determining their reliability, validity and establishing the norms are known as standardised tests. ‘A standardised test is one in which the procedure, apparatus and scoring have been fixed so that precisely the same tests can be given at different times and places’

Characteristics
1. They are based on uniform curriculum
2. They are concerned with whole field of knowledge or ability tested
3. The content is also standardised
4. The administration of the tests is also standardised
5. It is constructed by specialist or experts
6. The validity and reliability of a standardised test is that ensures right from the beginning of its construction

Merits
1. They give us objective and impartial information about an individual
2. They provide information in much less time than provided by any other device
3. These tests measure those aspects of the behavior which otherwise could not be obtained
4. In subjective observation we may over look shy children but these tests discover such also.

‘Check your progress’ - 4
Choose the correct answer from the brackets
1) Parlors and Thornd tests are
   a) TMT,   b) CRT,   c) STNRT
2) As a teacher you want to know the immediate feedback of your students which test will you use for-this purpose?
   a) N R T   b) T M T   c) ST   d) C R T
3) Say ‘Yes’ or ‘No’ to the following statements
a. To know the application level of the pupils of 9th standard in science subject NRT is used

b. Suresh is in standard 10th and has appeared for state level examination. His scores are compared with these friends in the class and the test Administered is ST.

20.8 Let Us Sum Up

In this Unit we came to know about the variety of tools and techniques of evaluation. Testing or observations are most commonly used techniques in classroom situation. We have also learnt the essential characterisation and requirement of sound text and they are validity, reliability, objectivity practicability and comprehensiveness. In this unit different types texts and their characteristics relative merits are discussed.

20.9 Answers to ‘Check Your Progress’

‘Check Your Progress’-1

1) Oral Test
2) Performance test
3) Oral
4) Written

‘Check Your Progress’ -2

1.a) Playground
b) Classroom
c) In the library In camps excursions etc.

2.a) Can be used easily
b) Can be used in natural and artificial settings
c) Many situation are available to observe
d) Less experience is enough
‘Check Your Progress’ - 3
a) a-3
b) b-4
c) c-1
d) d-2

‘Check Your Progress’ - 4
a) ST  b) TMT  c) CRT  d) NRT

20.10  Unit-End Exercises
1. Explain the characteristics of Oral, Written and performance tests
2. List out the difference between C R T and N R T
3. What are the merits and limitations of T M T?
4. What is the criterion for the construction of a good test? Explain briefly with examples
5. What is the importance of standardised test?

20.11  References
1. Aggarwal, J.C. : Essentials of Examination system
2. Rambha N Patel : Measurement and Evaluation
4. Dandekar W.N : Evaluation in Schools
UNIT 21  ■  TOOLS OF EVALUATION : AN INTRODUCTION

Structure

21.1 Introduction
21.2 Objectives
21.3 Most used Tools - Questions / Test and Items
   21.3.1 Meaning
   21.3.2 Classification
21.4 Most Used Tools - Test papers / Question paper
   21.4.1 Meaning
   21.4.2 A well Balanced Question Paper
21.5 Question Bank
   21.5.1 Objective Based Test Items - Meaning
   21.5.2 Concept and Importance
   21.5.3 Steps of Construction
21.6 Let Us Sum Up
21.7 Answers to ‘Check Your Progress’
21.8 Unit-End Exercises
21.9 References

21.1 Introduction

Teaching and Testing should go together evaluation should be based on leaning outcomes so that teachers have to identity the teaching outcomes and proper test items should be constructed in this unit different tools of evaluation are introduced an idea of Blue print is also given

21.2 Objectives

After studying this Unit you will be able to:

- describe the most used tools - questions / test item
- construct a blue-print for a Unit Test
• construct a well balanced question paper
• identify the role of question bank in teaching-learning process

21.3 Most Used Tools—Questions / Test Items

21.3.1 Meaning: Questions/Test items are tools to examine the performance of an individual in cognitive affective and psychomotor domain.

21.3.2 Classification:

Examination can be classified on the basis of type of questions is essay type, objective type and oral type, objective type and oral type. This may be illustrated as under

Type of Examinations
(on the basis of questions)

Essay Type
Oral Type (Written)

Objective Type

Long answer type
Short answer type
Very short answer type

Classific action type
Caassific action type
Matching type
Multi-Purpose type
True-false type
Correct/Incorrect type
Short recall type
Best answer type

21.4 Most Used Tools—Test Paper / Question Paper

21.4.1 Meaning: A test / a unit test is a short test given at the end of a teaching unit. A unit test is basically a miniature test. It is different from a full test mainly in regard to the limited content area (Unit) in which it is based questions are of the name type time for the test is about 45 minutes and total marks allotted 25 minutes and total marks allotted 25.

309
Meaning - Examination

The dictionary of education

1. “An appraisal of ability, achievement or present status in any respect”
2. The instrument used in making such an appraisal

‘Check Your Progress’ - 1

1. How would you come to know about the performance of your pupils after each day’s lesson?

2. What might be the duration of test and an examination?

21.4.2 A well balanced question paper

Concept: The concept of evaluation as the “Process of determining”

- The extent to which an objective is being achieved.
- The effectiveness of the learning experiences provided in the class room.
- How well the goals of education have been accomplished.

To fulfill the above objective there should be a well balanced question paper. A well balanced question paper is one which gives due weightage to content, types of question, level of the question, weightage to objectives time allotted should also be correct.

Characteristics of a well balanced question paper

The characteristic of a good test can be classified in two categories, viz, 1. Practical Criteria 2. Technical Criteria
Criterion of a good Test

Practical  
1. Ease of scoring  
2. Time  
3. Cost  
4. Face validity  
5. Purpose  
6. Meaning of test score  
7. Acceptability  
8. Ease of administration  
9. Ease of interpretation  

Technicalel  
1. Validity  
2. Reliability  
3. Objectivity  
4. Discrimination  
5. Standardisation  
6. Normal  
7. Items

A well balanced question paper should have the following characteristic:
  1. Proper weightage to content  
  2. Proper weightage to objective (cognitive, affective, psycho-motor)  
  3. Easy, average and difficult question usually 30%, 50%, 20% respectively  
  4. Proper instruction should be given in writing the answers  
  5. There should be proper time budgeting  
  6. A blue-print should be prepared before setting a paper  

Steps of construction  
If at all we want to make a test an effective instrument of evaluation it has to be structured to a systematic pattern decided in advance - some of the necessary steps for setting up a good and meaningful test are:  
  a. Planning the test paper (Design)  
  b. Editing the test paper  
  c. Reviewing the test paper  

‘Check Your Progress’ -2  
Fill up the blanks  
1. A well balanced question pupils should give weightage to..................., .................,  
   .................................. and ..................................  

2. Evaluation should be based on ...............................  

A. Design of the Test (Planning)  
a) Selection of objectives and content
b) Weightage to objective
c) Weightage to different areas of content
d) Weightage to different forms of questions
e) Weightage to difficulty level
f) Scheme of options
g) Sections in the question paper

B. Editing the test paper

a) Selection of test items
b) Grouping of test items
c) Instructions to examiners
d) Sections in the question paper
e) Preparing a marking scheme and scoring key

C. Reviewing the test paper

a) Question wise (after the test is given)
b) Critical evaluation of the test (before the test is given)
c) Item wise analysis (after the test is given)

The Blueprint

The blueprint is a three-dimensional chart showing the weightage given to objective, contact and forms of questions in terms of marks.

1. It helps the content validity of teacher-made-test
2. It describes the scope and emphasis of the test
3. It relates objectives to the content

Who should prepare the Blueprint?

There is nothing wrong about involving students in the development of a blueprint; in fact wherever feasible students’ involvement should be encouraged, if for no other reason to make them feel that they have played some role in planning the course. Of course, the major and final responsibility will be that of teacher, who the decision maker is, not the students’ input should be considered by the teacher while he is making his decisions and it should be utilised only in an advisory capacity.

When to prepare the Blueprint?

Should the blueprint be prepared before the test is constructed or should it be prepared well in advance? To be of the utmost benefit, it should be prepared well in advance. It would thus assist the teacher in organising his teaching material, serve as a monitoring agent, and help keep the teacher from straying off his instructional track.
The specimens of the weightage-tables and corresponding blueprint are given below:

**Design of the unit test**

Subject: Algebra  Std. VIII  
Unit: Set Theory  Total Marks: 50

**Table-1**

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Percentage</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Understanding</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Application</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Skill</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

**Weightage to Objectives:**

**Table-2**

<table>
<thead>
<tr>
<th>Sub-Units</th>
<th>Percentage</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept of set</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Set notation</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Types of sets</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Set Relation</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Subsets</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Set Operations</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Venn Diagrams and examples</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

**Weightage to Item Formats:**

**Table-3**

<table>
<thead>
<tr>
<th>Form of Questions</th>
<th>Percentage</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>Short answers</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Objective type</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>
Weightage to Difficulty Level:

Table-4

<table>
<thead>
<tr>
<th>Sub-Difficulty Level</th>
<th>Percentage</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty level</td>
<td>Percentage</td>
<td>Marks</td>
</tr>
<tr>
<td>Easy</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>Average</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>Difficult</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

One can tally the three weightage tables - 1, 2, 3 with the blueprint table - 5. The weightage to the difficulty level table - 4 is not to be mentioned in the blueprint, but it should be considered while setting the question paper.

Scheme of Operations

There are two types of options: External options and internal options.

BLUEPRINT

The Blueprint: A Three-Dimensional Chart:

Table-5

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Knowledge</th>
<th>Understanding</th>
<th>Application</th>
<th>Skill</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>E S O</td>
<td>E S O</td>
<td>E S O</td>
<td>E S O</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept of set</td>
<td>1 - -</td>
<td>- - 2</td>
<td>- - 2</td>
<td>- - -</td>
<td>5</td>
</tr>
<tr>
<td>Set notation</td>
<td>1 - -</td>
<td>1 -</td>
<td>- 2 1</td>
<td>- -</td>
<td>5</td>
</tr>
<tr>
<td>Types of sets</td>
<td>1 - -</td>
<td>1 1</td>
<td>- 2 -</td>
<td>- - -</td>
<td>5</td>
</tr>
<tr>
<td>Set relation</td>
<td>1 - -</td>
<td>- - 1</td>
<td>1 1 1</td>
<td>- - 1</td>
<td>6</td>
</tr>
<tr>
<td>Subsets</td>
<td>1 - -</td>
<td>1 1</td>
<td>- 1 -</td>
<td>- -</td>
<td>4</td>
</tr>
<tr>
<td>Set operations</td>
<td>- - -</td>
<td>2 - 4</td>
<td>- 2 4</td>
<td>- - 3</td>
<td>15</td>
</tr>
<tr>
<td>Venn Diagrams and examples</td>
<td>- - -</td>
<td>- - 1</td>
<td>- 2 1</td>
<td>- - 4</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5 - -</td>
<td>4 3 8</td>
<td>1 10 9</td>
<td>- 2 8</td>
<td>50</td>
</tr>
</tbody>
</table>

\[E=E\text{ssay Type} \quad S=\text{short-answer type} \quad O=\text{Objective type}\]
‘Check Your Progress’-3

1. Name the chart that gives comprehensive idea about a test or an examination

2. Name the necessary steps in preparing a test paper.

21.5 Question Bank

A question bank contains number of question belonging to different types of questions. The question bank is a planned library of test items pooled through cooperative effort for the use of evaluators, teachers and students. It is an inbuilt feed-back mechanism for improvement of questions. A question bank serves a number of purposes.

Questions from the question bank can be used for the measurement of the pupil’s achievement. Question bank can be for the measurement of the pupils’ achievement. Questions can also be made use for diagnosis of the pupils’ difficulties.

Question banks should be established in various subjects. As for the location of question banks, these can be set up at the DIETS, Teacher Training Schools and Colleges, State Evaluation Units, Boards of Secondary Education, SCERTS and NCERT. Questions for the questions banks, as for as possible, should be prepared by practicing teachers in workshops conducted by experts. Enrichments of questions

21.5.1 Objective Based test items—Meaning

Meaning: Objective tests are a large variety. However, only seven or eight types of objective test are commonly used.

According R. L. Ebel and D. A Frisbie an objective test is “One that can be provided with a simple predetermined test of correct answer so that subjective opinion or judgement in the scoring procedure is eliminated”. Wiersma and S.G. Jurs opines that “Objective items are items that can be objectively scored, items on which persons select a response from a list of options.”
Objective Type Test

**Definition:** It refers to any written test that requires the examinee to select the correct answer from among one or more of several alternative or supply a word or two and that demands an objective judgement when it is scored.

**Objective-centred Test:** When questions are framed with reference to the objectives of instruction, the test becomes objective-centred or objective-based. This type of test becomes objective-centred or objective-based. This type of test may contain essay type and objective type test items. An essay test may be objective-centres or objective type test. On the other hand, can always be scored objectively, though it may not be objective-centred if it is not planned with reference to the objectives of instruction,

**Objective Type Test Item:** The most important criterion of an objective type test item is that it can be most objectively scored. The scoring will not vary from examiner to examiner.

**Classification of Objective Type Item**

All objective type test items may be sub-divided into three classes:

1. Supply type or recall type (Short-answer, Completion);
2. Selection type or recognition type (alternate response, matching, multiple-choice);
3. Context-dependent type (pictorial form interpretative).

**Merits of Objective Type Test**

1. It can be scored objectively and easily. The scoring will not vary from time to time or from examiner to examiner.
2. In this test, a more extensive and representative sampling can be obtained. This reduces (a) the role of luck and (b) cramming of expected questions. As a result, there is greater reliability and better content validity.
3. It possesses economy of time, for it takes less time to answer than an essay test. Comparatively, many test items can be presented to students. It also saves a lot of time of the scorer.
4. It eliminates extraneous (irrelevant) factors such as speed of writing, fluency of expression, literary style, good handwriting, neatness, etc.
5. It creates an incentive for pupils to build up a broad base of knowledge, skills and abilities.
6. It measures the higher mental process of understanding, application, analysis, prediction and interpretation.

**Limitations of Objective Type Test**

1. Objectives like ability to organise content, ability to present it logically and in a coherent fashion, etc., cannot be evaluated.

2. Guessing is possible. No doubt, the chances of success may be reduced by the inclusion of a large number of items.

3. The construction of adequate objective type test items is difficult. It requires special abilities and is time-consuming.

4. Printing cost is considerably greater than that of an essay type test.

**21.5.2 Concept and Importance**

Objective test items can be valued without any personal prejudices the pupils have to be very clear in their answer

**Importance**

1. Can be used for the measurement of the pupils’ achievement
2. Can be used for the diagnosis of the pupils’ difficulties
3. Free from personal prejudices
4. Factors like handwriting, number of papers etc., can be avoided
5. Easy to correct
6. Full justice can be given to the students
7. Questions can be covered comprehensively
8. Can easily be valued through computers and results are obtained very quickly

‘Check Your Progress’ -4

1. Name the test type which is free from personal prejudices

--------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------

317
2. What are the factors that can be avoided while correcting the answers?

21.5.3 Steps of Construction:

A lot of care should be taken which constructing the objective type test. The following factors are to be born in mind by the examiner

1) Free from ambiguity
2) Very clean in asking questions
3) Only one specific answer should be there
4) Proper instruction should be given on how they should answer

21.6 Let Us Sum Up

In this Unit we have discussed the most used tools and also criteria of a good test. You have been introduced to prepare a goad question paper with the help of a ‘Blue Print’.

21.7 Answers to ‘Check Your Progress’

‘Check Your Progress’-1
1) Test / Unit test
2) 10 to 45 minutes -test
3) 2- 3 hours examination

‘Check Your Progress’-2
1) Content, types of question, level of question objective
2) Learning outcomes / instructional objectives

‘Check Your Progress’-3
1) Blue Print
2) Planning, editing, reviewing (PER)
‘Check Your Progress’ -4
1) Objective type test
2) Handwriting, numbers of pages etc.

21.8 Unit-End Exercises

1) What are the most used tools of evaluation? Describe them briefly
2) Prepare a Blueprint for a unit test
3) What is the criterion for balanced question paper?

21.9 References

UNIT 22  □  TEST ITEMS, RATING SCALE, CHECK LISTS, AND ANECDOTAL RECORDS: AN INTRODUCTION

Structure
22.1  Introduction
22.2  Objectives
22.3  Test Items Salient Features, Relative Merits, Construction Guide lines
   22.3.1  Essay Type Questions
   22.3.2  Short Answer Questions
   22.3.3  Very Short Answer Questions
   22.3.4  Multiple Choice Items
   22.3.5  Completion Type Items
   22.3.6  True False Type Items
   22.3.7  Matching Type Items
   22.3.8  Analogy Type Items
22.4  Rating Scales-Salient Features, Relative Merits, Construction Guide lines.
   22.4.1  Descriptive Rating Scales
   22.4.2  Numerical Rating Scales
   22.4.3  Graphic Rating Scales
22.5  Check Lists-Salient Features, Relative Merits, Construction Guide lines.
22.6  Anecdotal Records-Salient Features, Relative Merits, Construction Guide lines.
22.7  Let Us Sum Up
22.8  Answers to ‘Check Your Progress’
22.9  Unit-End Exercises
22.10 Reference

22.1  Introduction

Teaching and Testing should always go together. A teacher should be aware of various test item formats, their strengths and weaknesses. In this Unit you are going to learn about different types of tests, rating scales and checklists and anecdotal records.
22.2 Objectives

After studying this Unit you will be able to

construct the following objective type tests:-

- Essay type questions.
- Short answer type questions.
- Very short answer type questions.
- Multiple choice questions.
- Completion Type questions.
- True-False questions.
- Matching type questions.
- Analogy type questions.
- Prepare and use Check lists and Anecdotal Records

22.3 Test Items

22.3.1 Essay Type Questions:

Meaning: Essay tests have a long history that date back to more than four thousand years. In this type the pupils are required to write a long answer. The essay type questions may use the following words signifying the simple to higher mental processes

a. What, who, when, which, and where  
b. List  
c. Contrast  
d. Discuss  
e. Evaluate  
f. Outline  
g. Compare  
h. Develop  
i. Describe  
j. Explain  
k. Summarise etc.

Merits:

1. Suitable for some aspects of learning.  
2. Provoke thought and higher mental processes.  
3. Provide qualitative interpretation.
4. Measure originality and initiative.
5. Encourage better and inter-related study.
6. Easy to construct and apply.
7. Cheating, copying minimised.
8. Give examinees freedom to respond with in broad limits.
9. Divergent thinking can be measured.
10. More economical to use.

Limitations
1. They generally stress the lengthy enumeration of memorised facts
2. They have limited content validity
3. There is lack of consistency in judgements even among competent examiners
4. They have ‘question to question carry effect’.
5. Scoring depends on the mood of the examiner
6. They are time-consuming both for the examiner and examinee.

Suggestions to Minimise Subjectivity
1. The student should be coached and important distinctions between terms like define, discuss explain, describe should be explained as item to be formed.
2. The students may be coached to write the answers systematically.
3. The question should be pinpointed and precise so that an answer key may be prepared in advance.
4. The expected length of the answer of each question should be indicated on the paper.
5. Normally no weightage should be given to hand writing, spelling and precise language in papers other than languages may be lessened:
6. It is sometimes suggested that a particular questions of all the examiners should be evaluated at one time. Then the second question of all the examiners and so on.

22.3.2 Short Answer Type Questions

Salient features: In simple language it may be stated that short-answer type test in between an essay type test and an objective test. Short answer items require the examinee
to respond to the item with a work, short phrase, number or a symbol. Short answer items as considered objective items in that the correct response can be secured objectively. That is preferably there is a single correct answer so that equally important scores would agree on the correctness of a response.

**Merits:**

1. A relatively large sample of the content can be covered.
2. Easy to construct.
3. It proves little opportunity for guessing.
4. Useful in evaluating spelling and knowledge of a foreign language.
5. There is very little scope for the influence of handwriting and spelling.
6. Questions will not have irrelevant clues to possible answers.

**Limitations:**

1. Not suitable for measuring complex learning outcome.
2. Not suitable for judging the power or analysing and reasoning of the student.
3. Impossible to test the synthesis, interpretation, ability of the students.
4. It is limited to questions that can be answered with a word phrases, symbol or number only.

**22.3.3 Very Short Answer**

**Salient features:** In this type of questions the students are required to supply a factor.

**A specific answer ex:**

1. Fill of the blanks
2. Matching type
3. True or false etc.,

**Merits:**

1. There can be wide coverage of syllabus.
2. Easy to correct.
3. Purely objective.
4. In the content
Demerits:
1. Language ability / competency cannot be tested
2. Guessing is possible
3. Encourages copying

‘Check Your Progress’ - 1

Fill in the blanks
1. To test the organisation capacity of the students ............type question are suitable.
2. There is wide coverage of the content in .................type of tests.
3. In very short answer type questions there is scope for .............and................

22.3.4 Multiple Choice Items

Meaning: A multiple choice item consists of a problem and a list of suggested solutions. The problems may be stated on a direct questions or an incomplete statement and is called the stem of the items. The text of suggested solution may include words, numbers, symbols or phrases and are called alternatives / choices/options. The pupils are requested to read the stem and the list of alternatives and to select the one correct or best alternative.

Forms of Multiple Type Test
1. The correct answer form
2. The best answer form
3. The Multiple Response form
4. The incomplete statement Form
5. The Substitution form
6. The combined responses form

Merits:
1. Objective in scoring
2. They reduce the effect of guessing
3. They can be easily adopted for machine scoring
4. A substantial amount of subject matter can be tested.
Limitations:
1. They do not permit the examiner to express their views.
2. They cannot measure attitudes or motor skills
3. They cannot evaluate the ability to organise and present ideas
4. They require more time to construct.

Guide Lines To Construct Good Multiple Choice Questions:-
1. Be sure the stem of the items clearly formulates a problem.
2. Use the negative sparingly in the stem of an item.
3. There should be only one correct or best answer in every item.
4. Questions and sentences should be kept as short as possible.

22.3.5 Completion Type Questions

Meaning: Here an incomplete statement and the pupil is required to complete it. Ex: There is more perspiration in the .................season.

Merits:
1. Easy to correct
2. Easy to answer
3. More syllabus can be covered.
4. High objectivity can be brought in

Demerits:
1. Copying is encouraged.
2. Languages ability cannot be tested.
3. Logical thinking or organisation capacity of the pupil cannot be tested.
4. Not possible to test affective / psychomotor abilities of the pupil.

Guidelines to construct:
1. There should be only one specific answer.
2. The incomplete statement should not be doubtful or ambiguous.
3. Items should be taken from the curriculum.
4. Proper space should be given for response.
22.3.6 True -False Type Questions

**Meaning:** Here the pupil is presented with a declarative statement and the pupil has to identify whether it is “true or false”.

**Merits:**
1. They are good for young children who have poor reading habits.
2. They can be scored quickly, reliably and objectively
3. They are adaptable to most areas.
4. This type of item is a time saves for it allows for frequent testing.

**Limitations:**
1. There is chance for guessing the answer.
2. They lend themselves most easily to cheating.
3. They are susceptible to ambiguity and misinterpretation.
4. They tend to be less discriminating and create clusters.

**Guidelines for Constructing True / False Items**
1. To use simple, clear language to avoid ambiguity.
2. To avoid tricky statements.
3. To avoid lifting statements verbatim from the text.
4. Double negative statement should be avoided.

22.3.7 Matching Type Questions:

The matching test consists of two columns. One column consists of the questions or problems to be answered and the other column consists of answers. The examinee is required to make some sort of association between each premise response. He pairs the corresponding elements and records his answers.

**Merits:**
1. Many questions can be asked in a limited period of testing time.
2. They can be constructed relatively easily and quickly.
3. A great deal of space is saved and the pupil usually has less reading to do.
4. Can be scored easily.
Limitations:

1. Items are likely to include irrelevant clues to the correct answer.
2. Generally they emphasise rote memorisation.
3. They are largely limited to learning outcomes in the knowledge domain.
4. Scoring is relatively easier.

Writing good True - False items

1. To keep each list relatively short
2. Each matching test should consist of homogeneous items;
3. To avoid equal number of premises and responses
4. To arrange the answers in some systematic fashion
5. To avoid giving extraneous or irrelevant clues.

22.3.8 Analogy Type Questions:

Meaning: In this type the pupil is required to deduce the relationship that exists between the first “two parts of the item and then apply it to the third and fourth parts. Normally the third part is given and the missing fourth part is selected from the list of options on the basis of the relationship existing between the first two parts.

Ex: The Himalayas : India :: The Alps : :: .................

Merits:

1. They help measure students’ capacity for interpretation and discrimination.
2. They can be subjectively scored by hand as well us by machines.
3. The students can understand items of this type without any extra coaching.
4. They are not so much influenced by guessing.

Limitations:

1. Construction of the item is not very easy.
2. They consume more time.
3. It tests only knowledge level of the students.

Guidelines for Construction:

1. Perfect items should be given and there should not be room for ambiguity.
2. Items should be useful and reliable.
‘Check Your Progress’ -2

Choose the correct answer

1. Copying can be avoided in the following type of test
   a) Essay type   b) Short answer type

2. The examiner is not carried away by the handwriting of the students in
   a) Short answer   b) Essay type answer.

22.4 Rating Scales-Salient Features, Relative Merits, Construction Guide lines.

Rating scales are very popular and are useful in testing and in applied psychology as well as in basic research. They can be employed in evaluating individuals, their reactions and products. They are being increasingly used in large industrial, mercantile and financial organizations and in recommending promotions, transfers and wage increases. In education too, they are being used to evaluate personnel.

Rating method began with Psychophysics, particularly with the work of FECHNER. GALTON published the first Rating Scale in connection with his esquire into Mental Imagery. Galton distinguished between various strengths of imagery such as highest, first, sub-octile, first quartile, last octile, etc. in 1906-1907, PEARSON constructed his rating scale for judging intelligence. He took a seven category judgement mentally defective, slow-dull, slow, slow-intelligence, fairly intelligent, distinctly capable and very able. Several other rating scales were prepared later on.

Types of Rating Scales

These are five broad categories of rating scales. They are: 1. Numerical, 2. Graphic 3. Standard 4. Cumulative Points and 5. Forced Choice. In almost all of these scales, assignment of a category evaluation is done by inspection. This may be either along an unbroken continuum or in ordered categories along with a continuum. The operation in each of these types is, however, quite distinct. We shall describe the nature, limitations and construction of each of these scales in brief.

22.4.1 Descriptive Graphic Rating Scales

This type of scale is generally the most desirable type of scale to use. Such specific descriptions define a particular dimension
22.4.2 Numerical Rating Scales

In numerical scales, the observer is the one who evaluates and assigns a particular number to a particular stimulus. For example, following numbers may be allotted while evaluating feminine beauty.

1. Most beautiful
2. Very beautiful
3. Beautiful
4. Average
5. Ugly
6. Very ugly
7. Ugliest

Or else numbers allotted may be -3, -2, -1, 0, 1, 2, and 3. They may also be in alphabets as A, B, C, D, E, F, and G.

Suggestions for Construction

1. These scales have a bipolar tendency; they have a direction in two opposite extremes. A zero value is generally taken at the middle, minus (-) values below it indicating negative direction, and plus (+) values above, it, indicating positive direction. Since such a way is not quite suitable for persons having little or negligible knowledge of algebra, use of negative numbers is not recommended. Alphabetical or serial numbers may be used instead.

2. Subjects generally avoid terminal categories and shift judgements towards the middle of the range. This leads to shortening of the range. Therefore, while constructing rating scale, the investigator should leave room for expansion beyond these categories.

Evaluation

1. The construction and application of numerical scales is easy. The handling of results is also very convenient.

2. If the rater uses assignment honestly and sincerely, then evaluation of a very high order is possible. If adequate numbers of categories are employed, these scales can be used in a large number of situations.

3. These scales are subject to more bias and errors than other scales.
22.4.3 Graphic Rating Scales

These scales are very popular and are very widely used. Boyce used some sort of a Graphic Scales before 1915. But it was truly developed later on by Scott Company. In these scales a four five inches long straight line is given and under these some descriptive adjectives or phrases are given. The use of the scale is given in directions, such as “These adjectives represent your judgement. Judge every trait independently, so that when you judge on trait, disregard other traits. If a person is exceptional in your opinion you need not judge him high in every trait, because in spite of being exceptional, he may not be up to the mark in every trait” devised by American Council on Education. An example is given below.

In social conversation how have you been? 1. Talkative 2. An Easy Talker, 3. Talked When Necessary, 4. Preferred listening, 5 Refrained from Talking (from Lind’s Personal Inventory).

Suggestions for Construction

1. The good end may be placed first and bad end in the last, because raters generally think good qualities first.
2. On an average, 5 lines may be taken which are not very short or very long. In long lines continuum is disrupted and rates tend to cluster their marks in the middle. In shorter lines, works are mixed and so confused.
3. Space amidst adjectives or phrases need not be equal. There may be more space left in the middle categories than in the extreme ones to counteract the tendency of bunching ratings in the middle.
4. If traits are mentioned in a bipolar manner, most favourable in the one end and most unfavourable in the other, the neutral cue may not necessarily be given in the middle.
5. One trait should be completely rated before going to the next.

Evaluation

1. Construction and administration of graphic rating scales is very simple.
2. The rater need not bother with numbers. Descriptions are given and so scale can be quickly filled out.
3. A comparable rating can be done without bothering about all the ratings.
4. Comparable rating can be done without bothering about all the ratings.
5. The discrimination range or fineness may be changed whenever necessary say from one to five or one to fifty.

‘Check Your Progress’ - 3

1. What are the types of Rating Scales?

2. What are the main characteristics of the three Rating scales?

22.5 Check Lists-Salient Features, Relative Merits, Construction Guide lines

A check list consists of listing of steps, activities or behaviour which the observer records when an incident occurs. It is similar in appearance and use to a rating scale and is classified by some as a type of rating scale. A check list enables the observer to note only whether or not a trait or characteristic is present. It does not permit the observer to rate the quality of a particular behaviour or its frequency of occurrence or the extent to which a particular characteristic is present. When such information is desired, the check list is definitely inappropriate.

Advantages of Check Lists

1. They are adaptable to most subject-matter areas.
2. They are useful in evaluating those learning activities that involve a product, process and some aspects of personal-social adjustment.
3. They are most useful for evaluating those processes that can be sub-divided into a series of clear, distinct, separate actions.
4. When properly prepared, they constrain the observer to direct his attention to clearly specified traits or characteristics.
5. They allow inter-individual comparison to be made on a common set of traits or characteristics.
6. They provide a simple method to record observations.
7. They objectively evaluate traits or characteristics.

**A Specimen**

**Directions:** Listed below are series of characteristics related to health practices. Check those characteristics which are applicable to students.

<table>
<thead>
<tr>
<th>Characteristics to be Observe</th>
<th>Roll Numbers of the Pupils</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Takes a balanced diet</td>
<td>1  2  3  4  5  6  7  8  Etc</td>
</tr>
<tr>
<td>2. Washes before breakfast</td>
<td></td>
</tr>
<tr>
<td>3. Brushes teeth after eating</td>
<td></td>
</tr>
<tr>
<td>4. Drinks plenty of water at time of eating</td>
<td></td>
</tr>
<tr>
<td>5. Brushes teeth before going to bed</td>
<td></td>
</tr>
</tbody>
</table>

Here is an example of a check list for constructing T/F items

1. Expresses each item in clear, simple language;
2. Avoids lifting statements verbatim from the text;
3. Avoids negative statements wherever possible;
4. Makes sure that each item is clearly true or false:
5. Review the items independently.

A Check list should not be used if a more discriminating procedure can provide a valid appraisal; Example:

1. Adds two digit numbers;
2. Subtracts two digit numbers;
3. Multiples decimals.

These abilities may be evaluated with greater discrimination and objectivity through the use of written problems or a simple test

**While Using Check Lists**

1. Use check list only when you are interested in ascertaining whether a particular trait or characteristic is present or absent;
2. Clearly specify the traits or characteristic to be observed;
3. Observe only one child at a time and confine your observations to the points specified on the check list;
4. Have a separate check list for each child. Individual observations can be recorded on a master check list;
5. The observer must be trained to observe behaviour. To make a valid judgement, he should omit recording those behaviours for which he has insufficient information.

22.6 **Anecdotal Records-Salient Features, Relative Merits, Construction Guide lines**

These are records of specific incidents, factual description of important and meaningful events or behaviour of students on informal occasions. Each event or behaviour is described shortly after it occurs.

Anecdotal records should possess certain characteristics:
1. They should contain a factual description of what happened, when it happened and under what circumstances the behaviour occurred.
2. The interpretation and recommended action should be noted separately from the description.
3. Each anecdotal record should contain a record of a single incident.
4. The incident recorded should be one that is considered to be significant to the pupil’s growth and development.

<table>
<thead>
<tr>
<th>Anecdotes</th>
<th>Date: December 10, 10.30 am</th>
<th>Time: Recess</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Jagadish is seen in the Library, sitting in a corner, solving riders in Geometry.</td>
<td>December 15, 1.15 pm</td>
<td>Geometry Period</td>
</tr>
<tr>
<td>2. Jagadish is found to be the only boy responding to the teacher’s questions on solving a rider.</td>
<td>December 21, 4.45am</td>
<td>Language Period</td>
</tr>
<tr>
<td>3. Jagadish was caught reading a book “Fun in Geometry” during the language period and was asked to leave the classroom.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Interpretation:** Jagadish is very much interested in Geometry.

**Recommendation:** Jagadish should be encouraged to do more in Mathematics and also not to neglect languages.
Advantages of Anecdotal Records
1. If properly used, they provide a factual record of an observation of a single, significant incident in the pupil’s behaviour.
2. They record critical incidents of spontaneous behaviour (in a natural setting)
3. They provide the teacher with objective descriptions.
4. They are very good for young children who are unable to use pencil-and-paper tests.
5. They direct the teachers’ attention to a single pupil.
6. They provide for a cumulative record of growth and development.
7. They can be used by the counsellor as a source of information for giving guidance.
8. They provide more complete descriptions of behaviour better suited to understanding and guiding pupils than the other observational tools available.
9. They can be used as a supplement to quantities data. This leads to a better understanding of a pupil’s behaviour.

Limitations of Anecdotal Records
1. They tend to be less reliable than other observational tools as they tend to be less formal and systematic.
2. They are time-consuming to write.
3. It is difficult for the observer to maintain objectivity when he records the incident observed.
4. When incidents are noted and read out of context, they may lose their meaning.
5. The observers tend to record only undesirable incidents and neglect the positive incidents.
6. They present only a verbal description of the incident. They do not reveal causes.

Making Anecdotal Records Effective
1. Restrict observation to those aspects of behaviour which cannot be evaluated by other means.
2. Concentrate on only one on two behaviours.
3. Observation should be selective.
4. An observational blueprint or guide should be prepared in advance.
5. Records should be complete.
6. They should be kept by all teachers and not only by the child’s classroom teacher.

‘Check Your Progress’ -4

1. What are the advantages of Check Lists?

2. What should a teacher do in an anecdotal record?

22.7 Let Us Sum Up

Education is not only concerned with the acquisition of knowledge but also is concerned with the development of desired attitudes interest, skills and various personal and social qualities. In this chapter you have studied about types of questions available and then relative merits and construction guidelines. For example: there are question types like essay type, short answers, and objectives type questions etc., In this chapter we have learnt about the constructions of multiple of choice true-false etc. We have also learnt about rating scales check list anecdotal records.

22.8 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. Essay Type
2. Short / Very short answer type
3. Copying / guessing
‘Check Your Progress’ -2
1. 
2. 

‘Check Your Progress’ -3
1. Descriptive Rating scale, Numerical Rating Scale and Graphical Rating Scale
2. a) Numerical Rating Scale indicates the extent to which a characteristic or trait is present
   b) The Graphic Rating Scale assigns some value to specific traits
   c) Descriptive Rating Scale expresses the trait objectively in a clear manner

‘Check Your Progress’ -4
1. Advantages of check lists:
   a) They are adaptable to most subject-matter areas
   b) They provide a simple method to record observations.
   c) They objectively evaluate traits or characteristics.
2. These are records of specific incidents, factual description of important and meaningful events or behaviour of students on in formal occasions.

22.9 Unit-End Exercises
1. What are the merits and limitations of essay type questions?
2. Construct ten multiple choice questions on a topic of your choice.
3. Explain different types of rating scales.
4. Mention the merits and limitations of check lists and anecdotal records.

22.10 References
1. N. Patel and B Rambhai - *Educational Evaluation*
2. Bipin Asthana - *Measurement and Evaluation in Psychology and Education*
3. Aggarwal. J. C. *Essentials of Examination System*
UNIT 23  CLASSIFICATION AND GRAPHICAL REPRESENTATION OF TEST DATA

Structure

23.1 Introduction
23.2 Objectives
23.3 Preparing Frequency Distribution Table
23.4 Importance of Graphical Representation of Scores
23.5 Types of Graphical Representation
   23.5.1 Frequency Polygon Construction
   23.5.2 Histogram - Construction
   23.5.3 Pie Diagram - Construction
23.6 Let Us Sum Up
23.7 Answers to ‘Check Your Progress’
23.8 Unit-End Exercises
23.9 References

23.1 Introduction

We collect data on various things in order to draw certain generalizations. In Education we make use of data for various purposes for example to improve the examination system we will depend on the Test data. The data is the quantity for qualitative assessment. Any research in education is meaningless without the data of various kinds and its analysis.

The data is of two kinds

1. The data obtained by measurement is called as metric data. This is continuous series.
2. The data obtained by counting is called enumeration of data. This is a discrete series.

The branch of Mathematics that deals with metric data in relation to enumeration data is known as Statistics, the knowledge in the process of teaching and learning.
23.2 Objectives

After studying this Unit you will be able to:

1. Prepare frequency distribution table when the raw scores are given
2. List the advantages of graphical representation of data
3. Represent the data in different types of graphs
4. Prepare the frequency polygons for the given data
5. Prepare histogram for the given data
6. Prepare pie diagram (circle graph) for the given data

23.3 Preparing Frequency Distribution Table

Let us consider that you have conducted a test for VIII class in any subject, the marks obtained by 25 students are as given below for the maximum marks of 20. The data or measure is known as Raw Data. It need not be in a systematic form.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>12</td>
<td>8</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>9</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>12</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>11</td>
<td>8</td>
<td>12</td>
</tr>
</tbody>
</table>

The steps to be followed in preparing the frequency distribution table for the scores given above

Step-I Identify the highest score in the distribution
Step-2 Identify the least score in the distribution
Step-3 Find the range of the scores
Range = Highest score - least score
Step-4 Divide the range by the size of the class interval (you have to decide the size of the class interval by taking into account the range, preferably an odd number, odd number only for convenience)
Step-5 Write the step intervals keeping in mind the size of the class intervals the highest score must come in the first step interval if you write form the highest to least and the least score must come in the last step interval
Step -6 After writing the step intervals (Regular) mark the tallies against each class interval i.e. how many scores occur in a particular class interval

Step -7 Convert the tallies into numerical number called as frequency (f)

Step -8 Frequency distribution table can be written either from the highest to least or from least to highest both are correct but the convention is to write from the highest to least

Illustration for the raw scores given above

Step-1 Maximum Score = 15 (Highest)
Step-2 Minimum Score = 5 (Least)
Step-3 Range = 15-5 = 10

Range divided by the size of the class interval gives the number of step intervals (let the size be ‘3’ in this case)

\[ \frac{10}{3} = 3.3 \] (make it whole number)
\[ 3 = 4 \text{ step intervals} \]

Step -4

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>Tallies</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-15</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>10-12</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>7-9</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>4-6</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
</tr>
</tbody>
</table>

Another way just to help you to understand the frequency distribution

Step -1. Write the scores from the highest to least (all the twenty five)

15  9
14  9
13  9
Step 2. Make the table short by writing the frequency (number of times the score has occurred against each score the score has occurred) against each score.

<table>
<thead>
<tr>
<th>15</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Step 3. Make three scores as one step interval and write the total frequency of three scores against class interval

<table>
<thead>
<tr>
<th>Class interval</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-15</td>
<td>4</td>
</tr>
<tr>
<td>10-12</td>
<td>10</td>
</tr>
<tr>
<td>7-9</td>
<td>9</td>
</tr>
<tr>
<td>4-6</td>
<td>2</td>
</tr>
<tr>
<td><strong>N=</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>
23.4 Importance of Graphical Representation of Scores

1. Graphs are the pictorial representation of data. Pictures can be made more vivid and eye-catching by appealing columns.
2. Graphs easily draw the attention of the reader (observer).
3. Graphs are helpful to summarise the data (information).
4. Graphs are helpful to convey the information more precisely and quickly.
5. Graphs are helpful to compare the performance of one group with the other.
6. Graphs are helpful to know the nature of group (Whether Normal or skewed group).
7. Graphs are helpful to draw certain generalizations or conclusions.
8. Graphs (Pictures) help even the illiterate persons to understand the information.
9. Graphs are helpful to analyse the data in different ways.
10. Graphs (Frequency Polygon) are helpful to know the type of relationship that is existing between two variables.

23.5 Types of Graphical Representation

23.5.1 Frequency Polygon Constructions

<table>
<thead>
<tr>
<th>Class interval</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-15</td>
<td>4</td>
</tr>
<tr>
<td>10-12</td>
<td>10</td>
</tr>
<tr>
<td>7-9</td>
<td>9</td>
</tr>
<tr>
<td>4-6</td>
<td>2</td>
</tr>
</tbody>
</table>

(mid points of class intervals)
23.5.2 Histogram (Bar or Column Diagram) for the above table

![Histogram](image_url)

23.5.3 Pie diagram

Frequency distribution table

<table>
<thead>
<tr>
<th>Class interval</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-15</td>
<td>04</td>
</tr>
<tr>
<td>10-12</td>
<td>10</td>
</tr>
<tr>
<td>07-09</td>
<td>05</td>
</tr>
<tr>
<td>04-06</td>
<td>01</td>
</tr>
<tr>
<td>N =</td>
<td>18</td>
</tr>
</tbody>
</table>

Since you have to represent this in circle. Find out what portion is odd each class interval. In order to arrive at this, you have to express 4/18, 8/18, 1/18 in terms of degrees of a circle.

\[
\begin{align*}
8/13 & \times 360 = 80 \text{ Degree} \\
8/3 & \times 360 = 160 \text{ Degree} \\
5/18 & \times 360 = 100 \text{ Degree} \\
1/18 & \times 360 = 20 \text{ Degree}
\end{align*}
\]
‘Check Your Progress’-1

1. Fill up the blanks with appropriate words

1. The data obtained by measurement is called as ................ data
2. The data obtained by counting is called as ................ data
3. The frequently distribution table can be written from ..........to ..........

Answer the following questions,

1. What do you mean by raw scores?

2. What are the advantages of graphical representation of test data?

3. What is range?

23.6 Let Us Sum Up

1. Frequency distribution table can be prepared for the raw scores obtained by scoring a test.
2. There are many advantages of representing the data in different types of graphs.
3. The data is classified to know more about the performance of a group.
4. The data can be represented graphically they are
   a) Frequency Polygon
   b) Histogram
   c) Bar Graph or Column graph
   d) Pie Diagram or Circle Graph
23.7  Answers to ‘Check Your Progress’

‘Check Your Progress’-1

1.
1) metric
2) enumeration
3) lowest, highest
2. The data or measurements taken from a group of individuals.
3. Refer section 23.4
4. Range is the difference between the highest and the lowest score

23.8  Unit-End Exercises

1. Collect the test marks of 50 students in any subject and prepare the frequency distribution tables with varied class interval.
2. Collect the marks obtained by one hundred X standard students in Mathematics and prepare the frequency distribution table.
3. Prepare the frequency polygon for the item 2 under 23.8 and interpret the nature of the group.
4. Show the progress of your institution in any subject with the help of histogram or frequency polygon.

23.9  References

1. Dandekar .W. N - Evaluation in Schools
2. Henry Garett - Statistics in Education and Psychology
3. Guilford J. P - Fundamental Statistics in Psychology & Education
UNIT 24 □ PROCESSING OF TEST DATA

Structure

24.1 Introduction
24.2 Objectives
24.3 Measures of Central Tendency
   24.3.1 Mean - Meaning, Calculation and Uses
   24.3.2 Median - Meaning, Calculation and Uses
   24.3.3 Mode - Meaning, Calculation and Uses
   24.3.4 Measures of variability Meaning, Types and Uses
24.4 Correlation
   24.4.1 Meaning and uses
   24.4.2 Calculation of Co-efficient - Rank Difference Method
24.5 Let Us Sum Up
24.6 Answers to ‘Check Your Progress’
24.7 Unit-End Exercises
24.8 References

24.1 Introduction

The test data is to be processed to understand more about the performance of the group. The processing of data reveals many interesting things and helps the teacher to improve the system and also to take up the remedial programme to overcome the problems of the learners in learning.

The data processing helps the teacher to arrive at certain generalisations. What is the general ability of the group? What is the relevant programme according to the abilities of the learners? Where the majority of the group falls? How many are the exceptional learners? How many need extra guidance? Whether the group is homogeneous or heterogeneous etc. All these questions can be answered appropriately, if the test data analysed by using various statistical techniques.
24.2 Objectives

After studying this Unit you will be able to:

- define central tendency
- define mean, median and mode
- calculate mean, median and mode from the ungrouped and grouped data
- define the measures of variability
- list the uses of variability
- define correlation
- define the co-efficient of correlation
- calculate the co-efficient of correlation by rank difference method
- list the uses of co-efficient of correlation

24.3 Measures of Central Tendency

Central Tendency it is a point in the distribution of scores, where the majority of the scores tend to fall. The most common measures of central tendency are the mean, the median and the mode. These are also called as the representative values of a group.

24.3.1 Mean - Meaning, Calculation and Uses

Mean is the average of test scores

Or

Mean is the average of any measurement about the performance of a group

Mean is obtained by adding all the given scores and dividing the sum by the number of scores

Ex: The scores are 5, 6, 4, 5, 10, 6.
The sum of the scores 5+6+4+5+10+6 = 36
Number of scores = 6
The average or mean = 36/6 = 6

In general $X_1, X_2, X_3, X_4, \ldots, X_n$ are the scores

$$\text{Mean} = \frac{\sum f.x}{N}$$

When the grouped data is given ie. Frequency distribution table
### How to find the mean Method I

<table>
<thead>
<tr>
<th>Class interval</th>
<th>F</th>
<th>(X) Mid Point of the Class interval</th>
<th>f.x</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-84</td>
<td>2</td>
<td>82</td>
<td>164</td>
</tr>
<tr>
<td>75-79</td>
<td>3</td>
<td>77</td>
<td>231</td>
</tr>
<tr>
<td>70-74</td>
<td>5</td>
<td>72</td>
<td>360</td>
</tr>
<tr>
<td>65-69</td>
<td>7</td>
<td>67</td>
<td>469</td>
</tr>
<tr>
<td>60-64</td>
<td>8</td>
<td>62</td>
<td>496</td>
</tr>
<tr>
<td>55-59</td>
<td>10</td>
<td>57</td>
<td>570</td>
</tr>
<tr>
<td>50-54</td>
<td>12</td>
<td>52</td>
<td>624</td>
</tr>
<tr>
<td>45-49</td>
<td>8</td>
<td>47</td>
<td>376</td>
</tr>
<tr>
<td>40-44</td>
<td>5</td>
<td>42</td>
<td>210</td>
</tr>
<tr>
<td>35-39</td>
<td>3</td>
<td>37</td>
<td>111</td>
</tr>
</tbody>
</table>

\[
N = 63
\]

\[
\text{Mean} = \frac{\sum f.x}{N}
\]

\[
= \frac{3611}{63}
\]

\[
= 57.3
\]

### Method II (This is called as Deviation Method)

<table>
<thead>
<tr>
<th>Class interval</th>
<th>F</th>
<th>(X)</th>
<th>f.x</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-84</td>
<td>2</td>
<td>+4</td>
<td>+8</td>
</tr>
<tr>
<td>75-79</td>
<td>3</td>
<td>+3</td>
<td>+9</td>
</tr>
<tr>
<td>70-74</td>
<td>5</td>
<td>+2</td>
<td>+10</td>
</tr>
<tr>
<td>65-69</td>
<td>7</td>
<td>+1</td>
<td>+7</td>
</tr>
<tr>
<td>60-64</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>55-59</td>
<td>10</td>
<td>-1</td>
<td>-10</td>
</tr>
<tr>
<td>50-54</td>
<td>12</td>
<td>-2</td>
<td>-24</td>
</tr>
<tr>
<td>45-49</td>
<td>8</td>
<td>-3</td>
<td>-24</td>
</tr>
<tr>
<td>40-44</td>
<td>5</td>
<td>-4</td>
<td>-20</td>
</tr>
<tr>
<td>35-39</td>
<td>3</td>
<td>-5</td>
<td>-15</td>
</tr>
</tbody>
</table>

\[
N = 63
\]
\[ \sum fx = -59 \]

\[
\text{Mean} = AM + \left( \frac{\sum fx}{N} \right) \times 1
\]

\[
= 62 + \left( \frac{-59}{63} \right) \times 5
\]

\[
= 62 + \left( \frac{-295}{63} \right)
\]

\[
= 62 - \left( \frac{295}{63} \right)
\]

\[
= 62 - 4.68
\]

\[
= 57.32
\]

**AM= 62** It is the midpoint of the class interval where mean is assumed 1=5 size of the class interval N= Sum of the frequencies

**Note:** You can assume the mean to lie in any class interval but we take middle class interval generally you have to be careful while marking deviations from the assumed mean class interval +1, +2, +3+4... towards the upper (increases) end of the scale, -1, -2, -3, -4, -5..... towards the lower end (decreases) of the scale.

**Uses**

1. When the distribution is normal
2. When the most stable measure of Central Tendency is desired
3. Mean is used in further statistical calculations like Average Deviation Standard Deviation etc.
4. Mean is used to draw generalisations about the performance of a group
5. When we are interested to compare the performance of one group with another.

**24.3.2 Median - Meaning, Calculation and Uses**

1. It is the mid score in the distribution of scores, when the scores are arranged either in the increasing or decreasing order
2. It is a point in the distribution of scores above and below of which 50% of the scores lies. It divides the scale into two equal parts
3. It is also called as 50th percentile
Calculation:

1. Ungrouped data: let us consider 3, 5, 2, 4, 4, 6, 5, 7, 3 are the scores, you have to arrange 2, 2, 3, 3, 4, 5, 5, 6 in the order 4 is the median.

   Suppose the scores are even 2, 2, 3, 3, 4, 5, 5, 6.
   The average of the middle scores are taken is \(3 + 4 = 7\)/2 = 3.5 is the median.
   In general, \(N + 1/2\) gives the median.

   Where \(N\) is the number of scores arranged in the order (from highest to least or from least to highest).

2. When the grouped data is given

   **Median:** When the frequency distributions table is given

   Calculation:

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-72</td>
<td>2</td>
</tr>
<tr>
<td>67-69</td>
<td>3</td>
</tr>
<tr>
<td>64-66</td>
<td>2</td>
</tr>
<tr>
<td>61-63</td>
<td>4</td>
</tr>
<tr>
<td>58-60</td>
<td>5</td>
</tr>
<tr>
<td>(\text{fm})</td>
<td>3</td>
</tr>
<tr>
<td>52-54</td>
<td>3</td>
</tr>
<tr>
<td>49-51</td>
<td>4</td>
</tr>
<tr>
<td>46-48</td>
<td>5</td>
</tr>
<tr>
<td>(\text{F})</td>
<td>4</td>
</tr>
<tr>
<td>43-45</td>
<td>2</td>
</tr>
<tr>
<td>40-42</td>
<td>2</td>
</tr>
</tbody>
</table>

   \(N = 36\)

   Steps

   1) Divide \(N\) by 2 \(36/2\)

   2) From the lower end of the scale add the frequencies is cumulative frequency and identify the class interval where \(N/2\) lies

   \[
   \text{Median} = L + \left(\frac{N/2 - F}{fm}\right) \cdot \frac{1}{2}
   \]
I = The exact lower limit of the class interval where \( N/2 \) lies = 54.5
f = Sum of the frequencies, below the Class interval where \( N/2 \) lies = 16
fm = The frequency of class interval where \( N/2 \) lies = 4
I = Size of the class interval = 3

Substitute the values in the formula given above
\[ = 54.5 + (0/4)3 \]
\[ = 54.5 \text{ is the median} \]

Uses
1. When the distribution is skew, median is the appropriate measure of central tendency
2. When we are interested to know the 50th percentile

24.3.3 Mode - Meaning, Calculation and Uses

It is the most frequently occurring score in the distribution for

Ex:-
5, 6, 4, 6, 7, 4, 3, 6

The score that has occurred more number of times is 6

6 is 'Empirical' mode. This is also called as crude mode when the frequency distribution table is given. The formula used to find the Mode = 3X, Median = 2X Mean

Uses
1. It is a quick and rough measure of Central Tendency when the data is scant.
2. It is a typical value of a group (The value most commonly found).
3. When the data is scant.

24.3.4 Measures of variability Meaning, Types and Uses

When we are comparing the performance of one group with another, we have to consider not only the mean and the number but also the dispersion of scores.
Let us consider the following:

Example: The Marks obtained by the two groups are as follows find the average

<table>
<thead>
<tr>
<th>GA</th>
<th>GB</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>54</td>
</tr>
<tr>
<td>80</td>
<td>53</td>
</tr>
<tr>
<td>70</td>
<td>52</td>
</tr>
<tr>
<td>60</td>
<td>51</td>
</tr>
<tr>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td>30</td>
<td>48</td>
</tr>
<tr>
<td>20</td>
<td>47</td>
</tr>
<tr>
<td>10</td>
<td>46</td>
</tr>
</tbody>
</table>

| 450 | 450 |

The average of group A = 450 / 9 = 50
The average of group B = 450 / 9 = 50

Since the average of group A is equal to the average of group B. Can be say the Group A is equal to B? No, because look at the dispersion of scores or the spread of scores Group A is widely distributed where as Group B is closely distributed because the range of GA = 90 - 10 = 80 and the range of GB = 54 - 46 = 8

Hence the measures of variability are important

There are four measure of variability. They are:

1. Range
2. Quartile deviation
3. Average deviation
4. Standard deviation

**Range:** It is the difference between the highest and the least scores in the distribution.

**Uses**

1. When we are interested to know the total spread of the scores.
2. When the data are too scant and scattered widely.
3. Range is the most quick and rough measure of variability.
**Quartile Deviation:** It is a semi-inter quartile range

Or

It is half of the scale distance between 75th percentile and 25th percentile

**Uses**

1. When the median is the measure of central tendency.
2. When there are extreme scores, which would influence the standard deviation disproportionately.
3. When the concentration of scores around the median is of primary interest.

**Average deviation:** It is the average of deviations of scores from the mean of the scores. Let us consider the following scores.

<table>
<thead>
<tr>
<th>Scores (x)</th>
<th>Deviation of scores from the mean (x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>5 - 5 = 0</td>
</tr>
<tr>
<td>4</td>
<td>5 - 4 = 1</td>
</tr>
<tr>
<td>5</td>
<td>5 - 5 = 0</td>
</tr>
<tr>
<td>6</td>
<td>5 - 6 = -1</td>
</tr>
<tr>
<td>5</td>
<td>5 - 5 = 0</td>
</tr>
<tr>
<td>4</td>
<td>5 - 4 = 1</td>
</tr>
<tr>
<td>6</td>
<td>5 - 6 = -1</td>
</tr>
<tr>
<td><strong>Sum=35</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>x=4</strong></td>
</tr>
</tbody>
</table>

Total = 35
Average = 35/7 = 5

Signs: The sum of deviations = 4

Average or mean deviation = \( \frac{\sum x}{N} = 4/7 \approx 0.57 \)

**Uses**

1. When we are interested to know the deviations of all the scores from the mean.
2. When these are extreme deviations which would influence standard deviation unduly.
Standard Deviation

<table>
<thead>
<tr>
<th>X</th>
<th>M-X=x</th>
<th>x²</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>-2</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

\[ \text{Sum}=42 \quad \sum x^2 = 12 \]

Average = \( \frac{42}{7} = 6 \)

\[ \text{S.D} = \sqrt{\frac{\sum x^2}{N}} \]

It is defined as the square root of the average of the sum of the squares of deviations from the mean of the scores

**Uses of the Standard Deviation**

1. When the statistics of greatest stability is wanted.
2. When there are extreme deviations which would exercise a proportionately greater effect on the variability.
3. In further statistical calculations.

---

**24.4 Correlation**

It is the relationship existing between two variables

**24.4.1 Meaning and Uses**

It is an index which tells us the degree of relationship between two sets of scores either positively or negatively. Characteristics of the co-efficient of correlation are: It possesses both magnitude & direction. Limits: It always ranges from -1...... to + 1
24.4.2 Calculation of Co-efficient of correlation by Rank Difference Method

<table>
<thead>
<tr>
<th>Pupils</th>
<th>Marks in maths</th>
<th>Marks in science</th>
<th>Rm</th>
<th>Rs</th>
<th>Difference of Rank</th>
<th>$d^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80</td>
<td>85</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>75</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>62</td>
<td>68</td>
<td>10</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>65</td>
<td>70</td>
<td>8</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>82</td>
<td>82</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>85</td>
<td>79</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>64</td>
<td>75</td>
<td>9</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>79</td>
<td>69</td>
<td>4</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>78</td>
<td>76</td>
<td>5</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>70</td>
<td>72</td>
<td>7</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$\sum d^2 = 56$

$$=1-\frac{6\sum d^2}{N(N^2-1)}$$

$$=1-\frac{6\times56}{10(100-1)}$$

$$=1-\frac{6\times56}{10\times99}$$

$$=1-0.3$$

$$=1-\frac{56}{165}$$

$$=0.7$$

Positive high correlation

When there are repeated scores in the data how to give ranks
<table>
<thead>
<tr>
<th>Pupils</th>
<th>Marks in Eng</th>
<th>Marks in maths</th>
<th>$R_e$</th>
<th>$R_m$</th>
<th>$d=R_e-R_m$</th>
<th>$d^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70(5)</td>
<td>75(3)</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>68</td>
<td>70</td>
<td>8</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>80</td>
<td>75(4)</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>82</td>
<td>80</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>70(6)</td>
<td>75(5)</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>85</td>
<td>69</td>
<td>1</td>
<td>8</td>
<td>7</td>
<td>49</td>
</tr>
<tr>
<td>7</td>
<td>70</td>
<td>82</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>8</td>
<td>65</td>
<td>68</td>
<td>9</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>75</td>
<td>72</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

\[ \sum d^2 = 88 \]

In Eng-Add 5+6+7=18 and divide by 3
\[ =18/3=6 \]
Ranks im Maths- Add 3+4+5=12 and divide by 3
\[ =12/3=4 \]
\[ = 0.3 \]
\[ = 1 - \frac{6 \sum d^2}{N(N^2 - 1)} \]
\[ = 1 - \frac{6 \times 88}{9(81-1)} \]
\[ = 1 - \frac{11}{15} \]
\[ = 1 - 0.7 \]
\[ = 0.3 \]

Positive low correlation

Interpretation of index
± 0.1 to ± 0.3 Positive or Negative low correlation
± 0.4 to 0.6 Positive or Negative Moderate correlation
± 0.7 to 0.9 Positive or Negative High correlation

Uses of Co-efficient of Correlation
1. To find out the reliability and validity of evaluation tools.
2. When two examiners value the answer scripts, to find out the objectivity in their scoring.
3. To find out the relationship between any two school subjects.
4. To find out the relationship between internal assessment and external assessment in an examination.
5. To find out the relationship between any two variables of a group.
6. To know the truthfulness of certain statements made by the people for Ex: The intelligence of a person is depending upon the size of the head.
7. To improve the test items

24.5 Let Us Sum Up
1. You have learnt about the measures of Central Tendency. They are Mean, Median, Mode their meaning, calculation and uses.
2. You have learnt about the measures of Variability, They are Range, Quartile Deviation. Average Deviation and Standard Deviation their meaning and uses.
3. You have learnt about Correlation its meaning, characteristics, limits its calculation by rank difference Method and the uses of Co-efficient of Correlation.

24.6 Answers to ‘Check Your Progress’

‘Check Your Progress’ - 1
1. Central Tendency is a point in the distribution of scores, where the majority of the scores tend to fall.
2. Mean is used
-When the distribution is normal.
-When the most suitable measure of Central Tendency is designed.
-Mean is used in further statistical and standard Deviation etc.
-Mean it used to draw generalisations about the performance of a group.
-When we are interested to compare the performance of one group with another.
3. Mode is a quick and rough measure of Central Tendency when the Data is scant
4. The measures of Variability are - Average Deviation, Quartile Deviation and standard Deviation.
5. Range is the most quick and rough measure of variability.
6. It is the square root for the average of the sum of deviations from the mean of the scores.
7. It is half of the scale distance between the 75th score and 25th score when the scores are arranged from highest to lowest.
8. It is an index which tells us the degree of relationship between two sets of scores either positively or negatively.
9. The limit of Co-efficient of Correlation is from 1 through 0 to + 1.
10. Print from page 77 uses of Co-efficient of Correlation>

‘Check Your Progress’ - 1
1. Define Central Tendency

2. What are the uses of Mean?
3. What are the measures of Variability?

4. Which is the most quick and rough measure of Variability?

5. Define Standard Deviation.

6. Define Quartile Deviation.

7. Define Correlation.

8. What are the limits of Co-efficient of Correlation?
9. What are the uses of Correlation?

--------------------------------------------------------------------------------------------

--------------------------------------------------------------------------------------------

--------------------------------------------------------------------------------------------

10. What are the uses of Correlation?

--------------------------------------------------------------------------------------------

--------------------------------------------------------------------------------------------

--------------------------------------------------------------------------------------------

**24.7  Unit-End Exercises**

1. Prepare a frequency distribution table for the marks obtained in any subject that you are teaching

2. Calculate themen the median and the mode for the frequency distribution table that you have prepared for the raw scores

3. Construct the frequency polygon and the Histogram for the frequency distribution table and interpret the nature of the group

4. Write the advantage of graphical representation of test data (frequency distribution table)

5. Write the uses of co-efficient of correlation

6. Take any two types of measurement about a group and find the type of relationship existing between then

7. Collect the marks obtained by VIII or IX standard students in any two school subjects and find the relationship between them

8. Find the relationship between the hours of work at home and the academic achievement of a given class
24.8 References

1. Dandekar. W.N. : *Evaluation in Schools*
2. Henry Garett : *Statistics in Psychology and Education*
3. Guilford J.P. : *Statistics in Psychology and Education*
COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

BLOCK 05
MANAGEMENT OF SCHOOL PROGRAMME
### B.Ed. CC-03 : TEACHER FUNCTIONS

### Block

#### 5

**MANAGEMENT OF SCHOOL PROGRAMME**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit-25</td>
<td>Institutional Planning</td>
<td>367</td>
</tr>
<tr>
<td>Unit-26</td>
<td>School Plant</td>
<td>377</td>
</tr>
<tr>
<td>Unit-27</td>
<td>School Time-Table</td>
<td>389</td>
</tr>
<tr>
<td>Unit-28</td>
<td>School Discipline</td>
<td>399</td>
</tr>
<tr>
<td>Unit-29</td>
<td>School Records</td>
<td>412</td>
</tr>
<tr>
<td>Unit-30</td>
<td>Classification And Promotion</td>
<td>434</td>
</tr>
</tbody>
</table>
### INSTRUCTIONAL DESIGN AND EDITORIAL COMMITTEE

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
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<tr>
<td><strong>N. Krishnappa</strong></td>
<td><strong>Course Writer</strong></td>
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BLOCK – 05 MANAGEMENT OF SCHOOL PROGRAMME

INTRODUCTION

School is most important institution is any society. It is set up by the society with a large number of objectives. It has to play original role in building the society the important function of developing the future citizens of society is entrusted to the school. Since school becomes an important social institution it should be managed effectively to do its functions. The head of a school should have a profound knowledge and skills. In this block an attempt is made to explain the principles and, procedures of managing school programmes.

Unit 26, the meaning of school plant, the essential requirement (maximum/ desirable) of the school plant, the maintenance of school plant, student support services, importance of student support service are explained.

In Unit27, you aim to acquire the knowledge about the timetable, types of timetable, importance of timetable, and also the principles of construction of timetable.

Unit 28 deals with the School discipline. It explains the meaning of discipline traditional and role of Head Master, role of class-room teacher, role of parent-teacher association and student government in the maintenance of school discipline.

In Unit 29, Importance of school records, types of school records and maintenance of school records are described the format of different school records is also given.

Classification in educational contact means, assigning of pupils to a standard or a section is the purpose of instruction. It involves planning children in an educational setting which may provide them the best opportunity for all round development, primitive refers to allow the child to move to the next higher standard on the basis of performance.

In Unit - 30 you will study about classification and promotion of students
UNIT 25  INSTITUTIONAL PLANNING

Structure

25.1 Introduction
25.2 Objectives
25.3 Institutional Planning

25.3.1 Meaning
25.3.2 Importance of Institutional Planning
25.3.3 Objectives of Institutional Planning
25.3.4 Steps in the preparation of an Institutional plan
25.3.5 Characteristics of Institutional Planning

25.4 Let Us Sum Up

25.5 Answers to ‘Check Your Progress’

25.6 Unit-End Exercises

25.7 References

25.1 Introduction

In the previous Block, you studied about the meaning, calculation, uses of central tendency and variability. You also studied about the meaning uses and calculation of coefficient of correction. In this unit, you will study about the meaning of Institutional Planning. Institutional Plans are micro plans and the basic premise of a plan is that the existing physical, financial and human resources yield optimum returns. You will study the importance of planning at institutional level i.e, the involvement of teachers and community to optimum utilization of resources available. You will study the objectives of institutional planning and the steps involved in institutional planning. At the end of the Unit, you will study the characteristics of institutional planning.
25.2 Objectives

After studying this unit, you will be able to:

- explain the meaning of institutional planning
- bring out the importance of institutional planning
- state the objectives of institutional planning
- describe steps of institutional planning
- explain the characteristics of institutional planning

25.3 Institutional Planning

In this chapter, we shall study about the meaning, importance, objectives and important steps of institutional planning.

25.3.1 Meaning

Institutional plan is a programme of development and improvement prepared by an educational institution on the basis of its needs and the maximum utilization of resources available with a view to improve the school programme and school practices. It is based on optimum utilization of the resources available in school and the community.

Traditionally, educational planning in India is characterized by its centralized process and involvement of experts only. It is done at the high level. It is usually expenditure oriented and does not involve teachers and local personnel in its preparation and implementation. It is not attempted at institutional level. The planning is done by one and the responsibility of implementing the plan will be someone else’s.

It is high time that the educational planning focuses on decentralization and takes into account each individual institution as a separate entity. It should take care of active participation of the concerned individuals. Indian education commission (1964-66) has suggested that every institution should prepare its own plan of improvement and development. Planning at the institution level involves iron-monetary or ‘human efforts and thus de-emphasize the expenditure oriented thinking. This type of planning is highly essential in a developing country like India where financial resources are likely to be meager for educational development. The current trends in planning emphasize optimum utilization of existing or available resources. Institutional planning is one such current trend in educational planning.

Institutional plans are micro plans and the basic premise of a plan is that the existing physical, financial and human resources are yielding optimum returns. All these years, our planning system adopted top-to-bottom approach with the result that most of our schools remain unconcerned with educational development plans prepared at the higher level.
In the hierarchy of planning, institutional planning occupies the bottom most level, which has reference to one particular institution. It is because the needs, objectives, nature of problems, resources etc may considerably vary from one institution to another institution. These differences may not be noticed or attended to while planning is done at other levels. Thus, every institution will identify its problems, assesses its own needs through systematic planned efforts and finds alternative solutions. It can also develop appropriate programmes or objects to meet needs.

Hence decentralization of educational planning and management at the institutional level would now form the base of the planning process, permitting the active participation of all educational functionaries, school Headmasters, teachers, students, parents and other community members, where each one of them will have specific tasks to perform.

Kothari commission has said that “no comprehensive programme of educational development can ever be put across unless it involves every educational institution and all the human factors connected with its teachers, students and local community.”

The important aspects of this definition are:

- Institutional planning is unique for an institution
- It is based on the needs of the school as identified by concerned individuals (teachers, students, management and the community)
- It aims at school improvement and development
- It is based on the principle of optimum utilization of available resources (material as well as human resources)
- It provides for maximum utilization of community resources
- It introduces scientific approach to the process of planning
- It moves away from expenditure oriented, to effort oriented plan
- It helps to put democratic procedures into practice

25.3.2 Importance of Institutional Planning

The importance of institutional panning is as follows:

a. To give proper direction to educational planning in the country: Educational planning has been going on in our country for the few decades. However its impact has not been felt. It has been mainly an inverted pyramid, everything trickling from top to bottom, where individual teacher and institution have been forgotten. By reversing the normal trend followed
today institutional planning will give the right direction to the educational planning of our country i.e, from bottom to top.

b. To encourage and initialize freedom and creativity of the individual teacher and make the individual teacher effective: To weed out the outdated practices and initiate innovative practices, teacher must have initiative and freedom. The purpose of institutional planning is to have a living cell in the school, where some creative thinking is generated.

c. To avoid wastage and stagnation: There are resources in our educational institutions which are not put to optimum use. There is under use of both human and material resources leading to a lot of wastage and stagnation.

d. To give scope for planning at Institutional level in such a large country one single omnibus prescription does not suit; there should be a variety of experiments going on in millions of institutions in this country.

25.3.3 Objectives of Institutional Planning

At the school level, institutional planning may be of one or two years duration depending upon the nature of tests undertaken. In fact, in such an idea was first given by Kothari Commission during 1964-66.

The specific objectives of an institutional plan may be listed as follows:

- to provide educational facilities for the growing population of different age groups in the adjoining localities
- to improve the output quantitatively which implies the reduction of wastage and stagnation
- to improve economic output i.e. reducing the cost per pupil, better utilization of available resources etc.
- To improve the qualitative output, such as improving the user level knowledge and skills of pupils, their application ability and so on.

J. P. Naik has listed the following objectives for instructional planning:

- It aims at involving every teacher in the formulation and implementation of plans
- It aims at allowing adequate freedom to teachers to think of new ideas for the improvement of instruction and other programme of the school
- It aims at encouraging the teachers to do something creative and thus provides job satisfaction to them
● It aims at shifting the emphasis from expenditure orientation to that of proper utilization of sources
● It aims at providing local committee with an opportunity to join hands and to improve the school
● It aims at imparting realism and concreteness to educational planning

“For the institutional planning, the motto should be not high aim but failure is a crime.” The size of the plans and the levels of implementation are not important, what has to be insisted upon is doing things with dignity, in pride is yourself and with success” If this is followed up then institutional planning will be put successfully on the ground.

Therefore, if each institution is to be the unit of educational planning, it is essential to involve educational and institutional administrators teachers, parents and students in the process of educational planning because democratic educational planning and administration presupposes popular participation just as any other process of democracy.

It should be the responsibility of the schools and professional organizations to form planning forums and undertake improvement programmes at their own level. Teachers should be trained to assume leadership in the matter of educational planning by preparing effective plans for their institutions which become the basis for further planning at the institutional, cluster level and block level from below and supplement planning from above.

25.3.4 Steps in the preparation of an Institutional plan

While preparing the institutional plan, the following steps are important:

a. Undertake a survey of the needs of the school resources (material and human) available in the school and community. This involves listing the needs of students, teachers, community people and non-teaching staff. This also includes curricular, co-curricular, organizational, administrative, financial and material (equipment, furniture etc) requirements of the school. This also takes into account capabilities, talents, resourcefulness of staff, students, resources, persons available in the community, material or physical resources that could be put to use.

b. Prepare a plan of Improvement / Development: This involves preparation of a plan depending upon the needs of the school, resources available in the school and community. It might involve a series of projects (individual/group) to be undertaken, a programme of improvement / development to be implemented. Planning process should include ideas, initiative and involvement of all the concerned individuals.
c. Execute the plan with available resources and with maximum efforts:- This involves phased implementation of the plan with limited financial resources and unlimited human resources and effort. Talents, abilities and resourcefulness of school, staff, students and community could be put to maximum use.

d. Evaluate the programme of Improvement Development: This is done to take stock of the results of the programmes and to judge the effectiveness of efforts. It also helps to find out the extent of success or failure of the programme to investigate the causes and to remove the deficiencies.

Likewise the next development / improvement programme in the order of priority could be planned, executed and evaluated. Following are some of the broad areas under which institutional planning could be attempted (a) Curricular programmes (b) Co-curricular programmes (c) Examination and Evaluation (d) Discipline and welfare services (e) School community relationship.

25.3.5 Characteristics of Institutional Planning

The following are the characteristics of institutional planning:

1) Need based: An institutional planning is prepared, keeping in view the needs of the school as felt by the staff of the institution. These needs may be in the area of school organization, curricular programmes, co-curricular programme etc.

2) Specificity: Every institution has its own image and individuality. The plan for an institution should have its individual lines of development and improvement according to the resources available and potentialities. Every institution therefore, should have its own specific plan.

3) Optimum Utilization: The Institutional plan is not expenditure oriented. Its major criterion is the maximum utilization of the human and physical resources available in the school and the local community.

4) Augmenting human efforts: As a corollary to the maximum utilization of human resources, there should be deliberate attempts by an institution to augment the human efforts. This is essential for large number of educational programmes which need imagination, initiation and inspiration rather than finance and physical facilities.

5) Goal oriented: The entire planning at institutional level is directed towards the national goal that is pursuit of excellence in every field. This national goal is the common feature of the plans of all institutions in the country. To achieve this, institutional plans will continuously fix higher and higher goals and there by, the plan will go on continuously improving and developing the institutions.
6) Co-operative in nature: The institutional plan is the co-operative venture of all concerned pupils, teachers and community. Close involvement of all these agencies is encouraged by this planning process. The head of the school is however, to play the role of leader, in preparing and organizing the plan.

7) Flexibility: The plans prepared at the state and national levels suffer from the elements of rigidity. On the other hand, institutional plans are highly flexible, always open for modifications as demanded by circumstances. It accommodates all changes.

8) Democratic Setup: Institutional planning implies involvement of all concerned. This is possible only in a democratic set up where everybody has worth and dignity. Planning and execution at the institutional level also promotes democratization in the school.

9) Community support: Community support through community involvement is a requisite of institutional planning. A good institutional plan will ensure the establishment of a better rapport with the community.

10) Improved motivation: An institutional plan through its successful implementation, results into improved motivation on the part of the teacher, pupils, management and community. It will create greater enthusiasm and a sense of belongingness in all the involved agencies to improve education.

‘Check Your Progress’ - 1

1. What is Institutional Plan?

2. What is the importance of Institutional Planning?

3. Mention the objectives of Institutional planning.
4. List the step of Institutional planning.

25.4  Let Us Sum Up

In this unit, you studied about the institutional planning. You understood that institutional plan is a programme of development and improvement prepared by an educational institution on the basis of its needs, and optimum utilization of the resources available in the school and the community. Kothari commission has said that “no comprehensive programme of educational development can ever put across unless it involves every educational institution and all the human factors connected with its teachers, students and local community.”

You understood the importance of institutional planning i.e. to give proper direction to educational planning in the country, to encourage and initialize freedom and creativity of teacher, to avoid wastage and stagnation and to give scope for planning at institutional level. You also studied the objectives of institutional evaluation stated by J. P. Naik. In the later part of this unit, you studied the steps in the preparation institutional plan. And at the end, you studied and understood the characteristics of institutional planning like need based, specificity, optimum utilization, augmenting human efforts, goal oriented, co-operative in nature, flexibility, democratic set up etc.

25.5  Answers to ‘Check Your Progress’

Check Your Progress -1

1. Institutional plan is a programme of development and improvement prepared by educational institution on the basis of its needs and maximum utilization of resources available, with a view to improve the school programme and school practices.

2. The importance of institutional planning is as follows:
   a. To give proper direction to educational planning in the country
   b. To encourage and utilize freedom and activity of individual teacher and make it effective
   c. To avoid wastage and stagnation
3. The objectives of institutional planning are:
   a. To provide educational facilities for the growing population of different age groups
   b. To improve the output quantitatively which implies the reduction of wastage and stagnation
   c. To improve economic output
   d. To improve the qualitative output, such as improving the level of knowledge and skill of pupils, their application level and so on.

4. The steps of institutional planning are:
   a. undertake a survey of the needs of the school resources (material and human) available
   b. preparing a plan of improvement / development
   c. Execute the plan with available resources and with maximum efforts
   d. Evaluate the programme of improvement/ development

5. The Characteristics of institutional planning are:
   - Need based
   - Specificity
   - Augmenting human efforts
   - Goal Oriented
   - Co-operative in nature
   - Flexibility
   - Democratic set up
   - Community support
   - Improved motivation
   - Optimum utilization

25.6 Unit-End Exercises

1. What is Institutional planning? Explain its importance
2. Describe the objectives of Institutional planning
3. Explain the steps of institutional planning
4. Explain the characteristics of Institutional planning

25.7 References

UNIT 26 ▪ SCHOOL PLANT

Structure
26.1 Introduction
26.2 Objectives
26.3 School Plant
   26.3.1 Concept
   26.3.2 Requirements
   26.3.3 Maintenance
26.4 Student Support Services
   26.4.1 Essential, Desirable
   26.4.2 Importance of Student Support Services
26.5 Let Us Sum Up
26.6 Answers to ‘Check Your Progress’
26.7 Unit-End Exercises
26.8 References

26.1 Introduction

In the previous Unit, you studied about Institutional Planning - Meaning, Importance, Objectives, Steps and Characteristics of planning. Institutional plan is a programme of development and improvement prepared by an educational institution on the basis of its needs and the maximum utilization of resources available.

In this Unit, you will study the school plant the concept, maintenance of school plant, and optimum utilization of it. You also study the essential/desirable student support services in school plant and the importance of student support services.

26.2 Objectives

After studying this unit, you will able to:

- Give the meaning of school plant
- List the essential requirement of school plant
- Explain the maintenance of school plant
- Explain the optimum utilization of school plant
- Explain the student support services required in a school plant
26.3 School Plant

The school plant is a factor of tremendous-normal importance in education. More the emphasis on speeding up the process, more will be the emphasis on good learning environment. Non-Function, meagerly equipped and unattractively decorated school plants have given place to plants with superior lighting, attractive decoration, comfortable seating, useful service facilities such as library, multipurpose room, functional play ground etc. Although because of financial handicaps all these requirements may not be met, this is the ideal. It is necessary that our school plants become the learning laboratories. In this unit, you will study the concept, requirements and maintenance of school plant, student support services.

26.3.1 Concept

School plant is a comprehensive term meaning building, play ground, furniture, equipment, laboratory and so on. All the physical facilities that are required for achieving the various objectives of the school constitute the school plant. The school plant includes not only the existing facilities, but also the future requirements to meet the changing demands of education.

This is an established fact that best work can be accomplished with the best tools. Teaching-learning process that takes place in the school and the school plant are related in such a way as the soul to its body or production to the land. Even the more efficient Headmaster and the best staff can discharge their function properly, only when they are provided with proper material equipment like spacious building, suitable furniture, well equipped laboratory, library, sports ground and so on. On the other hand, ill equipped schools do hamper the all round development of the child. A good library may help the child to develop intellectually, at the same time, a good sports ground promotes his physical growth and laboratory trains him to acquire more and more application ability. The school plant is the ‘child’s home’ during the school hours and the ‘community center’ afterwards. It may be called a ‘living laboratory’ where children learn through living and doing. It is also known as ‘youth center’ or a ‘civic enterprise’ which provides, recreational, educational, library and other cultural facilities for multifarious development and growth of the youths.

26.3.2 Requirements

The basic need of any school, in the first phase is its basic desirable requirements like site, buildings, equipment, etc. You will study all these aspects in this sub-unit.

The important principles that may be kept in mind for provision of the school plant are:
a. The immediate as well as ultimate needs as required to realize the objectives of the education at a particular stage and in a particular area should be clearly identified, formulated and phased according to urgency. That is why both short-term and long term plans should be chalked out.

b. Planning should ensure reasonable flexibility in order to facilitate necessary adjustments suiting to the changes that may occur in educational programmes in future.

c. There should be sufficient room for additions and alterations in the school plant to accommodate change in curriculum, roll strength and personnel.

d. The trends of expansions in the local industries, commerce, communication and other ventures should be taken into consideration for planning the school plant.

e. A blue-print or a Master plan should be drawn up before starting any major construction work. This should provide all the present and further needs of the society.

The Site

A school cannot be put up anywhere and everywhere. It has a great importance and significance. There are certain definite considerations which a proposed site must fulfill before it can be declared suitable for building a school.

- **Good Location:** The cost of the site is not important, but the location is the deciding factor as the expense involved may be such a heavy drain on the resources of the school, that the essential services may have to be curtailed to the detriment of the education function.

- **As much as possible, the site should be outside the town:** Adequacy and suitability should be the primary consideration. Attention should be given to the distance of site to the existing or traffic routes with a view to minimizing the danger to children on their way to school.

- The Direction in which the Town is growing and extending should also be borne in mind so that it may not be within the reach of the town in a short time. Crowded streets, heavy traffic, stagnant drains and rubbish heaps should serve as a challenge to the school authorities.

- The school should be located in correct distance to the other physical facilities of a community such as parks, health centers, libraries etc.

- The Site for the School should be located near the present and probable future
centers of the school population to be served. The educational authorities are
generally of the view that elementary school pupils should not be asked to walk
more than three fourths of a mile and secondary pupils more than a mile and a
half.

- The School should be constructed in places which are open and spacious enough.
The child requires above all, space to be active is the conception of education
as a process in which the child is immobile and receptive, while the teacher was
active and energetic, has been replaced by one of the children learning through
his own activities.

The school Building committee of the Central Advisory Board of Education has
recommended the following minimum area.

<table>
<thead>
<tr>
<th>Number of Children</th>
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<tr>
<td>For 160 children</td>
<td>2/3 Acre</td>
<td>2-3 Acres</td>
</tr>
<tr>
<td>For 320 children</td>
<td>1 Acre</td>
<td>4-5 Acres</td>
</tr>
<tr>
<td>For 480 children</td>
<td>1 1/2 Acre</td>
<td>6-7 Acres</td>
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The Site should be little raised, if possible and at any time should be dry. There should
be no ponds or low lying water logged ground near at hand. The site should be sufficiently
removed from the noise, dust, smoke and physical danger of factories and rail roads. It
should provide sufficient space for further expansion.

**School Building**

The basic need of any school, in the first place is a good building which enables us
to conduct classes. There are no two opinions on the idea that a school building must be
excellent - planned spaciously, functionally and with pleasing architectural features. “Buildings
are to education as body is to the mind.” A sound mind can only be there in a sound body.”
It is very well expressed in the statement. A fine building makes a fine school and a poor
building a poor one. Schools should be housed in beautiful buildings, which are not only
stimulating centers of education for children but also vital centers of community life.

Experts have suggested the following seven principles for planning a school plant
building.

- **Curriculum Adequacy:** The plant must be planned to provide the facilities necessary
  for the efficient accommodation of all the phases of curricular, co-curricular and community
  activities for which the plant is intended.

- **Safety and Well Being:** The school plant should be so planned as to protect the
comfort, health and safety of pupils, teachers and all who will use its facilities. Lighting, heating and ventilating should be in accordance with the best practices.

**Intersectional co-ordination:** Each unit or portion of a plant may be well planned for its specific purpose, yet if the units are not put together with respect to their mutual relationships, the plant as a whole, will not be satisfactory. For example, certain activity rooms should be planned according to the activities carried out. The noisy units should be located so as not to interfere with quite zones.

**Efficiency and Utility:** The school plant should be planned and assembled in a manner that will promote efficient school management and convenience of pupils and the public in its use.

**Beauty:** The entire school plant should be cheerful, attractive and pleasing.

**Adaptability:** A school plant should be planned for economical future adaptations to changing requirements.

**Economy:** A school plant should be economical in its original cost, upkeep and operation. The school building may be made of any material metal, glass or kacha material. All these should universally be adapted to facilitate enough sunlight and ventilation. Low initial cost, durability, appearance, acoustical properties; ease of maintenance and low operational costs should decide the type of building we construct for our children.

**Class-rooms:**

In the secondary school, it is desirable that each section of students should have a room, though in teaching two sections or more can be accommodated in one big room designed to seat about 70 pupils. It is desirable that some rooms should accommodate as many as 70 and others 30 to 40 students. About one fourth to one fifth of the rooms should be larger and smaller than the average. An essential component of the class room is a good and well lit black board. It is always good to have separate class-rooms for teaching each subject. This develops in the pupils more interest and sense of belongingness towards the subject and the department. Space for keeping racks and audio visual aids should be provided. In case of subjects like physics, chemistry and biology, suitable arrangements should be made for keeping the relevant apparatus and equipments.

The class-rooms should present a pleasant and inviting look. The walls should be painted with some light colour and the rooms should be tastefully decorated. Rooms with northern and eastern light should have warm colours such as yellow orange etc., and rooms with southern and western light should have cool colours such as green, blue, and certain compositions of grey. In dark coloured wall-rooms, ceiling should be white, in others it should be cream coloured.
The Office Room

It is desirable that the office room is centrally located to serve as good coordinating center for the school. It should be easily accessible to visitors, teachers and pupils. A good office in a large secondary school requires these things.

1. A room for the principal
2. A waiting room for the visitors
3. An office room for the clerical staff and
4. A store room with shelves and wall cupboards for office and educational files.

26.3.3 Maintenance

All facilities and equipments in the school must be regularly and frequently inspected in order to assure its proper working at all times. The Principal / Headmaster should be very vigilant to protect the school plant from defacement and damage. Any defacement marks should be removed immediately. Both teachers and students should be made to imbibe the virtues of good housekeeping. No waste-papers, pieces of chalks should be lying about. The co-operation of the faculty is essential in building up attitudes in the part of the pupils against carelessly dropping wastepaper etc in the halls or on the classroom floors or on the grounds. Such co-operation results in desirable training for citizenship. In addition to improving the appearance of the school, the rooms should be free from accumulation on walls, tables, equipment etc. School plants should be regularly and periodically inspected for detecting the needs of repair. General repairs might be undertaken during vacations while the emergency repairs should be attended immediately.

Plant Utilization

Though the school plant, particularly, the building is used for educational purposes, community should also be allowed to use the same for village meetings, elections, family planning meetings etc., It is also suggested that school building should be used to the optimum, by holding two independent schools in-shifts or-for the programme of non-formal education.

The Indian Education Commission (1964-66) has aptly observed that since it is very costly to provide and maintain physical plant of educational institutions, it becomes necessary to utilize it as fully as possible for the longest time in each day and for all the days in the year by making suitable administrative arrangements. It is evident from the Third Educational Survey (1979) that the community participation in school activities is greater than the school participation in the community activities; in fact the position of community is encouraging.
It has been emphasized in a study (1980) that for democratization and improvement of education, such cooperation and collaboration should be promoted between the school and the community.

**Check Your Progress - 1**

1. What is a school plant?

2. List the essential requirements of school plant.

3. List the consideration of a good site.

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**26.4 Student Support Services**

**26.4.1 Essential, Desirable**

School plant is a comprehensive term meaning building, play ground, furniture, equipment, library, laboratory, Hostel, etc. In the school, all the planning shall be done keeping in view the needs of the learner. Students play a vital role in the school. Hence while planning the school plant, importance should be given to aims and objectives of the school, the needs, tastes, aptitudes of the pupil. In this sub-unit, you will study the student support service required in a school plant both desirable and essential.

**Library**

Library is an indispensable part of the school. It has been the center of modern educational activities for organizing seminars, symposia, project work, in service training courses and soon. There should be a reading room adjacent to the library and a large number of seats, desks, book shelves and almirahs with artistic effect, for making it pleasant and attractive. There should be sufficient provision for light and air. The library should be
conveniently located with easy access to all pupils of various classes and all teachers of the school.

Modern library is not merely a place for locating books and journals in the advanced educational institutions. It should be a “Learning resource center” which provides different kinds of audio-visual media and materials including slides, filmstrips, educational films, radio and T.V programmes. That is all kinds of facilities and resources are made available in the center for promoting learning experiences. The library room in our country should be balanced accordingly with a vision for the future growth and development.

**Assembly Hall**

Assembly hall is an important general-use facility of the secondary school plant because it is here that general meetings, dramatics, lectures, exhibitions, declamation contests and many activities are arranged. Its size will be determined by the local needs, but the hall should have a suitable stage of not less than 20 by 30 feet with green rooms and other equipment and furnishings.

The hall should be located on the ground floor and possibly in a wing isolated from the quieter areas to ensure safety of crowds, easy access for both pupils and the public reduced sound interference and accessibility to parking. The hall can be used as a multipurpose room as an auditorium with a combination of functions such as gymnasium, refreshment room and as audio-visual room etc.

**Science Laboratories**

The school must possess well-planned and equipped science rooms and laboratories to aid instruction and stimulate greater interest in science course. The old practice of having separate lecture and practical rooms is now giving place to multiple use rooms; a good size for an average school room is 24 by 42 feet. If service connection for gas, electricity and water are provided in wall, it will be easy to use the movable assets. Built in cupboards for storing medical and apparatus should be provided. They will save space and also assure a better look.

**Music Room**

Music in its various forms has become a basic school offering. In recognition of the significant place music fills in the school programme, it becomes necessary to provide well equipped music room for the purpose. Special acoustical treatment is essential for all music rooms. Sound from music room should not interfere with the work in quite areas of the building. Special attention should be given to build in wall cases and adequate storage for instruments. A small music library may also be provided.
Medical Examination Room

Every secondary school should have a room set aside for medical and dental services. It should be equipped with running water and electric power outlets.

School Counselor and the Career Master’s Room

In a secondary school provision of guidance service is essential. A room should be given to the school counselor and the career master where the pupils may meet him or he may meet the pupils when needed.

Cafeteria

Cafeteria will be a valuable adjunct of any educational institution. The size of the cafeteria and the equipment needed will vary with the size of the high school and the number of students who patronize it. The best location for the cafeteria if space allows is probably a separate wing of the main building.

The Hostel

Now-a-days the importance of the school hostels has gone down with the expansion of schools in the nook and corer of the country. It is regarded as a center of citizenship training and second home of the pupils. Many good qualities of head and heart are developed at the hostel. The hostel should be provided with adequate sanitary facilities. It is desirable to set up single storied building for the hostel. The superintendent’s quarters should preferably be attached to the hostel.

The Hostel should not be considered merely as a place for boarding and lodging of the pupils. It should provide all the opportunities for promoting healthy habits and developing good qualities like fellow-feeling, co-operation, mutual help and punctuality. The hostel life should cater to the needs of the future citizens by providing ample opportunities for civic training.

Art and craft room

Arts and crafts have found an important place in the modern school curriculum. A separate room provided with adequate number of tables, chairs, storage facilities, stands for apparatus and equipment is found helpful for the activities like toy making, modeling, woodwork, embroidery, painting and drawing. This room should not be crowded and wash basins as well as sinks should be fitted in the room for cleaning. A teacher’s demonstration table may be placed at the center place and all kinds of apparatus necessary for different activities should be kept properly.
26.4.2 Importance of Student support services

Student support services in the school plant play an important role. For the all round development of the pupils, activities should be conducted according to the needs and aspirations of individual pupils. Library and laboratories help the individuals to enrich their knowledge. A store of knowledge of pupil can be accumulated by developing reading habits among the pupils. Music room, art room etc., will help the pupils to increase their participation in the extra-curricular activities. “A sound mind in a sound body” can be created through extracurricular activities. The role of counselor and career master is very important. It is a difficult stage for the secondary students to decide their future aspirations. Counselors provide right direction to the students to choose a particular course after completion of their secondary schooling. So student support services are important in secondary schools to achieve the various objectives of the school in general and students in particular.

‘Check Your Progress’ - 2

1. What are the student support services required in a school?

26.5 Let Us Sum Up

In this unit, you studied about the meaning of school plant, its requirements and maintenance of school plant. School plant is a comprehensive term meaning building, playground, furniture, equipment, laboratory and so on. All the physical facilities that are required for achieving the various objectives of the school constitute the school plant. The essential / desirable requirements of a school plant are the site, which should be in a good location, as far as possible it should be outside the town, it should be located to serve the population, it should be constructed in places open and spacious enough, it should be little raised if possible.

The school building to be constructed should be as far as possible according to the principles of design. Class-rooms should be spacious to accommodate 30-40 students in average. The school plant should have office, principal’s chamber and staff room. You studied about the maintenance of the school plant. All facilities and equipments in the school must be regularly and frequently inspected in order to assure its proper working at all times.
Optimum utilization of the school plant should be made. Though it is used for educational purposes, community should also be allowed to use the same for elections, family planning meetings and other Community activities. Educational surveys conducted from time to time suggested that, physical facilities should be shared by both school and community. In the later part of this unit, you also studied about student support services like library, assembly hall, laboratory, music room, medical examination room, school counsel rooms, cafeteria etc., Libraries are centers of educational activities for organizing seminars, symposiums, project work, in service training programs etc., Modern Libraries are ‘Learning resource centers’ which provide different kinds of Audio-visual media and other related equipments.

Assembly halls help to prove the talents of secondary school students through dramatics, exhibitions, contests, quiz’s etc. Science laboratories, music rooms, medical examination rooms, school counselor’s rooms are the other student support services.

26.6 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. School plant is a comprehensive term meaning building, play ground, furniture, equipments, laboratory and so an.

2. The requirements of school site are:
   a. the site
   b. school building
   c. class-rooms
   d. Principals room
   e. Staff room etc.

3. The considerations of a good site are:
   - good location
   - As far as possible, it should be outside the down
   - The direction in which the town is growing
   - The site for the school should be located near the present population.
   - It should be constructed in places which are open and spacious.
   - The site should be a little raised.

4. Suggested principles:
   - curriculum adequacy
- safety and well being
- inter-functional coordination
- efficiency and utilities
- beauty
- adaptability and economy

‘Check Your Progress’ -2

1. The student support services are
- Library
- Assembly Hall
- Science Laboratories
- Music Room
- Medical Examination room
- School Counselor’s Room
- Cafeteria / Hostel etc.

26.7 Unit-End Exercises

1. Explain the essential requirements of School Plant.
2. Explain the considerations to be kept in mind while planning a school plant.
3. How to maintain a school plan?
4. Explain the importance of student support services.

26.8 References

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UNIT 27 □ SCHOOL TIME–TABLE

Structure

27.1 Introduction
27.2 Objectives
27.3 Timetable
  27.3.1 Types of Time table
  27.3.2 Importance of Time table
  27.3.3 Principles of Time table Construction
27.4 Let Us Sum Up
27.5 Answers to ‘Check Your Progress’
27.6 Unit-End Exercises
27.7 References

27.1 Introduction

In this Unit, you will be studying the meaning of timetable and its related aspects. As you aware, every school will have its own timetable for the smooth running of an Institution. It is a plan art showing the daily allotment of time among the several subjects; activities and classes. You will also study the types of timetable, importance of timetable in the school and principles of construction of time table.

27.2 Objectives

After studying this Unit, you will be able to:

- Give the meaning of timetable
- List the types of timetable
- Bring out the importance of timetable
- Explain the principles of timetable construction

27.3 Time Table

The school timetable is a methodical and pre arranged scheme of studies and activities. It is a plan showing the daily allotment of time among the various subjects, activities and
classes. It shows the hours of school work, the teaching load of each teacher, and the duration of (length) of each period and the time of interval. A timetable in fact, is the second school clock, on the face of which are shown, the intervals, the hours of the day between which lessons are taught, the kind of activity in progress in each class. It also shows art, craft, community social service and sports activities, which though regularly recurring do not rank as ordinary lessons. It is in fact a mirror that reflects with some accuracy the entire educational programme followed in the school.

27.3.1 Types of Time Table

A good timetable clearly indicates what types of curricular and co-curricular activities that are being carried out in the school at a particular place and a particular hour. It also shows under whose supervision and guidance those activities are being carried out. More the number and variety of activities, more will be the types of timetable. Therefore, it is desirable for the efficient working of school programme to have the following types of timetable:

Consolidated Time Table for the Whole School

It is also known as the general timetable. This timetable is a complete picture of the entire school programme per day. It is a sum total of all the class timetable in a concise form, but is also a record of every teachers daily work. It shows the details of work of every individual teacher, with regard to his curricular and co-curricular activities in the school and also vacant periods allotted to him. This timetable is generally meant for the reference of the Headmaster. One of the copies should also be put in the staff rooms.

Class Time Table:

It is a timetable of each class and section thereof. It shows the distribution of subjects with teachers for each period. It also shows the breaks in between the teaching periods along with recess and the periods for games and co-curricular activities. All the sections and classes in a school follow their respective class timetable and have a copy there of in their classrooms.

Teachers’ Time Table

Every teacher has a copy of his own programme showing the details of his academic and nonacademic work. A consolidated timetable containing the programme of all the teachers in a school is also prepared for the guidance and supervision of Headmaster. A copy of this timetable is placed in the staff room and another copy with Headmasters chamber.

Vacant Periods Time Table

A special timetable showing the vacant periods of all the teachers is also prepared. This will be helpful in alloting work, when some teacher is absent. Pupils may not behave
properly in the absence of a teacher, so if on a particular day one or more teachers are absent, the Headmaster must keep their classes busy in one way or the other. And the best way of doing this job is to consult the vacant period’s timetable and allot those teachers to those classes, who are vacant in those periods. A copy of this timetable is always available in the Headmasters office.

Games Time Table

This is one of the types of timetable that shows the co-curricular activities. It shows which particular group is engaged in a particular game at a particular time. Groups for games are not organized on the basis of sections or classes. These are organized on the basis of age and proficiency in games. So the need for a games timetable can hardly be stressed. In this timetable is also shown the number of play grounds which are being used by a particular group of students in the case of particular games.

Co-Curricular Activities Time Table

In addition to games, a variety of co-curricular activities are also organized in every good school. The importance of co-curricular activities cannot be minimized. A regular timetable of all such activities is prepared in the beginning of each session showing the different types of activities in the school, the names of teachers’ in-charge of those activities, the place where they are to be held and the time when they are to be undertaken. It saves a lot of duplication and over lapping and facilities, in the formation of groups of pupils participating in the activities of their own choice and liking.

Home Work Time Table

In every school, some home work is daily assigned to pupils in various subjects. But in order to see that this home work does not become a mental strain on the average pupil, a home work timetable is prepared before hand by each section and class. It shows the amount of home task to be set by each teacher for the class or classes in his or her own subject during a week. In this way, home work can be adjusted among the various teachers teaching the class and then no teacher can unnecessarily over burden the pupils with work in his own subject, without consulting other teachers. A copy of this timetable is put up in each class or section and the monitor is to see that home work for the day has been assigned by the teachers concerned. It is also needed to send a copy of home work timetable to parents to secure their co-operation in this direction. In some schools, ‘home-tasks exercise book, is introduced in the middle and higher classes and every pupil is required to keep a copy there of. In this exercise book the home task assigned to pupil in various subjects as entrusted by the teachers concerned each day is marked for the information of the pupil’s parent or guardian and the pupils is required to get his/her parents or guardians signature with date after he/she has done the home work assigned to him /
her on that particular day. Such a practice inculcates in pupils the good habit of revision and independent work even after school hours.

‘Check Your Progress’ - 1

1. List the types of timetable

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27.3.2 Importance of Time Table

Timetable is a necessary tool for the efficient working of a school. It is really a mirror that reflects the entire educational programme of the school. It is the timetable that supplies the framework within which the work of school proceeds. It is the instrument through which the purpose of the school is to function. The importance of timetable lies in its values which may be mentioned as follows:

It ensures smooth and orderly working of the school

In a timetable everything is planned in advance. All the teachers and pupils know their job as well as time they are to devote to each item. It is therefore that smooth orderly and regular work in the school goes on even in the absence of the Headmaster or any of the teachers. In case there is no timetable in the school, there is always the danger of negligence of duty, duplication of the effort and repetition of unnecessary items and activities. Timetable places proper persons at their proper places at the proper time and in the proper manner.

It prevents waste of time and energy

Timetable shows exactly what is to be done at a particular time. It directs the attention of both pupil and the teacher to one thing at a time. Thus one’s energy is automatically directed in a particular direction and this prevents a lot of wastage of time and energy. It also prevents confusion, duplication, overlapping and unnecessary repetition on the part of the pupil and teacher.

It ensures equitable distribution of work among teachers

Timetable gives summary of the work allotted to each teacher. The Headmaster or another superior officer can know at a glance the amount of work that every teacher is expected to do. Thus timetable helps in avoiding the allotment of too much or too less work to one teacher.

It ensures equitable distribution of time to different subjects and activities

Timetable gives due attention and emphasis to various subjects and activities in the
school according to their relative importance or difficulty. This is very essential for the all round development of the pupils. While more important subjects and activities get more attention and time, the less important ones are not altogether neglected.

**It helps in adjusting School work according to the needs of pupils**

Timetable helps the school authorities to adjust school work according to the physiological needs of pupils. This is the only reason why fatigue, interest and freshness of mind and body are given due consideration at the time of constructing a timetable.

**It helps in the formulation of good habits**

A good timetable is very helpful in inculcating the habits of orderliness, punctuality and steadiness of purpose, both in teachers and students. It ensures regularity, even progress by preventing laxity. It develops a methodical attitude towards work among pupils and teachers in the school. Such adherence to a pre-arranged plan of work is the secret of the success of all persons, connected with the school.

**It aids the school discipline**

School timetable directly aids discipline in the school to a great extent. It prevents confusion and duplication of work, distributes noise in various spheres of school activity, lessens the need of punishment by keeping pupils busy in desirable activities and lets every one’s own business. Everything appears to be in perfect harmony, smoothness and concord. In the absence of such a plan, the school is sure to go topsy-turvy. Thus timetable not only facilitates work, it also adds efficacy and efficiency in various spheres. A timetable is therefore an absolute necessity for every type of school and its vital importance cannot be denied.

‘Check Your Progress’ - 2
1. What is the importance of timetable?

27.3.3 Principles of Time Table Construction

In the previous pages of this unit, you studied about the types of timetable and importance of the timetable. In this sub-unit, you will study about the principles of timetable construction. It is not an easy task to prepare a good timetable. It is really a complicated piece of work because it is determined by a number of factors and conditions which change from place to place and from school to school. Its construction therefore requires thorough
concentration and perseverance of mind. While constructing a good timetable, the following important principles should always be kept in mind:

1. **Type of School**

   The nature of curricular and co-curricular activities to be organised in a school is determined by its type. Activities organised in a higher primary school will differ from those in a secondary or higher secondary school. Similarly, rural schools will differ to a great extent from an urban school. Single teacher and double shift schools have their own specific problems which must be solved through the timetable. It is therefore that while constructing a timetable, the specific needs of the school, for which it is meant, must always be kept in mind.

2. **Departmental regulations:**

   Generally, the Department of Education in different states fixes the length of the school year, the duration of the school day, the duration of the each teaching period and even the number of periods in each subject. Usually, eight teaching periods are provided for secondary classes and seven for primary and higher primary classes. It is therefore, becomes essential that school timetable is in agreement with the government policy.

3. **Amount of time available**

   As we have stated above, the allotment of time to different subjects and activities is done on the basis of the amount of time available. In some states, the duration of the time allotted to each subject has been fixed by the department of education. Timetable will therefore be formed in accordance with departmental instructions. In case of shift schools, duration of school day is naturally shorter. It will therefore necessitate several changes in the school timetable.

4. **Relative importance and difficulty of subjects**

   The distribution of time and periods among the various school subjects is a matter of great importance. Provision for each subject should be provided in the timetable according to its importance which of course is determined by the social, economic and cultural considerations as well as by the further needs of the pupils. There is also the consideration for the relative difficulty of subjects. Thus more time in secondary schools is given to mathematics, English and science not because they are more important but they are more difficult. In primary and higher primary schools, more time is devoted to reading, writing, arithmetic and craft because of their difficult nature as compared to social studies. Similarly, the number of subjects, combination of subjects provided and number of elective groups introduced in a particular higher secondary school must also be taken into consideration, while framing a suitable timetable.
5. **The Element of Fatigue**

Fatigue in reality is the state of inability to continue work after a prolonged activity of certain parts of the body. It is of two kinds a) Physical or muscular and b) Mental or nervous. When any part of our body works for a long time, a sort of chemical action is produced with the blood in that part. As this action is too great, the waste products in the body are produced to such an extent that it is too much to be carried easily by the blood. So we feel a sort of pain, which is called fatigue.

Fatigue weakens attention and perception and diminishes the power of insight and initiation. Hence the work rate is also diminished. In the school some subjects cause more fatigue than others. They involve a heavy mental strain and effort. Such subjects should be taught during early hours when the brain is fresh. It has been noted psychologically that the second and third periods on a school day are the best when the work curve reaches its highest point. Similarly the second and third days of week are the best, when momentum is the highest. Monday is only the warming up day and Saturday is perhaps the worst. So subjects like English, regional languages and mathematics should be taught during the best periods of the day. Similarly subjects like arts, crafts, writing, Science practical and manual work etc which require less concentration should be provided in the last periods. Lastly the duration of periods must change according to age, physical conditions and season. In summer, periods should be of shorter duration as compared to winter. Similarly in case of primary classes, periods should not be very long. Small children get fatigue very soon and so they need frequent changes in activities and occupation.

6. **Variety**

Timetable should be constructed in a manner that it allows frequent change of places and postures to pupils. The same subject should not be taught continuously for many periods nor should be the same class sits in a particular room for the whole day. Change of seat, room and posture is the best remedy against fatigue. Similarly easy and difficult subjects and lessons should be provided alternatively in the timetable for the sake of variety. If a subject is to be taught for two or three periods in a week, it should not be provided on consecutive days. It should rather be fixed in the timetable after regular intervals.

7. **Elasticity**

As we have already studied that timetable is an instrument to help us in carrying out the school work smoothly and efficiently it should therefore be not rigid and fixed. It should rather be made as flexible and elastic as possible. There must be ample scope for adjustments and changes to meet specific needs of certain categories of pupils. Changes may also be necessary because of the transfer of some teachers. It should however be remembered that
timetable should not become our master because of its rigidity. It should always act as a 
faithful servant.

8. Staff, Equipment and Building

While constructing a good timetable, the number and qualifications of teachers, the 
number and size of the classes, classrooms and equipment there in, should always be kept 
in mind. Timetable of a single teacher school will be different from that of a multi teacher 
school. Again in case of school where one room is needed for two classes the timetable 
will be arranged in a different manner as compared to a school with a spacious building. 
Equipment and furniture available in a school also determine the construction of timetable 
to a certain extent.

It should however be noted that these principles cannot be strictly adhered to. Changes 
have to be effected in view of local conditions and problems. But in all cases some other 
important considerations must also be given due attention while constructing a suitable 
timetable. These considerations are:

- School timetable should always be constructed in conjunction with the home 
  work time - table.
- In case of physical science, home science and craft practical and English 
  composition double periods should be provided in the timetable.
- The craft and science teacher who have to make necessary arrangements for the 
  practical work should be kept free in the period immediately preceding the 
  practical periods.
- The periods for subject which is taught only twice or thrice a week, should be 
  provided at intervals and not consecutively.
- At least one or two free periods per day should also be provided for every 
  member of the teaching staff to overcome the fatigue effect and to do correction 
  work, if any.
- The time allowed to a subject should not be further sub divided into its branches. 
  Its allotment should be left to the teacher concerned.

‘Check Your Progress’ - 3

1. List the principles of timetable construction

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27.4 Let Us Sum Up

In this unit, you studied the meaning, types of timetable, importance of timetable and principles of timetable construction. You understood that timetable is a methodical and pre arranged scheme of studies and activities. It is a plan showing the daily allotment of time among various subjects, activities and classes. You also understood that there are different types of timetable like consolidated timetable, class timetable, teacher’s timetable, vacant period’s timetable and games timetable. You also understood the importance of timetable in the school. For smooth functioning of school, to prevent waste of time and energy, to ensure equitable distribution of time and to formulate good habits among pupil, it is necessary. Lastly you studied the principles to be borne in mind while timetable construction. They are type of school, departmental regulations, amount of time available, relative importance and difficulty of subject, the element of fatigue etc.

27.5 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. The types of timetable are:
   - Consolidated timetable for the whole school
   - Class timetable
   - Teachers timetable
   - Vacant periods timetable
   - Games timetable
   - Co-curricular activities timetable and
   - Home work timetable

‘Check Your Progress’ -2

1. The importance of timetable is:
   - it ensures smooth and orderly working of the school
   - it prevents wastage of time and energy
   - it ensures equitable distribution of work among teachers
   - ensures equitable distribution of time to different subjects and activities
   - it helps in formulation of good habits
   - it aids the school discipline
'Check Your Progress’ - 3

1. While construction of timetable the following principles are kept in mind. They are:
   - The type of school
   - Departmental regulations
   - Amount of time available
   - Relative importance and difficulty of subjects
     - the element of fatigue
     - variety
     - Elasticity
     - Staff Equipment and building

27.6 Unit-End Exercises

1. What is a timetable?
2. Explain the different types of timetable.
3. Describe the importance of time-table in the school.
4. Explain in detail the principles of time-table construction.

27.7 References

UNIT 28  ■  SCHOOL DISCIPLINE

Structure

28.1 Introduction
28.2 Objectives
28.3 School Discipline
   28.3.1 Concept
   28.3.2 Maintaining School Discipline
   28.3.3 Role of Headmaster
   28.3.4 Role of Teachers
   28.3.5 Role of Student Government
   28.3.6 Role of Parent Teacher Association
28.4 Let Us Sum Up
28.5 Answers to ‘Check Your Progress’
28.6 Unit-End Exercises
28.7 References

28.1 Introduction

In the previous Unit, you studied the meaning of timetable, importance of timetable and the types of timetable. You also studied the principles of construction of timetable. In this Unit, you will study the concept of discipline. Discipline is the most important aspect of any education instruction. The type of discipline obtained in a particular school depends upon the philosophy behind its educational programmes. You will study the maintenance of discipline in the school, the role of Headmaster, the role of teachers in maintaining classroom discipline, the role of Student Government in maintenance of discipline and at the end you will also study the role of parent-teacher association.

28.2 Objectives

After studying this Unit, you will be able to:

- Define the concept of discipline
- Explain the maintenance of discipline
Bring out the role of Headmaster
Bring out the role of a teacher in the school discipline
Bring out the role of Student Government
Bring out the role of Parent-Teacher Association

28.3 School Discipline

Discipline is the most vital aspect of the secondary school administration. The type of discipline obtained in a particular institution will depend upon the philosophy behind its educational programmes. The democratic philosophy will have impact on the techniques, so will the autocratic philosophy shape the discipline procedures.

28.3.1 School Discipline - Meaning and Concept

The word ‘discipline’ is derived from the Latin Word ‘Discipulus’ which means to learn. It is the same root from which the word disciple is derived. From Indian history, we know that the disciple used to submit himself voluntarily to the ‘Guru’ thus curtailing his liberty and freedom in order to achieve his objective under the directions and orders of the preceptor.

According to Sir Percy Nunn, “Discipline consists of the submission of one’s impulses and powers to a regulation, which imposes form upon chaos and brings efficiency and economy where there would otherwise be ineffectiveness and waste. Though part of our nature may resist this control, its acceptance must on the whole be willing acceptance, the spontaneous movement of a nature in which there is an inborn impulse towards greater perfection.”

From the above viewpoints, we can say that discipline is a process of education. It is the control of behaviour to attain a goal and purpose, the subjugation of emotions and actions under the direction of a leader in fulfillment of the aim.

It implies a good understanding of right conduct; formation of desirable habits and an adherence to such standards as are necessary. Discipline implies the subordination of individual interests to group interest to bring efficiency and economy. It implies the willing acceptance of the controls i.e. the individual must do either what he is required to do or must not do what he is forbidden to do.

Concept of discipline in the past

A few decades back, school discipline was that of the rod. With the help of rod, order was maintained. The principal was the absolute monarch of the school, his word was final.
He exercised the power of a despot in obtaining unqualified and humble submission of the pupils to his authority. ‘Spare the rod and spoil the child’ was literally practiced. The first law of the school was order, the first task of the teacher was to compel order and the first duty of the pupil was to obey and behave. In fact it was the greatest floggers, who were regarded as the best school masters.

This type of discipline was based on fear; it was super imposed, it was negative, prescriptive and destructive and its main aim was to keep order. No wonder, this discipline crushed all initiative in the child. He felt himself helpless in situations where there was no preceptor to guide his activities.

**The modern concept of Discipline**

Authoritarian discipline began to crumble at the beginning of the 18th Century. There was a considerable reaction against this type of discipline. Initiated by Rousseau and followed by Pestalozzi, Froebel, Montessori, the modern reaction against this concept of discipline reached its climax and found its most persuasive exponent in the American philosopher, educationist John Dewey. Also with the adoption of democracy both as a political creed and as a way of life in modern times, need was felt for educating him anticipating the future needs.

Today we teach children to obey, but we want this obedience to be a thinking obedience, not merely reliance upon authority. Children are led gradually to discipline themselves. They are taught that there is a time for quiet and a time for activity, a time to converse and time to listen, time to work and time to relax. Teachers today realize that, it is not possible to teach by coercion, the goodwill of the pupil is always essential.

Freedom is the watchword of the new school. All kinds of super imposed and unnecessary reactions have been wiped. The teacher instead of working as a hard task master is a philosopher, a friend and a guide. The pupils have gained such boons as the right to move about the new classroom at will, to form natural groups, to talk, to choose the subject, to handle objects, to have a voice in student disciplinary matters and to take a large and active part in a general way, in class and social affairs. Modern discipline satisfies the needs of self respect, security and activity. It creates an earnest desire in the child to do the right thing child becomes a true co-partner in the educational process. Discipline emphasized is of positive and creative type.

The teacher, who is skilled discipline - meaning, integrates character and education into every learning situation. Light attitudes and desirable habits are formed in the pupils. The modern educator believes in self-discipline; the source of control is to be largely within
the individual, not external to him or imposed from without by force. The capacity for self-
control and self-direction is developed. The child makes decisions and assumes responsibility
for his actions without always requiring a vigilant watch over him. In short, the modern
discipline helps the pupil to become self-propelled, self controlled and self-guiding person.

28.3.2 Maintaining School Discipline

You studied about the concept of discipline in the past and the modern concept of
discipline. In this sub-unit, you will study the maintenance of school discipline.

Good discipline is a prior condition for the efficient working of an institution. It is both
a cause and a consequence of the successful functioning of a school. It can be maintained
in the following ways.

Effective Teamwork: Effective team work in the wake of intelligent professional
leadership is the key to sound disciplinary policies. There must be teamwork between the
principal and the staff; teachers and teachers; teachers and pupils; pupils and pupils;
principal, teachers and pupils. All must pool their resources and put their heads together
to achieve a desired end. Let responsibility be divided among different persons and
departments. Let definite duties be assigned to them so that the principal is free from
disciplinary difficulties.

Good School Traditions: School discipline is not a matter like a written constitution.
Conventions and traditions of the school go a long way in maintaining discipline. A school
without conventions and traditions may be as unruly as a mob knowing no law. Healthy
traditions will reduce the incidence of indiscipline. The pupils staying in the school for a
number of years get used to its ways of life. The new one will not feel uneasy in the flowing
stream. Traditions are not established in days, they take years. So the problem of discipline
is to be taken as a continuous challenge.

Well Planned School Works: Before the session starts the work plan must be got
ready in order to avoid all confusion and delay in execution of the work. Class work by
means should be allowed to substitute teachers or stop gap.

Unified Discipline Policy: There should be a unified discipline policy evolved through
joint deliberations with the staff. Everyone in the school must be made fully conversant with
objectives and techniques of discipline.

A Suitable Programme of Co-curricular Activities: The corporate life of the school
should be so organized as to provide ample and varied opportunities for the expression of
the pupils impulses and the flow of their vital energy into worthy fruitful and satisfying
channels. Co-curricular activities give the pupils a sense of social co-operation, make them
self-directing, develop the insight for law and order, heightens the respect of the authority and give fine training in leadership. Apart from the moral values, these activities develop the tastes and temperaments of all the students and help them discharge a portion of surplus energy in the play ground or club instead of mischief in the class-room.

Well Conducted School Assemblies: It will be very useful if school day starts with general assembly where the whole of school population meets. School assemblies tone up the general atmosphere of the school. It can serve as a common meeting ground. It can be the family altars of the school to which each can bring his offerings. It can help the cultivation of group consciousness and spirits de corps. It promotes school loyalty. The school’s daily programme can start with a prayer or a short programme of an inspiring nature by the principal or teacher or some resource personnel. Announcements can be made. It can make for a common knowledge of rules, customs and traditions. Appeals for better conduct on school functions and participation in the religious and cultural life of the school can be made there. Thus there will be good opportunities to control and direct the efforts of the pupils’ body as a whole.

Personal Contacts: Classes should not be very large. The teacher can then develop personal contacts. The skilled teacher, with a ready wit and tact can turn a tantrum into purposeful activity, mischief into useful assistance and prevent a display of indiscipline. As the bond of love between teacher and the child is the basis of school discipline, this bond must be strengthened.

Good School Premise and Sufficient Library and specialized rooms: -Physical facilities contribute a lot to the general atmosphere of the school. Healthy surroundings, good sanitary arrangements leave little scope for irritations. Adequate library and reading room facilities, special rooms for different subjects, common rooms etc will keep the children profitably busy and away from indiscipline.

Rewards: Rewards are sometimes used as a discipline device to make right conduct and hard work. They assure a condition of satisfaction and pleasure. It is thought that this condition strengthen the effectiveness of any action or conduct. Rewards are symbolic of approval from authority, they seem to be important for learners who have a strong desire to win self respect or approval from superiors, and rewards by giving status often impel pupils to greater activity.

Many psychologists and educationalists suggested rewards because they too frequently become ends in themselves. It is argued that in many cases, receipt of the reward becomes a signal for termination of effort. Witness the student who thoroughly enjoys a course but who sells his textbooks as soon as he had done his duty by the final examination. Hobbies
that have no definite reward are often pursued for more persistently. Rewards so to say have a demoralizing effect on the pupil because these tempt him to work not for duty’s sake, but for the sake of winning a prize. There are educationists who argue that the institution of rewards is a must for every school to provide necessary incentive and inducement for making consistent efforts to achieve success, satisfaction and pleasure.

**Punishments**: Children are dynamic, effervescent, and therefore heedless. They need checks to prevent excess in restrictions to keep them within the paths that lead upwards, and deterrents to halt their impulses to exceed the ‘speed limit’ of propriety, i.e. situations do arise in schools where some penal measure becomes imperative. Punishment in the form of blame or reproof, detention, moral punishments, repetition, fine, suspension, expulsion, corporal punishments etc are tried according to the nature of the offence. Punishment that follows any misconduct is a painful or annoying experience and tends to weaken the bond of connection between the stimulus and response. It reduces the channels of recurrence of that form of misbehavior. As offences can be of all kinds from relatively minor ones like persistent late coming to serious offences against the moral code like thrashing and bullying, so the corrections will vary in severity and be according to the purposes to be served. But the teacher and Headmaster or Principal must make sure that they are not making a mountain out of a mole hill and that they have satisfied themselves that they are not the cause of the problem.

### 28.3.3 Role of Headmaster

Headmaster plays an important role in an educational institution. He is compared with the captain of the ship. In fact, he is the head of the school both academically and administratively. He holds key – position, co-ordinates and organizes various programmes. He ensures proper maintenance of discipline in the school.

The Headmaster is a well wisher of pupils. Through democratic administration, he must promote willing participation and sharing of pupils’ option in the management and organization of both curricular and co-curricular programmes. The Headmaster should take keen interest in the students’ welfare activities and provide facilities for all round development of their personality. By maintaining friendly relationship with students, school discipline can be maintained effectively.

The school discipline mostly depends upon the competency of headmaster. It is not a particular function or duty of the headmaster. It is an overall outcome of all his activities dealings and rapport with others. The headmaster has therefore maintain proper relations with staff, students’ parents and community.
28.3.4 Role of Teacher

Teachers are mainly held responsible for classroom discipline. They should be able to obtain it without outside help. Discipline in the classroom is not an entity in itself; it is a product of good teaching. Though all disciplinary problems cannot be prevented, yet most of these will not arise in the classroom of intelligent, hardworking teachers who plan their work effectively, motivate their students skillfully and provide a friendly climate. Undoubtedly, problems of classroom discipline will disappear if there are efficient and strong teachers. In the words of Cunningham “only strong personalities survive this test of maintaining discipline.”

Pupils expect teacher to generate enthusiasm. They want his class to be alive. They expect him to be skilful, understanding, patient and demanding. They want him to respect them for what they are and most of all, what they can become. In short, he must be a fine teacher. In order to be successful in obtaining discipline; the teacher should bear in mind these points.

Be familiar with curriculum: The teacher must plan his programme of work well. His planning starts with the entire school life of the students. He should be reasonably familiar with the curriculum content of his field at each level. Curriculum and discipline are closely interrelated. A student who fails to see the relevance of what he is learning is not ready to learn. Moreover too much material creamed in one school year also causes frustration, which in turn may lead to discipline troubles. The teacher if he knows what his pupils have been exposed to in previous grade, can balance the curriculum and remove the cause of trouble.

Plan the lessons well: The starting point for all preventive discipline is a good lesson, carefully prepared and skillfully executed. The first rule in preparing a lesson plan should be to err in the direction of too much material rather than too little. Too much, that is, in the plan not in the actual presentation. Where a teacher has run out of material with still fifteen minutes to go and resort to a hasty device such as ‘start reading the next chapter’, the actual trouble starts. A good lesson plan is somewhat detailed but need not be lengthy.

While teaching, the steps-motivation, orientation, presentation, participation, application, and evaluation should be properly take care of.

Know each pupil by name: Every child has got a fascination for his own name. Familiarity of name will reduce problems of indiscipline. It will help the teacher to call only the pupil involved in the case.

Do not get nervous: The teacher must never lose temper. The must keep nerves,
words and activities under control. Undisciplined teachers cannot expect to have disciplined pupils.

**Be a good disciplinarian and pupils should know it:** If the teacher finds it necessary, he should remove a pupil from the class for some time or give him suitable punishment.

**Handle classroom discipline problems yourself:** Rare cases of discipline should be reported to the head. If too many cases are referred to the head, it will undermine the standing of a teacher before the students and parents.

**If necessary utilize the seating arrangement as a preventive measure:** Like the chairman of a meeting who is well acquainted with the participants, the teacher can prevent a great deal of annoyance by a judicious seating arrangement.

**Work with child’s uniqueness:** The teacher should find out individual differences in respect of temperament, reaction time, and size of the co-ordination control. The range of potentialities is as large as population; consequently the variability in achievement in any field is tremendous. The teacher can obtain effective results by working with the Child’s uniqueness.

**Establish habits of independent study:** Blessed are the teachers who have brought their classes to the stage where they say “whether I am present or not, the class carries on. The group has achieved independence.”

### 28.3.5 Role of Student Government

Student Government in schools mean participation of pupils in matters concerning organization, administration, functions and control through delegation of powers and responsibilities to the student body. In a democratic country, one of the important functions of the school is to give training to future citizens through subjects, opportunities, setting and activities that will fit children in the democratic mode of life. It has to enable the pupils to become ‘fit to life’ as well as ‘fit to live with others.’

Such type of morality grows like flesh and blood, by what it feeds on. Therefore the only substantial method of cultivating desirable qualities is a regime of activities, which give repeated exercise of virtue we desire to develop.

The association of pupils in the management of the school as one of the positive disciplinary devices is gaining wide popularity in democratic countries. It is argued that so far as practicable, the students should be allowed to participate in their own control. It is being realized that if a disciplinary programme is to be successful, it must have the support of the majority of students. Latest slogan in education is - to obtain discipline give freedom.
In a democracy, good citizenship is the major objective of education. Good citizenship composed on elements, which must be produced and activated. Among the most important of these may be (ii) A knowledge of the theory of democracy (ii) Sentiments of law and order (iii) Intelligent respect for authority, increasing self-respect and self-dependence and co-operation.

**Knowledge of theory of Democracy:** The students through the practice of democratic procedures will learn practically the theory of democracy. Important knowledge of democracy can be made meaningful and colorful and vital through the student council. It increases discipline among the pupils.

**By developing sentiment of law and order:** For obtaining effective discipline in a school, it is extremely important that sentiments of law and order are developed among the pupils. They should be helped to set the goal of efficient self-discipline and make serious attempts to achieve it. Student’s participation without student self-discipline is impossible. The students have a clear conception of the laws needed they help to set them and because they have had a voice in making them. They are vitally interested in seeing them observed.

**Respect for Authority:** As you studied, in a democratic country, one of the important functions of the schools is to give training in citizenship. Citizens should not be just blind followers. They must be aware of the rules and regulations, law and order. It increases the obedience among the pupils to the rules of the governing body, even in the matters in which he/she may personally disagree will tend to be all the more complete, because they appreciate the necessary for such rules for the good of the school as a whole.

**By Increasing Self-Direction and Self-Dependence:** For creating discipline in the children, it is necessary that, the training for effective social living is imparted. This training for social living may come very naturally and easily through a miniature society, in which the student learns pertinent knowledge, accepts the worthy ideas and actually practices the good disciplinary procedures.

**Cooperation:** This is another important element of democratic living which must be developed because although in the nature of human being there is a desire to associate with others, and share in their activities. There are no fully developed skills, which result in effective co-operation. Co-operation means combined efforts for the common good. The co-operative work will usually benefit from the unified efforts, which develops discipline.

**Sense of Responsibility:** Student government stimulates a sense of individual and group moral responsibility. Under autocratic method of discipline, the teacher must hold himself responsible for all infractions of the established rules of order. Students feel free to violate any phase of school decorum if they can escape punishment. Such an attitude tends
to encourage dependence upon compulsion for right action both within and outside school. It is the attitude of the subject rather than that of the citizen and cannot provide training for later assumption of democratic responsibilities. It activates sense of individual moral accountability. Only through practice one can learn self control for civil welfare.

28.3.6 Role of Parent-Teacher Associations

Parent teacher association is an effective formal organization for facilitating school community collaboration and interaction. It should be formed in every school for the purpose of exchanging ideas that will help them in understanding each other’s point of view and will also help in common task of giving a better, more natural, healthier and more sympathetic deal to children.

On behalf of the school, the teacher should take initiative in the progress of interaction and cooperation. On behalf of the community, parents/guardians should respond and reciprocate warmly and effectively. Both should collaborate in the process in the interest of the school, in the interest of the education and in the interest of the community. This mutual exchange of resources, ideas and thoughts help to improve the betterment of the school in general and betterment of the pupil in particular.

It has been rightly observed by George Tomlinson “In particular, remember that any clash between parents and teachers must always be harmful to the child. Harmonious working together can alone bring us the results we want”. Pupil’s welfare is the sole and common deal for which both should try. There will be no clash between parents and teachers if students are disciplined. Both teacher community and parent community should be aware of the danger of indiscipline.

‘Check Your Progress’ -1

1. What is discipline?

2. What is the concept of discipline in the past?

3. What is the modern concept of discipline?
4. How to maintain school discipline

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5. What is the role of Teacher?

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6. What is the role of student government in school discipline?

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28.4 Let Us Sum Up

In this Unit, you studied the meaning of discipline. The concept of discipline in the past was that of a rod. With the help of rod, order was maintained. The principal was absolute monarch of the school. The modern concept of discipline explains that the teacher instead of working as a hard taskmaster is a philosopher, a friend and a guide. You studied about the ways of maintenance of school discipline - they are effective team work, good School traditions, well planned school work; well conducted school assemblies, personal contacts, good school premises, rewards and punishments. You also studied the role of Headmaster, i.e. he must be a leader and he should know the rules and regulations of the school. You studied about the role of teacher in maintaining discipline. He must be familiar with the curriculum; he should know each individual by name. He must be a good disciplinarian, and work with child’s uniqueness.

You studied the role of student government in maintenance of school discipline. In a democratic country, good citizenship is the major objective of the education. The good citizenship composed of elements like knowledge of them of democracy, sentiments of law and order and intelligent respect for authority etc. At the end of the unit, you studied the role of parent-teacher associations. It is an effective formal association for facilitating school community, collaboration and interaction. It should be formed in every school for the purpose of exchanging ideas that will help in understanding each other. It helps to maintain school discipline effectively.
28.5 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. Discipline is a process of education. It is the control of behaviour to attain a goal and purpose.

2. The concept of discipline in the past was based on fear. It was super imposed, it was negative, prescriptive and destructive and its main aim was to keep order.

3. Modern concept of discipline satisfies the needs of self-respect, security and activity. It creates an earnest desire in the child to do the right thing. Child becomes a true co-partner in the educational process.

4. School discipline can be maintained in the following ways:
   - Effective teamwork
   - Good school traditions
   - Well-planned school work
   - Unified discipline policy
   - Suitable programme of co-curricular activities and
   - Well-conducted school assemblies

5. Teachers are mainly held responsible for Classroom discipline can be maintained by a teacher. For this,
   - he must be familiar with curriculum
   - he should plan the lesson well
   - he should know each pupil by name
   - he should be a good disciplinarian
   - he should handle class discipline himself

6. Student Government has a major role to play in the maintenance of school discipline. The objectives can be achieved by:
   - Knowledge of theory of democracy
   - By developing sentiment of law and order
   - By respecting authority
   - By increasing self-direction and self dependence Co-operation
   - Sense of responsibility
28.6 Unit-End Exercises

1. Explain the concept of discipline in the past and the modern concept of discipline.
2. Explain the principle of maintenance of discipline in the school?
3. Explain the role of Teacher’s in the school discipline.
4. Explain the role of Student Government in maintenance of school discipline.

28.7 References

29.1 Introduction

In the previous unit, you studied about the concept of discipline, the traditional concept and modern concept. You studied about the maintenance of discipline in the school. You also studied about the role of Headmaster, the role of Teacher, the role of Student Government and the Parent Teacher Association in the maintenance of discipline. In this unit, you will study about the meaning of school records, the importance of school records, and the types of school records. At the end of the unit, you will acquire the knowledge about the format of different school records. As you know, school is an important Public Institution. In the matter of effective functioning of an institution, it is answerable to several bodies, agencies and authorities. Hence it is important to maintain school records properly and accurately. You will study all these aspects in this unit.

29.2 Objectives

After studying this unit, you will be able to:

- list different kinds of school records
- bring out the importance of school records
describe how school records should be maintained

draw the format of different school records.

29.3 School Records

School is an important public institution. In the matter of effective functioning of an institution, it is answerable to several bodies, agencies, and authorities like parents, society, state and public. The school records refer to all the records and files kept in the schools for the academic activities of the school, which are maintained to ensure the smooth functioning of the school. The common school records prescribed are as follows:

- Cash Book
- Register of Grants
- Journal Book
- Ledger Account
- Stock account of Receipt Book
- Cheque Book Stock Register
- Register of money orders and Bank Drafts received
- Training Attendance Register
- Stock and issue Register of Consumable articles
- Register of Assets
- Register of Journal / Magazine / Newspapers
- Register of investment (out of Grants)
- Register of postal Stamps
- Register of Telephone Charges
- Establishment Register
- Register of Deposits and Refund of Deposits
- Refund bill of Deposits
- Register of recoveries from salary Bills and their remittance to respective authorities
- Library accession Register
- Work-register
- Register of outstanding Audit Objections
‘Check Your Progress’ - 1
1. What do you mean by school records?

29.4 Types Of Schools Records

School records and registers can be broadly classified under the following heads:

**General Records**
- School Calendar
- Long Book
- Visitor’s Book
- Service Book
- Order Book
- Admission and withdrawal Register
- Staff Attendance Register
- Casual Leave Register

**Teacher’s Personal Files**
- Staff Duty Register
- Property Register
- Staff meeting Register
- Annual Budget

**Financial Records**
- Acquaintance Roll
- Cash Book
- Fee Collection Register
- Contingency Register
- Students Fund Register
- Government Grants File
- Register of Scholarships
- Donation Register
- Register of Pay Bills
- T.A. Bills
- Medical Reimbursement Bills
- Postage Stamps Account
- Register of investments
- Establishment Register
- Register of Recoveries from salary and their remittance to respective authorities
- Register of Outstanding Audit Objections

**Educational Records**
- Public Attendance Register
- Timetable
- Teachers Timetable
- Examination Results Records
- Teacher’s diaries
- Monthly and Term wise Programme of Work
- Cumulative Records
- Internal Assessment Records
- Staff Participation in Orientation Courses

**Equipment Records**
- Stock Register of Furniture and School Appliances
- Stock Register of various Departments
- Library Accession Register
- Library Catalogue
Stationary Stock Register
- Register of Magazines and News Papers

**Correspondence Records**
- Receipt and Dispatch Register
- Departmental Orders Circulars file
- Memo Book
- School Education Board Circulars Files

**Supervision and Inspection Records**
- Headmasters Supervision Register
- Rewards and Punishment Register
- Honours Roll Register
- Head Mater’s instruction Book
- Guidance Record
- Pupils Health and Physical Records
- Hobbies Record
- Inspection of Education Officers
- Inspection of Accounts by Audit Department
- Follow up of In-service Training Programmes

The above list is comprehensive enough and includes almost all registers which are commonly used. Some of the important school records are described below:

**Log Book:** This is related to financial matter of students. Hence the entry is done student wise. The main columns are relative to the demand (D) made of students, the amount collected (C) from students and the balance at their credit (B)

**Contingency Register:** The Contingency Register is maintained for expenses that are small and quite unexpected and which happen by chance.

**Acquaintance Roll or Salary Book:** It is the most important book. It has two important columns i.e, pay from different sources like Basic pay, D.A. H.R.A. etc., and the deduction side contain contribution to GPF, IT, LIC, FBF, FA etc., Apart from this, it has other details of employee like Name, Designation, Scale of Pay, Bank Account Number etc.,
**Teacher’s Attendance Register**: This is kept in H.M. Chamber. Every Academic Year a new register is maintained. In this, the name and designation of Teacher is given. The names of the teachers are written in order of seniority. It also mentions the numbers of casual leave at credit and already taken. Headmaster, Teaching Staff and non-teaching staff are expected to sign it every day.

**Teacher’s Dairies**: Every teacher is supposed to maintained it. In this they have to write the notes of lesson, the home work given to pupils, periods taken etc.

**Examination Register**: A Register must maintain in which the marks obtained in each test and examination are entered with remarks. This gives comprehensive view of the academic Achievement of pupils.

**Pupils Attendance Register**: This should be maintained class-wise. The names of all the pupils in alphabetical order are to be maintained here. Everyday attendance is taken and specific marks are made if pupils are present or absent. This is usually done by in-charge or the class teacher.

**Cash Book**: It is an important record of money transactions. It should be maintained in double entry system. All receipts, payments, and charges of whatever sort connected with the funds placed at the disposal of the head of the office should be shown in the cash book. All financial transactions to be made through cheques or cash should be entered in the cash book on daily basis and attested by the head of the office/drawing and disbursing officer. Receipt number, voucher numbers should be recorded in the cash book. It should be written and closed daily. If there are no transactions on a particular day, it should be recorded as ‘No Transactions in the cash book’. At the end of the month, closing balance as per the cash book should be reconciled with the bank pass book and attested by the Head of the Institution.

**Register of Grants**: Grant in Aid received for various activities of an Institution should be recorded in the Register of Grants, showing the date of receipts of each type of grant in aid.

**Journal Book**: Journal is one of the important Accounts Books and its use is restricted to recording transfer/adjustment entries other than the cash transactions. Each adjustment entry passed through the Journal should be supported by the vouchers. Each journal entry should be attested by the head of the office/drawing and disbursing officer.

**Ledger Account**: Ledger is an important book in which the transactions recorded in the cash book or journal should be classified under different heads of accounts or objects of expenditure to any sub unit thereof. Every ledger account is divided into two sides. The
left hand side is known as the DEBIT side and right hand side in known as CREDIT side. All items of debit and credit of the cash book and journal should be posted on the same day in the respective ledger account. The ledger folio (LF) should be given in column provided in the Cash Book folio (CB folio) in the ledger. All the ledger accounts should be closed and tallied with the totals of classified accounts every month.

**Stock Account of Receipt Books:** A Register to which the receipt and issue of receipts books should be maintained by every institution. Only one receipt book should be issued at a time.

**Cheque Book Stock Register:** All the financial transactions of an institution are conducted through Bank. It is necessary to have a proper stock account of cheque books received from the bank.

**Register of Remittances of Cash / Cheque / DD’s to Bank**

A Register to watch prompt remittance of amount collected in the office should be maintained.

**Temporary Advance Register:** As far as possible, all payments have to be made through crossed cheques. In special circumstances where the expenditure has to be incurred by paying, temporary advance a register must be maintained in which the temporary advance paid and the adjustment account obtained against such advances be entered.

**Register of Money Orders and Bank Drafts received:** The Register should be maintained to record the receipt of money orders and Bank drafts and their remittance to Bank.

**Training Attendance Register:** A Register to which the attendance of the trainees and stationery materials issued to the trainees should be maintained.

**Register of Assets:** A Register of all properties and other assets of an institution should be accounted in the Register of Assets.

**Register of Journals/Magazines/Newspapers:** A Register to which the receipt and disposal of journals, magazines, and newspapers should be maintained in the school.

**Register of Postal Stamps:** A Register should be maintained showing the postal stamps purchased, used, and balance, physical verification of stamps to be made periodically by the head of the office.

**Register of Franking Machine Account:** A Register to be maintained to watch the expenditure for the use of Franking machine in the office.
Establishment Register: A Register should be maintained to watch the expenditure on the sanctioned strength of the establishment.

Register of Deposits and Refund of Deposits: Deposits received should be accounted allotting separate pages for each kind of deposits. Deposits which are not claimed within three completed years should be treated as lapsed.

Register of recoveries from Salary and their remittance to respective authorities: The Register to watch various recoveries such as LIC, OPF etc., made with pay bills of the employees and their remittance to the respective heads to be maintained.

Library Accession Register: A Register of books purchased for library of the institution should be maintained in the office.

Register of Outstanding Audit Objections: A Register should be maintained to watch the clearance of Audits/inspections conducted by different agencies and compliance to the audit observations should be sent promptly.

‘Check Your Progress’-2
1. What are the kinds of school records? Name them.

29.5 Importance Of School Records

School is an important Public Institution. In order to furnish it to all the concerned, or to obtain information, it is important to maintain complete records. Let us study the importance of maintenance of school records.

Legal requirements: The Department of Education, Managements, provision of educational code, and other rules and regulations, make it binding on the school authorities to maintain various types of records, keep-up-to-date its information about students strength, average attendance, leave grants, income, expenditure etc.,

Financial needs: The school has to supply a lot of data to justify its budget and financial needs. At the beginning of every financial year the school has to supply data to justify the budgetary needs.
Administrative needs: Registers and records are very essential from administrative point of view. The Administration will work in darkness in absence of complete up-to-date records.

To appraise the effectiveness of institutional progress: The records tell us whether the institution is making progress or not. It will enable the administrator to know the direction in which the changes may be made for improvements.

Research needs: Records supply comprehensive and authentic data to those who wish to undertake the responsibility of educational research and reform. The data also facilities statistical analysis and evaluation of policies and programmes.

To Develop Constructive and Co-operative Relationship with Community: Report based on school records are sent to parents from time to time. The data helps teachers, parents, and management to discuss students’ problems and short timings.

For Child’s All-round development: Only regularly maintained detailed records can keep track of the children’s all-round growth and development and can be depended upon in providing guidance.

‘Check Your Progress’ - 3

1. What is the importance of school records?

29.6 Format of School Records

In the previous section you studied the importance of school records, In this Section specified format are given for all the records. You will study them in detail.
### CASH BOOK

**Name of the Unit:**

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<tr>
<th>Date</th>
<th>Receipt No</th>
<th>Particulars</th>
<th>LF No.</th>
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<th>Bank</th>
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### REGISTER OF GRANTD

**District/Block/SDMC**

**Particulars of Grant**

**Name of the Unit:**

<table>
<thead>
<tr>
<th>Month</th>
<th>Sl. No.</th>
<th>Order No/Date</th>
<th>Amount</th>
<th>Specific Purpose of the Grant</th>
<th>Date of Credit to Bank A/C</th>
<th>Challan No./Date</th>
<th>Date of actual credit to BEO/School A/C</th>
</tr>
</thead>
<tbody>
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</table>

### JOURNAL BOOK

**Name of the Unit:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Particulars of the Transaction</th>
<th>Ledger Follo No.</th>
<th>Amt. To be debited</th>
<th>Amt. To be credited</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
## LEDGER ACCOUNT

Name of the Major/Minor Intervention

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>Voucher No.</th>
<th>Cash Book Folio No.</th>
<th>Debit</th>
<th>Credit</th>
<th>Debit or Credit Balance</th>
</tr>
</thead>
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</tbody>
</table>

## REGISTER OF REMITTANCE OF CASH/CHEQUE/DDs TO BANK

Sl. No. | Date of Remittance | Name of the Bank | Account No. | Cash No. | Cheque/DD No. | Date | Amount | Total | Bank Challan No/ Date |
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<thead>
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## TEMPORARY ADVANCE REGISTER

Name of the Unit:

<table>
<thead>
<tr>
<th>Date</th>
<th>Name &amp; Designation of the person who received the Advance</th>
<th>Purpose</th>
<th>Cash Cheque No.</th>
<th>Amunt</th>
<th>Reference of Sanction File No.</th>
<th>Signature of the person receiving the Advance</th>
<th>Incharge Office Sign.</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>
# ACCOUNT ADJUSTMENT STATEMENT

1. Name and Designation of the Receiver :  
2. Purpose of Advance :  
3. Date of Advance :  
4. Cheque/Cash : Cheque No. Date  
5. Amount Advanced : Rs.  
6. Expenditure incurred : Rs.  
8. Date of Accounts rendeted :  
   
   
   **Signature**  
   (Advance Register)  
   
   
   **Amount**  
9. List of vouchers Enclosed :  
   
   1.  
   2.  
   3.  
   4.  
   5.  
   (Signature of the person who accepts the Accounts)  
   (Signature of the person)
## REGISTER OF MONEY ORDERS BANK DRAFTS RECEIVED

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Date</th>
<th>From whom received</th>
<th>On what account (Purpose)</th>
<th>Cheque No./DD No. &amp; Date</th>
<th>Bank of which drawn</th>
<th>Amount Rs. P.</th>
<th>Date on which deposited to Bank</th>
</tr>
</thead>
<tbody>
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</table>

## REGISTER OF CHEQUES/MONEY ORDERS/DDs DESPATCHED

**Name of the Unit:**

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Date</th>
<th>Cheque/DD No. &amp; Date</th>
<th>Amt. of the Cheque/DD/MO</th>
<th>Purpose</th>
<th>To whom sent/issued</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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## REGISTER FOR JOURNAL/MAGANIZES/NEWS PAPERS

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Date of Purchase</th>
<th>Name of the Journal/Magazine/News Paper Purchased</th>
<th>Agency from Which purchased</th>
<th>Cost of the Journal/Magazine/News Paper</th>
<th>Voucher No./ Date</th>
<th>Cash Book Folio No.</th>
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424
REGISTER OF INVESTMENTS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Sanction Order/Date of Investment</th>
<th>Name of the Bank in which invested</th>
<th>FDR No. &amp; Date</th>
<th>Amount Invested</th>
<th>Source from Which Amt. Invested</th>
<th>Date of Investment</th>
<th>Rate of Interest</th>
<th>Date of Maturity</th>
<th>Interest Earned</th>
<th>Date of Credit to Bank A/c</th>
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</table>

REGISTER OF POSTAL STAMP ACCOUNT

<table>
<thead>
<tr>
<th>RECEIPTS</th>
<th>OB</th>
<th>Value of the Postal Stamp received</th>
<th>Expenditure</th>
<th>Balance</th>
<th>Initials of the Despatcher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Voucher No.</td>
<td>Letters No.s</td>
<td>Value of Stamp Affixed</td>
<td>Days Total</td>
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</table>

REGISTER OF FRANKING MACHINE ACCOUNT

<table>
<thead>
<tr>
<th>Date</th>
<th>Old Balance</th>
<th>Purchase Value</th>
<th>Total</th>
<th>Used</th>
<th>Balance</th>
<th>Signature of the Supdt.</th>
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<tbody>
<tr>
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</table>

STOCK ACCOUNT OF RECEIPT BOOKS

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Date</th>
<th>Opening Bal</th>
<th>Source of Receipt</th>
<th>No. of books received</th>
<th>Series No.</th>
<th>Book No.</th>
<th>Receipt</th>
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</thead>
<tbody>
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<td>From</td>
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</tbody>
</table>
**ISSUES**

<table>
<thead>
<tr>
<th>Date</th>
<th>To who issued</th>
<th>No. of Rct. books issued</th>
<th>Series No.</th>
<th>Book No.</th>
<th>Receipt No.</th>
<th>Signature of Receiver</th>
<th>Balance</th>
<th>Date of returns of Receipt book (used)</th>
<th>Signature of Official receiving the used books</th>
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<tbody>
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</table>

**STOCK REGISTER OF CHEQUE BOOKS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Date</th>
<th>Name of Bank</th>
<th>Chq. Book No.</th>
<th>No. of Leaves contained</th>
<th>Details of Usage</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
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<td>From To Date of Commencement Date of Closure</td>
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</table>

**TRAINING ATTENDANCE REGISTER**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name &amp; Desgn. of attendant</th>
<th>Materials Received</th>
<th>Attendance Acknt.</th>
<th>Remarks</th>
<th>Officer's Signature</th>
</tr>
</thead>
<tbody>
<tr>
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**STOCK AND ISSUE REGISTER (CONSUMABLE ARTICLE)**

<table>
<thead>
<tr>
<th>Description of Article</th>
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<table>
<thead>
<tr>
<th>Date</th>
<th>Opening Balance</th>
<th>Bill No. &amp; Date</th>
<th>Source</th>
<th>Receipts</th>
<th>Total</th>
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</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Indent No./Date</th>
<th>Issue Slip No.</th>
<th>To whom issued</th>
<th>Qty</th>
<th>Value</th>
<th>Quantity</th>
<th>Value</th>
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426
### 1. REGISTER OF ASSETS

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<tr>
<th>Sl. No.</th>
<th>Name of Grantee Institution</th>
<th>No. and date of sanction</th>
<th>Amount of the sanctioned grant</th>
<th>Brief purpose of the grant</th>
<th>Whether any condition regarding the right of ownership of Govt. on the property or other assets acquired out of the grant was incorporated in the grant-in-aid section</th>
<th>Particulars assets credited or acquired</th>
<th>Value of the assets as on _______</th>
<th>Purpose for which utilized at present</th>
<th>Encumbered or not</th>
<th>Reasons if encumbered</th>
<th>Disposed of or not</th>
<th>Reasons and authority if any for disposal</th>
<th>Amount realized on disposal</th>
<th>Remarks</th>
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</thead>
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### REGISTER OF RECOVERIES FROM SALARY AND THEIR REMITTANCE TO RESPECTIVE AUTHORITIES

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Establishment</th>
<th>Name of the Employee’s Designation</th>
<th>Employee’s No.</th>
<th>Gross Salary</th>
<th>RECOVERIES AFFECTED FROM SALARY BILL</th>
</tr>
</thead>
<tbody>
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<table>
<thead>
<tr>
<th>FA</th>
<th>Society</th>
<th>Others if any to be specified</th>
<th>Total Dedn.</th>
<th>Net Amount</th>
<th>Bill No./&amp; Date</th>
<th>Cheque No. &amp; Date in which sent to respective authorities</th>
<th>Cash Book Folio No.</th>
<th>Signature of the employee on verification</th>
</tr>
</thead>
<tbody>
<tr>
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### LIBRARY ACCESSION REGISTER

<table>
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<tr>
<th>Date</th>
<th>Accession Number</th>
<th>Author</th>
<th>Title</th>
<th>Publisher, Year of Publication &amp; Place of Publication</th>
<th>Pages</th>
<th>Bill No./Date</th>
<th>Price</th>
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</table>
## REGISTER OF DEPOSITS & REFUND OF DEPOSITS

### DETAILS OF RECEIPTS

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<tr>
<th>Sl. No.</th>
<th>Date</th>
<th>From Whom Received</th>
<th>DD No./Date</th>
<th>Amount</th>
<th>Cash Book Folio No.</th>
<th>On what A/c Received</th>
<th>Date of Deposit &amp; its Realization as per Bank Pass Sheet</th>
<th>Cash Book Folio No.</th>
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<tbody>
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### DETAILS OF REFUND OF DEPOSITS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Refund Bill/ Vr. No.</th>
<th>Amount</th>
<th>Refund Order No. &amp; Date</th>
<th>Cheque No./ Date</th>
<th>Amount</th>
<th>Bank A/c on which issued</th>
<th>Actual date of payment as per Bank Pass Book</th>
<th>Cash Book Folio No.</th>
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### REGISTER OF TELEPHONE CHARGES

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<th>Sl. No.</th>
<th>B.R. No. &amp; Date</th>
<th>Telephone No.</th>
<th>Office/Unit to which Telephone belongs</th>
<th>Bill Amount</th>
<th>Progressive Bal.</th>
<th>Cheque No./Date</th>
<th>Cash Book Folio No.</th>
<th>Excess Amt. Paid if any</th>
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### ESTABLISHMENT REGISTER

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Employee</th>
<th>Designation</th>
<th>Pay Scale of the Post Min.</th>
<th>Pay Scale of the Post Max.</th>
<th>Basic Pay for the year</th>
<th>Rate of Interest</th>
<th>Date of Increment during the year</th>
<th>Total Incremental pay for the year</th>
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<table>
<thead>
<tr>
<th>Total Pay for the year</th>
<th>Total DA for the year</th>
<th>Total HRA for the year</th>
<th>Total CCA for the year</th>
<th>Other Allowance for the year</th>
<th>Leave Encashment Salary</th>
<th>Total Salary for the year</th>
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<tr>
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# AUDIT OBJECTIONS FOLLOW-UP REGISTER

<table>
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<tr>
<th>Sl. No.</th>
<th>Period of account covered by audit</th>
<th>Audit Para No.</th>
<th>Date of issue</th>
<th>Brief details of the audit objection</th>
<th>Action Taken</th>
<th>Date of settlement</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td></td>
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</table>

# MONTHLY RECEIPTS AND PAYMENTS ACCOUNTS

Name of the Unit: 

For the Month of ......................

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Receipts Particulars</th>
<th>Amount</th>
<th>Sl. No.</th>
<th>Expenditure Particulars</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Opening Balance</td>
<td></td>
<td>1.</td>
<td>Expenditure A/c</td>
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</tr>
<tr>
<td>a) Cash at Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Cash in Office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Grants Received</td>
<td></td>
<td>2.</td>
<td>Advances</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Interest Earned on Bank Deposit</td>
<td></td>
<td>3.</td>
<td>Closing Balance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Receipts</td>
<td></td>
<td></td>
<td>Cash on hand</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cash at Bank</td>
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</tbody>
</table>

Signature DPO / BEO / HM

### BANK RECONCILIATION STATEMENT

<table>
<thead>
<tr>
<th>Balance as per Cash Book</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add:</td>
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</tr>
<tr>
<td>1. Cheque issued but not cashed</td>
<td>Rs.</td>
</tr>
<tr>
<td>2. Credit entries made in the Bank Pass but not shown in the Cash Book</td>
<td>Rs.</td>
</tr>
<tr>
<td>3. Other Adjustment entries (if any)</td>
<td>Rs.</td>
</tr>
<tr>
<td></td>
<td>Total</td>
</tr>
</tbody>
</table>

|Less:                     |     |
| 1. Amount sent Bank but not credited in the Bank Account | Rs. |
| 2. Bank Charges (Commission) debited Bank Account but not accounted for the Cash Book | Rs. |
| 3. Other adjustment entries if any (+) | Rs. |
|                          | Total |

Rs. |
DEPOSIT REFUND BILL

Name of the Unit : 
Date :

I am submitting herewith the details of the EMD remitted paid in connection with printing and supply of ............................................ The work has been completed and the details are given below :

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Date of remittance of Deposit</th>
<th>Cheque No./Date/Amount</th>
<th>Purpose</th>
</tr>
</thead>
</table>

I request that the above deposit may please be refunded.

Contents Received

Authorised Signatory

Office Use

i. Certified that the work has been completed satisfactorily in all respects.
ii. Certified that the original credit entry has been verified.
iii. Certified that there are no dues from this firm.

Passed & admitted for Rs. ......................... (Rupees .........................)

SDMC Level  Head Masters  Chairman SDMC

Block Level  BRC Co-ordinator  BEO

District Level  Account Supdt  Dy Project Co-ordinator Dist. Project Co-ordinator

REGISTER OF OUTSTANDING AUDIT OBJECTIONS

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<th>Sl. No.</th>
<th>Period of Audit</th>
<th>Audit Para No.</th>
<th>Date of issue of Report</th>
<th>Brief Details of Audit Objections</th>
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<table>
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<th>Money Value Objections</th>
<th>Action taken for Disposal</th>
<th>Date of Settlement</th>
<th>Money value objections Cleared</th>
<th>Accepting Authority Letter No./Date</th>
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<tbody>
<tr>
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<td>7</td>
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<td>10</td>
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</tbody>
</table>
29.6.1 Maintenance of School Records

School records should be maintained properly in the Institution concerning the prepared mode of keeping records, the following points are to be kept in mind:

- All the Registers (Records) should be numbered serially and a list of registers maintained should be prepared for easy accessibility.
- Registers should be kept tidy.
- All the entries should be neat, up-to-date, complete, legible, accurate and free from mistakes and over limiting.
- Entries should be appropriable initialed with date.
- Records should not be taken out of school premises and should be in safe custody.
- All the pages should be properly numbered.
- No page should be torn.
- Unused pages should be cancelled.
- It should be complete in all respects.
- If there is no entry to be made for a particular column, Not applicable (NA) should be mentioned.
- Facts and figures should be entered correctly.
- Mistakes should be attested with a signature.

‘Check Your Progress’ - 4

1. How should the Records be maintained?

29.7 Let Us Sum Up

In this Unit, you studied about the school records of different kinds. School records refer to all the records and files kept in the schools for the academic activities of the school, which are maintained to ensure the smooth functioning of the schools.
There are different types of school records and important among them are:

- General Records
- Financial Records
- Educational Records
- Equipment Records
- Correspondence Records and
- Inspection and Supervision Records.

You also studied about the importance of school records. The school records are important for legal requirements, financial needs, administrative needs, to appraise the effectiveness. In the later part of the unit, you acquired the knowledge about format of different school records. At the end of the Unit, you studied about the maintenance of school records.

29.8 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. The School records refer to all the records and files kept in the schools for the academic activities of the school, which are all maintained to ensure the smooth functioning of the school.

‘Check Your Progress’ - 2

1. The important types of school records are:

   - General Records
   - Financial Records
   - Educational Records
   - Equipment Records
   - Correspondence Records
   - Supervision and Inspection Records.

‘Check Your Progress’- 3

1. The importance of maintenance of school records are for legal requirements, for financial needs, for administrative needs, to appraise the effectiveness of Institutional Progress, for research needs and to know children’s all round development.
29.9  Unit-End Exercises

1. Explain different types of School records.
2. List of different types of School records prescribed.
3. Explain the importance of school records.
4. How do you maintain school records?

29.10  References

UNIT 30  CLASSIFICATION AND PROMOTION

Structure
30.1 Introduction
30.2 Objectives
30.3 Classification - Meaning
30.4 Need for Classification
30.5 Bases of Classification
30.6 Types of Classification
30.7 Scheme of Promotion
30.8 Let Us Sum Up
30.9 Answers to ‘Check Your Progress’
30.10 Unit end Exercises
30.11 References

30.1 Introduction

In education, valuation is an important component. Once a curriculum is designed following a systematic procedure, the next logical step is to implement the curriculum and transact it in the classroom. Teaching is the important activity in curriculum transaction. After the teaching learning process in the curriculum transaction, at the end, the learning of students has to be assessed. This is the process of evaluation. It shows the extent to which the instructional objectives have been achieved by the students.

The level of students learning is assessed through evaluation. After evaluation process, classification and promotion of the pupil will be done. In this Unit, you will be studying about the need for classification of pupil, bases for classification and also you will be studying about the scheme of promotion.
30.2 Objectives

After studying this unit, you will be able:

- justify the need for classification
- describe the bases of classification
- explain the scheme of promotion

30.3 Classification—Meaning

Classification means the assigning of pupils to a class or standard for the purpose of instructions. The main aim of classification is to place each individual pupil in an educational setting which may give him or her best opportunities for all round growth and development. It is believed that teaching work can be done more efficiently and effectively if pupils of more or less the same age and the same intellectual level, both in ability and attainment, are put together in one class or group. The members of such a class are generally related by common interests, aptitudes and aims. They lead a common life, inspired by common ideal and characterized by mutual co-operation. Thus class becomes a homogeneous group of pupils. This homogeneity arouses a class spirit and a healthy competition among the pupils. It also makes for economy of effort on the part of the teacher.

30.4 Need for Classification

You understand that classification means assigning pupils of common interest, ability, aptitude and aims to a particular class or group. In this sub-unit, you will study about the need for classification of pupils.

An ancient India, there was no system of classification. The individual system of instruction was prevailed in Ashrams or Gurukulas. During the Muslim period and medieval ages in Europe monitorial system worked. The teacher taught the monitor who transmitted knowledge to the youngsters. So right up to 18th Century individual system prevailed and there was no need for classification. The class system developed in Europe in 18th century and later on, in India also it developed during the British system of education.

There was a system when individual instruction was vogue in our country. Each pupil recited his lesson to the teacher in turn while the other pupils kept themselves busy in
preparing their lessons. Infact, this method of instruction originated from home where each child was taught individually by the father or some elderly member of the family. In *Gurukulas, Muktabs* and *Viharas* individual instruction prevailed and continued up to the end of 18th century because the number of pupils attending these institutions was very small. But with the increase in the number of pupils and with the increasing regard for educational efficiency, class as a unit of teaching came into existence. Then with the democratic setup, the question of educating the whole nation was taken up. The class was considered to be the only way of teaching a large number of pupils at small cost. It is not possible under the present circumstances especially in a big county like India, to employ one teacher for each individual child.

At present with the emphasis on the social aspect of education, the classification of pupils has become a basic necessity for the effective execution of our educational programme. The stress on the all round development of the citizens of tomorrow requires that pupils may be provided with various kinds of experiences in different situations with the children of the same age and maturity as well as with the children of different ages. Classification has thus become a multiple problem.

The need for classification arises from the nature and interest of pupils. Most of the pupils are extremely social. They crave friendship and association with other children especially when there are common interests and purposes. Such an association motivates learning in groups. Infact, the objective of human relationship on national and international level cannot be achieved, if we do not provide many opportunities to our pupils in schools for co-operative and group work.

‘Check Your Progress’- 1

1. What is the need for Classification?

30.5  Bases of Classification

So far you have studied about the need for classification of pupils. In this sub Unit, you will study the bases of classification of pupils. In progressive and advanced countries,
many plans of classification have been developed from time to time. Many new forms are still being experimented upon with a view to simplify the teaching-learning process in the classroom. But in a big country like ours we have to make the best use of the system which has been in existence here over a century. We therefore, largely base our school work on the class-system. Now we have to decide whether we have to decide whether we have to form our own class on the basis of age, or ability or attainment or on the basis of any other basis. The bases commonly used for classification can be discussed below:

1. **Chronological Age**

   The simplest basis of classification of pupils is the age of the pupils. In our country, where elementary education is compulsory, all children must join the school at a certain prescribed age (6, in our country). Therefore in each class we have children, generally of the same age. Since promotion to next higher class is made from year to year, children of the same age are grouped together. Age, however is not a very reliable basis of classification; pupils of the same age may not be equally intelligent. Both psychologists and teachers generally condemn the mass promotion of pupils from class to class at the end of the year. Therefore, the chronological age should not be the only criterion of the classification. It may remain the basic or the starting point for investigation and experimentation. But mental and scholastic attainments of the pupil must also be taken into consideration and he or she is allotted to a particular class.

2. **Mental Age**

   In certain countries, mental age is adopted as the basis of classification in place of chronological age. Intelligence and group tests are used for ascertaining the mental age of the pupils with high intelligent quotient. These tests may however be useful for classifying pupils at the time of their final entry into the school for elementary classes, because these tests measure only the innate ability and not the acquired knowledge of the individual pupil. But in case of pupils to be admitted to higher classes, intelligence tests cannot be made the sound basis of classification. In their case, the acquired knowledge of subject matter and their general ability should be the proper criteria for classification.

3. **Biotypological Examination System**

   In France, a new system has been tried to serve as a basis of classification. This system is known as Biotypological examination system. Through this system, a complete knowledge of the individual child is obtained, on the basis of which he or she is allotted a class or group. Biotypological examination touches the following aspects of the Child’s personality:
It is quite clear from the above that it is an attempt to investigate into the heredity and environment of the individual child as well as his behavior and performance in the school through a group of specialists. It is therefore an ideal system of ascertaining the social, intellectual, physical and other important aspects of the child’s behavior and character. This assessment is much more reliable than testing merely through the objective methods. But, this system cannot be applied in our country because of its size and population, financial difficulties and the dearth of technical personnel and specialists.

**Attainment in School Subjects:** The traditional methods of classification and promotion are based on the pupils’ attainment in school subjects without any consideration of his / her chronological or mental age. However with the recent advances in the field of educational psychology, attainment in school subject is no longer regarded as the only criterion of good education and classification. Special aptitudes, interests and abilities must also be taken into consideration along with scholastic attainment.

**Social Maturity:** A child who has learnt to behave properly in a social setup is said to have attained the social maturity. Some schools in America base their classification on maturity. In these schools much more stress is given on the social physiological, moral and emotional development of pupils than on their intellectual attainments. However in present working conditions of our schools this criterion is not applicable.

Now it can be said that, only one basis of classification does not serve the present day needs. On the other hand, if all the factors as mentioned above are adopted as bases of classification the homogeneous group will be reduced to such an extent that we shall ultimately have single individuals. It is therefore, a combination of at least two bases which is better than a single base.
1. List the basis of classification.

--------------------------------------------------------------------------------------------

30.6 Types of Classification

In the previous paragraphs you studied about the bases for the classification of students. Now let us study the types of classification.

There are so many types of classification of pupils. Among them the important are:

a. Ability grouping
b. Homogeneous grouping
c. Heterogeneous grouping

a. Ability grouping: In ability grouping, grouping of pupils is done on the basis of ability of the pupil discovered through intelligence tests. Grouping together of pupils of the same ability is called ability grouping.

b. Homogeneous grouping: In Homogeneous grouping, the pupils are grouped on the basis of a number of common factors viz. the achievement, the health, the maturity, the ability and the home environment. All bright children are separated from the average or the dull.

c. Heterogeneous grouping: In Heterogeneous grouping, pupils of various abilities and tastes are grouped in one class, if they posses requisite achievement in a particular phenomenon.

‘Check Your Progress’- 3

1. What are the types of Classification?

--------------------------------------------------------------------------------------------
30.7 Scheme of Promotion

So far you have studied about classification, its meaning, need for classification and bases of classification. In this sub-unit, you are going to study the promotion its, types, advantages and disadvantages. Promotion is one of the most complicated and baffling problems of school organization and administration. In the beginning when the present day school system was introduced in our county, the standard of attainment to be reached by pupils in various classes is fixed and the course of study was prescribed. The pupils were promoted to next higher classes after evaluation at the end of the academic year (School session). If the pupils fail to attain the required knowledge and ability, he/she had to repeat the same work for another year. Thus traditional system of yearly promotion is still in vogue in one form or the other in almost all systems of Indian education. Very often, mass failures at the time of public examinations in rural areas have been so large that much hue and cry was raised from all quarters against the system of examination and promotions. Let us discuss a few systems of promotion prevalent in our country.

Annual Promotion

Grading of pupils on the basis of annul examination is annual promotion. This plan of annual promotion has got its own advantages. It is easy to administer and economical in cost. Since the students remain with their teachers for one complete year, they can have sufficient time to understand them, follow their instructions and work accordingly. The subject matter can also be very easily divided and organized into large units and taught effectively. The teacher also has sufficient time to know the abilities of his pupils and he can thus adapt his method of teaching accordingly. The system of annual promotion in schools is quite in conformity with the plans followed in higher level of education.

Semi-Annual or half yearly (Semester) promotion

With a view to remove the main defects of the system of annual promotion, the plan of semi-annual (Semester) promotion has been adopted. This plan was expected to reduce the amount of retardation, resulting from failure, provide stimulus to the bright pupils and lead to a more frequent valuation of pupils achievement. But after a few years time in Africa, the majority of these scours changed over to the annual plan. It was because of greater interest in individual needs and difference and growing emphasis upon the education of the whole child rather than the mastery of subject matters alone.
Combined Annual and Semi-Annual Promotion

Under this plan the school work is planned in such a manner, that the whole course in each subject is covered in the first session; during the second term only revision work undertaken. The bright pupils are promoted to the next higher classes at the end of the first term and thus enable to save the half the school year. Other pupils recapitulate what they have learnt in the first term. Their promotion takes place at the end of the year.

The chief arguments of this plan are that it provides an opportunity to the bright pupils at a level nearly consistent with their ability. The interest of the average student is also not diminished because during the second term he is required only to revise what he has already covered. This system of special promotion is also criticized on the ground that the bright student, because of being crowded in his work, may become socially maladjusted. He / She may also complete his / her schooling too early and may thus be too immature to higher (College) education or for some employment. Moreover, neither the average pupils nor the leaders have any stimulus and interest in repeating for whole half year, what has already been covered.

Promotion by subjects

Under this plan, the pupils are promoted in accordance with their progress in each school subject. If a pupil is found to be quite well up in Kannada, he is promoted to the next higher class in that subject without any consideration of his grade in other subjects. He may remain in a lower class for the study of English or Arithmetic and in a still lower class for social studies. But for Kannada, he attends a higher class. The school timetable under the plan is framed subject wise: All the subjects in different classes are taught in one and the same period. So that each pupil may attend the class for which he’s fit in that subject. Under this scheme, the pupil does not lose his year, if he does not show the required proficiency in one particular subject. But effective co-ordination among the various school subjects is not possible under this plan. In addition to this, the plan is full of many other practical difficulties and as such it is not vogue in our educational institutions.

Trial Promotion

Trial promotion involves the conditional promotion of those pupils about when it is very difficult to determine whether to detain or promote them. Such pupils are promoted on the condition that if they fail to make adequate progress within a given period, will be sent back to their previous class. If however, they show satisfactory progress during this trial period, they are allowed to continue with the higher class. Such a procedure is quite
suited to elementary schools. But its success depends upon the attitude and opinion of the teachers who work with it. When a pupil has been promoted even conditionally, it is very embarrassing and undesirable to send him back after a few weeks. Therefore the general tendency in our country is effect promotion without any condition attached to it.

**Check Your Progress** - 4
List the types of promotion.

---

30.8 Let Us Sum Up

In this unit, you have studied about the meaning of classification, basis of classification, need for classification and Scheme of promotion. Classification means the assigning of pupils to a class or standard or purpose of instruction. The main aim of classification is to place each individual in an educational setting which may give him an opportunity for all-round growth and development. You studied about the need for classification also. It arises from the nature and interest of pupils. Most of the pupils are extremely social. They crave for friendship and association. Such an association motivates learning in groups. You studied about the basis of classification. Those bases are chronological age, mental age, biotypological examination system, attainment in school subject and social maturity. In the types of classification, you studied the type of promotion also. They are ability grouping, homogeneous grouping and heterogeneous grouping.

In the last sub-heading you studied the scheme of promotion. They are annual promotion, semi-annual promotion, combined annual and semi-annual promotion, promotion by subjects and trial promotion.

30.9 Answers to ‘Check Your Progress’

‘Check our Progress’-1

1. The need for classification arises from the nature and interest of pupils. Most of the pupils are extremely social. They crave for friendship and association with other
children especially when there are common interest and purposes. Such an association motivates learning in grouping. Hence there is a need for classification of pupils.

‘Check Your Progress’ 2
1. The basis of classification are:
   ● Chronological age
   ● Mental age
   ● Biotypological age
   ● Attainment in school subjects and
   ● Social Maturity

‘Check ‘Your Progress’ 3
1. The types of classification
   Ability grouping,
   Homogeneous grouping
   Heterogeneous grouping

‘Check Your Progress’ - 4
1. The types of promotion are:
   ● Annual promotion
   ● Semi-annual promotion
   ● Combined Annual and Semi Annual Promotion
   ● Promotion by Subjects and
   ● Trial promotion

30.10 Unit-End Exercises
1. Explain the need for classification.
2. Explain the bases of classification.
3. Explain the scheme of promotion.
30.11 References


COMPULSORY COURSE 03 (CC-03)
TEACHER FUNCTIONS

BLOCK 06
RESOURCE MOBILISATION AND MANAGEMENT
### Block 6

**RESOURCE MOBILISATION AND MANAGEMENT**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Title</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>Unit-31</td>
<td>Human and Material Resources</td>
<td>451</td>
</tr>
<tr>
<td>Unit-32</td>
<td>Resource Management</td>
<td>461</td>
</tr>
<tr>
<td>Unit-33</td>
<td>Resource Mobilisation</td>
<td>476</td>
</tr>
<tr>
<td>Unit-34</td>
<td>Resource Sharing</td>
<td>490</td>
</tr>
<tr>
<td>Unit-35</td>
<td>The Head Master</td>
<td>502</td>
</tr>
<tr>
<td>Unit-36</td>
<td>Action Research as a School Development Programme</td>
<td>509</td>
</tr>
</tbody>
</table>
INSTRUCTIONAL DESIGN AND EDITORIAL COMMITTEE

Prof. M. G. Krishnan  Chairman
Vice Chancellor
Karnataka State Open University
Mysore 570 006
Karnataka

Prof. Vikram Raj Urs  Convener
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Mysore 570 006

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Mysore 570 006

Planning and Development Officer
Karnataka State Open University
Mysore 570 006

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Administration or management of all these elements as a whole is a complex and complicated process. The total growth and success of the system, that is, institution depends on the development and strength of all constituent individual elements and aspects of the institution.

Resource is a means for implementing a plan, getting out of the trouble, solving problems and achieving success. Resources may be in the form of money, services rendered by human beings, economic goods, machines, property, assets, equipments, land, buildings, vehicles and so on.

Resources are very important, in fact indispensable, in any enterprise. It is also true with reference to education also. In educational system we need verities of resources both human and material. We need physical infrastructure like buildings, furniture, laboratory, library, and soon. We require the services of administrators (Principal, head masters), teaching and non-teaching staff members to conduct educational activities. We need the cooperation of many institutions, Governmental and non-Governmental agencies. We need finance from many sources to conduct educational activities without such cooperation and availability of various resources it is impossible to manage educational system. The quality and quantity of needed resources are also important, because the quality of education depends upon the quality and quantity of resources available and utilized in education.

Unit 31 of this block introduces you to the concept of resources and their importance. The next two units deal with resource management and resource mobilization. Unit 34 throws light on aspects of resource sharing and the last two units of this block defines the role of the Head Master and the importance of action research in managing a school.
Administration or Management embraces a large number of elements, whether material or human or ideational, which are important in their own merit as well as in collaboration with others. Every element is a small part, may be one, but it, along with others, and has to make the process a whole like links in a chain, every element has its share to contribute to the total strength of a chain. If any of the links of this chain becomes weak, the entire chain becomes weak and breaks. Similarly, the administrative process involves so many elements which are not merely theoretical but are very much practical in their nature and utility. They are not selected or independent of each other, rather they are closely interdependent and interrelated. They are all different aspects of the same process. Administration or management of all these elements as a whole is a complex and complicated process. The total growth and success of the system, that is, institution depends on the development and strength of all constituent individual elements and aspects of the institution. That is why, the efficiency of an administrator or manager depends on how he/she makes use of all the elements involved in the functioning of the institution and how he/she. The principles and structures of educational administration cannot be rigidly applicable. The mechanical and mathematical relationships of the physical world cannot be applied always to the field of educational administration. The administration of educational institutions is primarily concerned with age old human experiences of human organizations or associations.
Educational administration or management, in short, is a human enterprise controlled and affected by a large number of historical, philosophical, sociological, political and psychological factors. Moreover, education being a life-long process, educational administration deals with the entire human life ranging from childhood to adulthood. Thus educational administration is coextensive with human life and comprises multifarious elements.

Effective educational administration / management depends upon effective and skill full resource management. In this Unit you will study about the principles of resource management and the role of various school personnel in resource management.

The element which is required and involved in the functioning of a school / college is termed as a Resource. This resource may vary its nature. It can be a human being, like a teacher or a clerk or can be material like furniture, books and so on required in running a school / college. In this Unit you learn about the meaning and importance of resources required in a school / College and their importance in the functioning of an institution. You also learn about the classification of these resources.

### 31.2 Objectives

After studying this Unit, you will be able to

- Explain the meaning of Resources.
- Bring out the importance of Resources in the functioning of an educational institution.
- Classify resources available for a school / college.

### 31.3 Human and Material Resources-Meaning Importance

**MEANING :**

What is a Resource? In the ordinary sense a resource is any means human or material required to achieve a goal or to produce a commodity.

In the economic sense, resource is defined as any supply, support or aid that will meet a need (demand) of an individual or institution. Resource is a means for implementing a plan, getting out of the trouble, solving problems and achieving success. Resources may be in the form of money, services rendered by human beings, economic goods, machines, property, assets, equipments, land, buildings, vehicles and so on.

Resources may be available naturally like mineral resources land and forest resources etc. They are produced like equipments, vehicles, and machines etc. which are manmade
resources. Some resources are potentially present, but they need to be developed and utilized for example skills and capacities of human beings are potentially present in them, but they have to be developed through education and training to be utilized similarly electrical energy, wood energy and solar energy are potentially present in nature, but they have to be tapped through suitable technology for utilizing them. Some resources are symbolic in nature and the value of these is attributed money is a good example for this type of resource. The purchasing power is acquired by the money because of the value attributed to it by society.

**Human Resources**

Human beings who render various services to produce some good or to achieve a goal are known as Human Resources. Human beings possess Physical energy, Psychological abilities, motor-skills, and learn social skills to maintain human relationship which they use in producing goods and render services. All these put together are known as Human Resources.

Leon Megginson defines Human Resources as “the sum total knowledge, skill creative abilities, talents and aptitudes of an organizations work force as well as the values, attitudes and believe of an individual involved it is the sum total of inherent abilities, acquired knowledge and skills represented by the talents and aptitudes of the employed persons”.

**Material Resources**

Material resources include all other resources other than human resources. They include money, Materials, all kinds of infrastructure like furniture, building, machinery, equipments and so on.

Human Resource must be differentiated from Material Resources.

1. Material Resources are physical in nature and they are available in raw condition or they have to be manufactured. But Human resources imply human qualities like abilities and feelings.

2. Material Resources, most of they have to be produced and put to use. Some Material Resources like air, light, forest products etc are available naturally and can be put in to use directly. But Human Resources have to be developed over a like to be ready for use. This process of preparing individual’s abilities, skills and other qualities is known as Human Resource Development (HRD)

3. Material Resources can be handled in any manner. But Human Resources cannot be handled like that. Human feelings, social regulations and laws have to be considered in utilizing Human Resources.
4. Human Resources have to be replenished after a period of time through training. This is not so in using Material Resources.

5. Human Resources can be developed and enriched though education and training. This does not apply to Material Resources.

6. Human Resource loses its effectiveness with age, disease, lack of motivation. But Materials Resources can be utilized for a long period.

In education we make use of both Material Resources and Human Resources. Both these resources should be good qualitatively and quantitatively.

**Importance**

Resources are very important, in fact indispensable, in any enterprise. It is also true with reference to education also. In educational system we need verifies of resources both human and material. We need physical infrastructure like buildings, furniture, laboratory, library, and soon. We require the services of administrators (Principals, Headmasters), teaching and non-teaching staff member to comfort educational activities. We need the cooperation of many institutions, Governmental and non-Governmental agencies. We need finance from many sources to conduct educational activities without such co-operation and availability of various resources it is impossible to manage educational system. The quality and quantity of needed resources are also important, because the quality of education depends upon the quality and quantity of resources available and utilized in education. Hence the management of resources becomes an essential function of education administrators. In teacher training programme curriculum resource management finds a place. A good education administrator should know the sources of resources available for education, how to mobilize resources and how to utilize available resource effectively.

‘Check Your Progress’ - 1

1. What is the economic meaning of Resource?

2. How does Megginson define Human Resources?
3. What are Material Resources?

4. What are the differences between Human Resources and Material Resource?

31.4  Classification of Resources

Resources are classified in many ways. One way is to classify resources into human and material resources. We have already explained them in the previous section. Another way to classify resources is to classify them into free goods, production goods, consumer goods, material goods, economic (non-merit goods). This classification is explained with examples in the chart given below.

In education we use number of resources. They are classified into four groups namely (1) Natural resources (2) Physical / Material Resources (3) Human resources (4) Financial Resources. Examples for these resources are given in the chart given below. Resources of education can also be classified into school based Resources and Community based Resources.

31.4.1 School Based Resources

Resources available within the school campus are known as school based Resources. Building all infrastructures facilities, laboratory, library, teaching and non-teaching staff, playground all come under school based resources. The school administrator knows well about these resources and can utilize them as he wants to the optimum level. He can direct control over them, and make use of them appropriately.
The resources available in the field of education are represented through following figure-1

Figure-1: Resources of Education

Resources for Education

Natural Resources
- Land
- Water
- Air
- Trees/ Herbs/ Shrubs
- Environment/ Nature

Physical Material Resources
- Institutional Resources
  - Building
  - Libraries
  - Parks/ Gardens
  - Laboratories
  - Playgrounds
  - Multi-Media (A-V aids)
  - Furnitures
  - Study Materials
  - Vehicles
  - Seminar Halls
  - Staff Quarters
  - Guest Houses
  - Guidance and Counselling Clinics
  - Hostels
  - Gymnastics
- Non-Institutional Resources
  - Gifts
  - Donations
  - Endowments

Human Resources
- Institutional Resources
  - Teachers
  - Non-Teachers
  - Students
  - Administrators
- Non-Institutional Resources
  - Retired teachers
  - Parents
  - Professionals like Doctors, Lawyers etc.
  - Educated Youth
  - Retired Govt.
  - servants/officers
  - Academicians/ Educationists
  - Littérateurs
  - Thinkers
  - Public Representatives
  - Experts in various fields
  - Alumni

Financial Resources
- Fees
- Donations
- Grants
- Endowments
- Gifts
- Incentives
- Intellectual Property
Chart-3: Classification of Resources

- **Resources (Goods or Services)**
  - Types:
    - Free Goods
      - Meaning: A good with zero price. This is possible because its supply is either abundant or rationed.
      - Example: soil, air, water
    - Production Goods
      - Meaning: Goods which are used for production of consumables.
      - Example: labour, capital, and entrepreneurship
    - Consumer Goods
      - Meaning: Goods which are used for satisfaction of human wants.
      - Example: cloth, ink, pencil, paper, chalk, etc.
    - Merit Goods
      - Meaning: A good provided by the Government as it is regarded as desirable for consumption by the public.
      - Example: Education, Libraries, etc.
    - Economic Goods
      - Meaning: A good which is scarce and has a value.
      - Example: Computer, Mobile, Phones, Papers, etc.
31.4.2. Community Based Resources

All resources available procured and mobilized outside the school are community based Resources. These sources may be immediate community, wider social sources, Governmental and non-governmental agencies, educational and other institutions, financial sources like state and central governments, philanthropist, charitable organizations, voluntary organizations etc., are sources of community based resources. A school administration/ manager should know these sources so that he can mobilize resources for education. To obtain government and organizations based resources the school administrator should follow certain rules and regulations to use these resources. A dynamic administrator can mobilize lot of resources for the school from philanthropists and charitable organizations. A good Headmaster should identify available community based resources and then try to mobilize as much resources as possible. Various activities can be planned to mobilize community based resources conduct of student jatha, sending appeals, organizing drama I youth I music I sport festivals, science fairs, convective old students, making requests to government are some of such activities.

‘Check Your Progress’ - 2

1. How do you classify resources required in education?

2. What do you mean by School based Resources?

3. What do you mean by community based Resources?

4. What kinds of activities are organized to mobilize community based Resources?
31.5 Let Us Sum Up

In this Unit you have studied about the resources required in education. A resource is any good or service required and utilized to produce a good or to render service to satisfy some human need. Resources are mainly classified into Material Resources and Human Resources. The differences between these two types of resources has been explained.

Resources required for education are classified into school based Resources available within the school system and community based Resources available from various sources outside the school system. A school administrator has direct knowledge and control about school based Resources. But he has no clear knowledge about the availability of Community based Resources and has no control over them. He has to identify these sources and should take steps to mobilize them. He can organize several activities to mobilize community based Resources.

31.6 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. In an economic sense a Resource is a supply or support or that will meet a need (demand) of an individual or an institution. Resource is a means for implementing a plan, getting out of the trouble, solving problems and achieving success.

2. Megginson defines Human Resources as “the sum total knowledge skills, creative abilities, talents and aptitudes of an organization’s work force as well as the values, attitudes, and life of an individual involved it is the sum total of inhere of abilities, acquired knowledge and skills represented by the talents and aptitudes of the employed persons”.

3. Material Resources refer to resources which are Physical in nature and may be available naturally or may have to be manufactured.

‘Check Your Progress’ -2

1. Resources required in education are classified into (a) Natural Resources (b) Physical /Material resources (c) Human Resources (d) Financial Resources.

2. Resources available readily within the school campus are school based resources.

3. All those resources available from many sources outside the school campus are community based Resources.
4. Conduct of student Jathas, sending appeals, organizing drama / youth / music / sport festivals, science fairs, contacting old students, requests to government are some activities to mobilize community based Resources.

### 31.7 Unit-End Exercises

1. Make a list of Community based Resources available for your school / college.
2. As a head of the school / college, what measure do you adopt to mobilize more resources for your institution.
3. Explain the meaning of Resource and classifications of Resources.
4. Explain the meaning of Human Resources. How does it differ from Material Resource.

### 31.8 References

UNIT 32 RESOURCE MANAGEMENT

Structure

32.1 Introduction
32.2 Objectives
32.3 Resource Management - Meaning, importance.
32.4 Principles of Resource Management
32.5 Development of Human Resources.
32.6 Integration of Human Resources with Job skills.
32.7 Role of School Personnel in Resource Management.
   32.7.1 Role of the Headmaster
   32.7.2 Role of the Teachers
   32.7.3 Role of the Non-teaching Staff
   32.7.4 Role of School Management / Development Committee and Parent – Teacher Association.
32.8 Let Us Sum Up
32.9 Answers to ‘Check Your Progress’
32.10 Unit-End Exercises.
32.11 References.

32.1 Introduction

Educational Administration / Management is concerned with the Management of Educational institution like schools / colleges / Universities, where human beings (human resources) as well as Material (Material Resources are brought together for achieving the educational objectives of an institution. Resource Management in educational institutions is concerned more with the management of human beings, their interactions and inter-relations than with the physical elements or material resources like school buildings, furniture and equipments, and other resources like laboratory, library and sports material. It does not mean that management of material resources is not important. It is also equally important, but management of human resources is more complex as well as you need to deal with living beings who vary widely in their capacities, back ground, emotions and feelings, attitudes and skills.
Inter-human relationship is the key-note of educational administration, which is a main a social activity. As human behavior cannot be predicted with accuracy and social conditions are not static. The principles and structures of educational administration cannot be rigidly applicable. The mechanical and mathematical relationships of the physical world cannot be applied always the field of educational administration. The administration of educational institutions is primarily concerned with age old human experiences of human organization or associations.

Educational administration or management, in short, is a human enterprise controlled and affected by a large number of historical, philosophical, sociological, political and psychological factors. Moreover, education being a life-long process, educational administration deals with the entire human life ranging from childhood to adulthood. Thus, educational administration is coextensive with human life and comprises of multiple elements.

Effective educational administration / management depend upon effective and skillful resource management. In this unit you will study about the principle of resource management and the role of various school personnel in resource management.

### 32.2 Objectives

After studying this unit, you will be able to:

- Explain the meaning of Resource Management.
- Bring out the importance of school personnel in Resource Management.
- Explain the principles of Resource Management.
- Explain the aspects of Development of Human Resources.
- Bring out the need of matching Human Resources with Job Skills.
- Explain the roll of various school personnel in Resource Management.

### 32.3 Resource Management–Meaning and Importance

Resources are valuable. Some resources like air and water may be available freely. But some resources are scare and money is required to procure them. Hence resources have to be utilized carefully. Planning is required to utilize available resources optimally and effectively. This planning and its implementation are known as Resource Management. It is required to utilize effectively best material and human resources. Resource Management has several steps like identification of sources of resources, mobilizing these resources, utilizing the available resources optimally and effectively and sometime sharing available resources.
32.4 Principles of Resource Management

“Material facilities as a whole play an important role in undertaking of both curricular and extra-curricular activities in an educational institution. These material resources are formed in the form of teaching aids, laboratory equipment library equipment, cultural aids, sports and games equipment and also other office equipment. There are other types of materials facilities which are identified as consumable articles used in laboratories such as furniture, energy etc.”

Management of resources is essential for the following reasons.

1. Every resource has to be utilized.
2. Wastage in the use of resources has to be plugged.
3. Some resources are scarce. They have to be carefully utilized.
4. Some resources have multiple uses.
5. Some resources are not easily available.
6. Some resources like electric power, gas etc., are potentially dangerous. They have to be carefully used.
7. Paper use of resources saves time and money.
8. Some resources need technical Knowledge for proper utilization.
9. Resources have to be properly maintained to prevent loss or cost of repairs.
10. As there is financial involvement in the purchase of materials, proper materials management is essential.

A sound system of materials management must follow the following principles.

1. Determination of Material Resources.

The first requirement in Materials management is deciding what materials are required for the educational institution. This is necessary for allocation of funds, budgeting of expenses and starting procedure of procurement of materials. The determination of material requirement depends on several factors like the type of activities planned the staff strength. The size of students enrolled, immediate and remove needs, availability of funds and son on Manning and discussion are required for proper determination of requirement.

2. Facilities have to be specified on the basis of requirements.

To begin with it has to be decided what kinds of facilities have to be provided in the institution. On the basis of this the required materials have be purchased. This requires
proper planning and estimation of quantity / quality of materials required and the cost of materials.

3. Determining quality is essential:

While purchasing priority has to be given for high quality. It is even more important in institutions because public money is involved in the purchase of materials. High quality of materials ensures proper service, longevity of use, wastage and wear and tear of equipments.

4. The quantity of materials has to be decided properly.

Depending upon the requirement the quantity of materials (number and volume) required has to be determined. Unnecessary stock of materials has to be avoided. Only scarce materials can be purchased in large quantity and stored perishable and consumable materials must be purchased in small quantities.

5. Per capita material requirement has to be worked out.

While planning to purchase any materials how much cost has to be incurred per student (unit) has to be determined. This can be obtained by dividing total cost as required by the number of students (Units). This gives an indication to decide whether the investment is feasible or not. If per capita cost of this is known as unit-cost in economics) proves to be too high the proposal of that purchase has to be limited.

6. Utilization process has to be staggered:

In the case of some scarce or costly resources. Because it may not be possible to purchase them in large quantities. They have to be used but many or have to be used occasionally. Costly equipments like computers, some laboratory equipment, and costly books come under this category.

7. All material resources have to be optimally utilized.

Optimum utilization of any material is a cardinal principle in the material management of any institution. Maximal utilization improves efficiency of the equipments, proves to be economical.

8. A proper inventory system has to be maintained.

All the available / purchased materials have to be listed stock registers, utilization registered etc have to be kept. Entries have to be made for new material purchases, any material is issued to any book for use and any materials require repair or any material is abandoned.
9. Wastage and under utilization of materials have to be prevented.

For maximum utilization wastage and underutilization have to be prevented completely. Proper maintenance periodic repairs and proper supervision are important in preventing wastage and underutilization.

10. Every material, except consumables, has to be properly identified.

As all materials belong to the institution and thus become public property, they have to be identified and tested and recorded. Identification marks like name of the institution, category of materials and serial numbers have to be painted on each material.

‘Check you Progress’ -1
1. What is Resources Management?

2. What are the steps in Resource Management?

3. Why is a resource Management System required?


32.5 Development of Human Resources

The efficiency of education largely depends on the competence and capabilities of personnel who are engaged in various jobs and services. The most important component
of human resources is the teacher. It is the teachers who are mainly responsible for developing knowledge, attitude, values and skills of students. Unless they are well-equipped and properly motivated, the education system as a whole cannot be effective.

In addition to teachers, other personnel involved at the micro and macro-level are educational supervisors, administrators, planners, heads of institutions, heads of departments, head of research and evaluation, persons in charge of various co-curricular activities many ministerial and office assistants who contribute immensely to the realization of educational objectives. Each of these functionaries requires different degrees of knowledge, skills, understanding and attitudes for performance of their respective work and assignments with competence and efficiency. In fact, an effective manager of human resource can ensure an effectively managed educational system. For facilitating this function these are essential.

- The knowledge, the understanding, values, attitudes and skills required for proper performance of each job in the system should be analyzed and enlisted.
- Manpower requirements at various stages of management need to be estimated well ahead and the required manpower are made available.
- Development needs should be assessed periodically and human resources are multiplied through development programme.
- Persons concerned need to be motivated to maintain adequate levels of performance.
- Appropriate reward and incentive system should be developed through continuous guidance and various career improvement programmes for better quality or work life.

Efforts are to be made at various levels of management for developing the capabilities of personnel working in an organization or institution for performing their roles effectively and for taking up new responsibilities with right and efficiency. The need for human resource development is more imperative in the educational system where the rate of development of knowledge and skill is very fast, rather explosive. There is a great need for developing teachers’ professional growth and competence through in-service programmes. Consequent upon the implementation of National Policy on Education, 1986, a new environment has been created for upgrading and updating the knowledge and skills of teachers and other personnel. The mass vacation courses include orientation and refresher programmes which have been continuous orientation and refresher programmes which have been continuous and systematic through different institution and innovations.

In order to make the process of human resources development more systematic, relevant and meaningful, it is necessary to look into the following aspects of management.
i) Recruitment and Placement

After identification and finalization of the requirements of human resources, it is felt essential to recruit suitable persons. Previously, very few people were genuinely interested to come to teaching progression. There was, therefore, a very limited choice for the management to select competent persons for the teaching profession. This problem is no longer existent at present as a lot of persons are now available for taking up not only teaching, but also no-teaching jobs in the education system. Due to higher remuneration and comparatively better service conditions, many brilliant and highly educated candidates are trying their lot in the educational institutions starting from pre-schools to universities.

A good recruitment system has to be evolved for ensuring the identification of right kind of people to man different positions. If an Arts graduate is appointed to teach Science and Mathematics or it a History teacher is asked to teach languages, it is a waste of human resources or an unsatisfactory transaction of curriculum. A wrongly placed or frustrated teacher can spoil the learning atmosphere and may adversely affect the teaching-learning process. Therefore, all attempts need to be made to ensure the placement of right persons in right positions through right selection. Firstly, a good system of selection has to be based on accurate identification of competencies comprising knowledge, understanding, attitudes and skills, that are required to perform functions., Necessary needs should be identified though suitable tools and methods. These include degrees and diplomas obtained by the candidates, training courses participated and performance appraisal records of the candidates. Thirdly, it is necessary to identify mechanisms of testing the candidates’ knowledge, understanding, skills, attitudes and values, wherever accurate indicators are available.

ii) Performance and Potential Appraisal

After a person is selected, posted and given some responsibilities, it is felt necessary to supervise and guide his/ her performance. Further development needs are identified and in-service training is provided. Periodic appraisals of his/her performance not only enables him/her contributions are evaluated and the extent to which he/she is doing his/her job can be ascertained.

Performance appraisal deals with performance of a person on the job whereas potential appraisal is related to the assessment of capabilities of a person to perform his assignment and to take up responsibilities. For example, the head of an institution or an Inspector of schools has to potentiality to supervise and guide the teaching-learning process. Hence, he or she fails to do justice to his duties and responsibilities. Hence, it is essential to assess the abilities of an employee for the jobs assigned to him / her, so that right people can be placed at the right places for efficiently doing the job.
iii) Reward and Incentive Management

Rewards and incentives are essential for promoting high morale and ensuring adequate motivation of staff members. As we put in some extra efforts and take up some extra responsibilities, we expect some recognition or encouragement from the higher authorities. Any person who does something unusual or contributes something extraordinary or works out an innovation with success, he/she deserves appropriate incentives and rewards. This may be in several forms e.g. giving some cash awards in appreciation, granting a few increments in the salary, weightage for promotion, assigning higher responsibilities, making announcement in the house journal or newspapers, sponsoring study tours, praising before higher authorities and others, and so on. The person is encouraged by this, and the entire system gets motivated for doing better and achieving higher.

iv) Punishment and Disincentive Management

As desirable behavior of the personnel is to be reinforced, their undesirable behavior should be discouraged by all means, for efficient and effective functioning of an institution. However, for this, undesirable and unwarranted behavior, elements need to be identified as objectively as possible and the culprits or defaulters be penalized properly. Personal rancor or professional jealousy should not found any place in this. Punishment and disincentive measures may take different forms, namely asking for explanation, mentioning in the ICCR, issuing memorandum, reporting to the higher authorities, suggesting or making transfer to distant and remote places etc. These matters should be handled with free mind, great impartiality and proper precaution.

v) In-service Education

With a view to keep the personnel abreast with the latest knowledge, skills and trends, it is desirable to provide in-service education continuously any systematically. Teachers need such facility on priority, but other functionaries should also be exposed to modern developments in their respective fields. There are different forms of in-service education for human resource development.

Some of them are as follows

i) Refresher Training Course giving advanced knowledge and skills for better performance.

ii) Orientation Training Courses for wider exposition and better acquaintance with latest developments in the respective field and allied ones.

iii) Staff discussion and deliberation on curricular and co-curricular issues.
iv) Deputing personnel for participation in professional meetings, conferences, seminars and workshops.

v) Making various distance education courses and other career development programmes available.

vi) Encouraging staff members to take up research studies, extension work and publication activities.

vi) Communication

There should be free and frank communication among the employees through notes, office orders circulars, appeals, house journals, newsletters and so on. There are mainly two kinds of communication (i) vertical and (iiO horizontal, if a communications is made among the personnel staring from the grass root or field workers to the persons at the helm of affairs or at the apex of the administrative hierarchy, it is vertical. When a communication is meant exclusively for a particular level of personnel, it is horizontal. But both vertical and horizontal lines of communication should be free and continuous through various means for ventilation and removal of grievances, for boosting the morale and creating motivations among the persons at various levels. This communications should also be a two-way, and not a one-way traffic.

vii) Storage and retrieval of Data

Data relevant to recruitment, placements, transfer, training, reward and punishment etc. of the personnel should be properly reserved and retrieved for effective decision making. Management calls for various decision-making activities and or that, scientific storage and retrieval of information about employee’s qualification, qualities, performance and accomplishments awards, potential appraisal and human resource databank should be set up and maintained properly for helping the management in taking suitable decisions. In this work, the computer may be utilized effectively and efficiently if the organization or institution can afford it.

32.6 Integration of Human Resource With Job Skills

Human Resources constitute an important part of educational management. Especially, in the educational arena, human resources or personnel element assume a predominant role. In the management of an institution, it is essential to match individuals with specific skills of job with specific needs. The matching process was less difficult a hundred years ago, because most skills relevant to the work place tended to evolve from brain and muscle.
Today, with work becoming more knowledge and skill-based, management faces problems of matching human resources with work places. With work becoming more knowledge and skill-based management process is more active and responsive to matching human resources with various work places and job.

Personnel management is now often called Human Resource Management which includes recruitment, promotion, training, programming and so on. The process of matching jobs and individuals as discussed above leads to the following questions. What kind of person is needed for a job? What are the abilities of the people now in the organization? How can the individual be trained or replaced, or should the job be adjusted? How can people be obtained to match long term needs of the institution?

**Steps for Matching Job with Individuals**

The first step in snatching jobs and individuals is to make job specifications or description available to the management. A job description sets forth the objectives, duties, relationships and results expected of person in the job. A principal’s job description, for instance, might include the duty “timely completion of courses of study.” A hospital administrator’s description of job might include statements such as, “Coordinate all community relations” and promote outpatient services so as to relieve pressure on bed facilities.

In order to snatch job and individuals, job descriptions must be more explicit and concrete. The declaration that a principal should see that courses of studies are completed in time or transacted as per schedule, for example, does not say whether he or she made adequate rooms and teachers available. The hospital administrator may be in charge of all community relations but does this duty involve delivering speeches, appearing before the medical boards or conducting health programme for school children?

A job description may have to be amplified so that it spells out, for instance, how much interrelationship is intended, what innovation or measures need be taken or what managerial techniques should be used. In clarifying job charts all thoughts cannot be put in writing; the people who are in the management should be capable of “reading between the lines” i.e., the implications involved. They should be clear in their minds about the task of matching specific individuals with specific tasks.

The second major step in matching jobs and individuals is translating the duties in the amplified job description i.e., “individual specification”. A statement of duties often does to specifically tell what is expected of an incumbent or a candidate or a position. In considering an individual for a particular job, his past experience, accomplishment and behavior, will be the main evidence. But if he is a fresher, his conduct and characteristics in the past have to be appraised and if a position is changed, many factors need be considered for suitting a person to a position.
Individual specifications

There are usually three different ways of stating individual specifications.

i) Certain standardized jobs can be tested directly. Candidates for physical education officer or instructor posts can be put to a series of tests; prospective typists can be asked to type a sample passage and so on. Such standards, however, cannot be applied to complicated and unusual tasks that are typical of many executive jobs. These specifications tell little about a person, whether he will fit into a working group or not.

Additional specifications are therefore required for complex and high responsibility human positions.

ii) Past experience and achievement may be useful as an indication of one’s ability for a similar work in the future. A vice-principal, with some experience can be considered for a post of Principal. A deputy Director of the Training College or Institution can easily fit into a post of Director of Academic Staff College.

iii) Specifications need to include a list of personality traits or characteristics that may be stated in the technical jargon of behavioral or social scientists viz., “democratic and self assertive” or in general terms like ‘friendly temperament” and “energetic and ambitious’. The reason for resorting to personality characteristics is the experience may not be an adequate indication of the actual qualities required for a position. A job may be so unusual that only a few candidates have the requisite and related experience which may show distinctly all the qualities that are needed or success in a new position.

Generally, therefore, most statements of individual specification for executive and staff jobs include a combination of desirable experience and personality characteristics. Preparing the “experience” aspect of an individual is relatively simple and emerges from the analysis of the duties of a particular job. Experience job specifications are therefore useful and should be used whenever necessary.

32.7 Role of School Personnel in Resource Management

Management of resources both human and materials is not the responsibility of head of the institution. Through according to rules and regulations and as the headmaster / principal is the administrative head of the institution, the head-master / principal is responsible for procuring, maintaining and utilizing all resources in the institution, other personnel of the institution - teaching and no teaching staff are indirectly responsible for the management of resources. They are normally responsible for the proper maintenance and utilization of
resources. It is the joint responsibility of the head of the institution, teaching and other staff of the institution to properly manage the resources. Each has his role to play.

32.7.1 Role of the Headmaster

As mentioned about the overall responsibility of management of resources is on the head of the institution. It is with the co-operation of the staff members and members of the management committee the Headmaster decides the materials to be purchased and other resources to be mobilized for the requirements of the institution. He prepares the indent of required materials, prepares estimated cost, it requires invites tenders and makes amendment to purchase the materials as per rules. When materials are purchased they are verified for the quality and taken into stock. The head-master should distribute the resources depending upon the requirement. He has to supervise the proper utilization of all resources. He should also supervise the maintenance of equipments in the laboratory and other places. He relegates the responsibility of resources of various sections to the concerned chiefs like librarian, physical education teacher, laboratory assistants, in-charge of audio-visual room and also class-room teachers. The head- piaster should periodically assess the requirement of various resources human and material for the institution and take steps to procure them.

The headmaster is also responsible for the appointment of teaching and non-teaching staff. He should arrange for periodic in service training. Work must be allotted to the staff judiciously. Regular supervision of staff is also important to ensure efficiency. In all these duties the Headmaster takes the help of other staff members also.

An intelligent and innovative Headmaster can manage the resources for his / her institution most judiciously and effectively. He can identify new sources of resources and can mobilize them adequately. He/ she can think of making must — utilization of available resource. An efficient Headmaster can arrange for maximum utilization of resources. Thus the head of the institution plays an effective role in resource management

32.7.2 Role of the Teacher

Class-room teachers are also partly responsible for effective utilization of available resources. They have to play an important role especially in the proper utilization of library laboratory, sports materials and teaching aids. They are also responsible for maintaining proper discipline among students, for bringing out their potentials and for proper development of their personality and character. They can assist and advise the Headmaster in purchasing books, electronic materials, laboratory equipments and sport materials. They should maximally utilize library facilities, laboratory facilities and encourage students to make best use of these facilities.
32.7.3 Role of Non-teaching staff

The Role of Non-teaching staff is limited to the maintenance of materials, keeping records relative to them and providing various services like library service, laboratory service and routine office work. They have to inspect the materials and equipment regularly and report any defects which need to be repaired or many requirement of materials to the head-master. The librarian and Laboratory Assistants, technician of Audio-visual Room play an important role in teaching learning activities also. A good librarian an educate students in making good use of library Lab technicians, like work help students in laboratory activities.

32.7.4 Role School Management / Development Committee (SDMS) and parent Teacher Association (PTA)

School Management or Development Committees and parent-teacher associations also play a role in resource management. Their responsibility is limited to identification and mobilization of resources and proper supervision of their utilization. They can help the Headmaster in locating new resources for the institution. They can participate in any activity of the school for resource mobilization. SDMC’s have the power to advice and sanction money for purchase of required materials. They have the right to inspect to what extent the available resources are utilized. PTA members can make a follow up the progress of students’ academic achievement.

‘Check Your Progress’ - 2

1. What are the essential factors for effective Human resource management?

2. Mention the aspects of Human Resource Management

3. Which are the two steps in matching jobs with individuals?
4. Who are responsible for effective resource management?

32.8 Let Us Sum Up

In this Unit we have discussed about Resource Management which is very important in the management of an educational institution. You learnt about the meaning and importance of Resource Management. The principles of Resource Management were explained, Human Resource development has several aspects to be considered. These aspects were explained for better efficiency matching human resources to job skills is very important. Head of the institution, staff members, both teaching and non-teaching staff members should mutual cooperate in effective resource management. Even members of SDMC’s and PTA's can play an influential role in resource management.

32.9 Answer to ‘Check Your Progress’

‘Check Your Progress’ -1

1. See page
2. See page
3. See page
4. See page

‘Check Your Progress’ -2

1. See page
2. See page
3. The first step in matching jobs to individuals is to make job specifications of description available to the management. The second step is translating the duties in the job descriptions that are ‘individual specifications’. A statement of duties often does to specifically tell what is expected of an in or a candidate or a position.
4. The head-master, teachers, non-teaching staff-members and even members of school Development committee and parent teacher association are joints responsible for effective Resource Management.

32.10 Unit-End Exercises

1. What do you mean by Resource Management? Why is it essential in an institution?
2. Explain the principles of Resource Management.
3. Explain the process of Human Resource Development with reference to an educational institution.

32.11 Reference

UNIT 33 □ RESOURCES MOBILISATION

Structure

33.1 Introduction
33.2 Objectives
33.3 Resource Mobilization Meaning Importance
33.4 Resource Mobilization
   33.4.1 From Community
   33.4.2 From NGO’s
   33.4.3 From the Government
33.5 Resource mobilization role of
   33.5.1 Role of the Headmaster
   33.5.2 Role of the Teachers
   33.5.3 Role of Non-Teaching Staff
   33.5.4 Role of School Management / Development Committee.
33.6 Let Us Sum Up
33.7 Answers to ‘Check Your Progress’
33.8 Unit-End Exercise
33.9 References.

33.1 Introduction

In the previous two units you have learnt about meaning of resources and various human and material resources, development of human resources and methods of management of resources for maximizing efficiency. You have also understood the role of the head of the institution, classroom teachers and non-teaching staff in resource management.

Resources for running an educational institution are not available and procured easily. The required resources are obtained from various sources like government, non-governmental organizations, parents, community institutions, organization and philanthropic persons in society. Some resources like salary for teachers, development grants, money for days to day expenditure etc are available from government grants. They have to be obtained by following set procedures laid by the government. For the holistic development of a school, for providing better and varied facilities widening for the scope of activities only government financial sources are not adequate.
To achieve these developmental objectives the head of the institution or school management committee has to identify other resources for materials and finance. Resources available other than government sources have to be tapped for additional resources. In this activity, not only the Headmaster, but members of teaching and non-teaching staff, members of School Management / Development Committee and local community members interested in the development of their school have to play an active and constructive role. This process of identifying available resources and making used of them to the fullest possible extent is known as Resource Mobilization. In this unit you will study about various aspects of Resource Mobilization for the benefit of an educational institution.

### 33.2 Objectives

After studying this Unit, you will be able to:

- Explain the meaning of Resource Mobilization.
- Bring out the importance of Resource Mobilization.
- Explain the process of mobilizing resources from various sources.
- Bring out the role of Headmaster, Teaching / Non-Teaching Staff and School Management / Development Committee.

### 33.3 Resource Mobilization–Meaning and Importance

**Meaning:** Resource Mobilization is the process of identifying available resources from various sources, procuring these resources and making use of them effectively. The task of Resource Mobilization is a co-operative task. The head of the institution, teachers, non-teaching staff and members of school development committee should work individually and collectively in mobilizing available resources for the benefit of school.

A school has so many resources like building, playground, furniture, teaching aids, laboratories, and human resources like teaching and non-teaching staff. In addition to these resources, there are many other resources outside the school. Educated persons in the community, members of school Management / Development Committee, philanthropic persons who can contribute to the school, natural resources like lakes, forests and so on of geographical / biological / scientific interests community resources like notaries / factories / production centers, banks, post office, railway station, fire station, police station which are useful for teaching civics, educational centers like universities and resource organizations and government agencies, voluntary organizations and so on. These varied researches have to be at identified and mobilized effectively by the school administrator.
Resource mobilization includes the following tasks.

1. Identifying the source of available resources.
2. Take stock of available resources in the school and outside the school.
3. Identifying the resources required for the development of the school.
4. Preparing a plan to utilize the resources available in the school.
5. Preparing a plan to mobilize available resources outside the school.
6. Preparing a plan to utilize the resources keeping in mind the needs of the schools.
7. Preparing a time plan for the utilization of resources.
8. Maintaining the available resources in the school in good condition and to improve them if need be.
10. Preventing misuse or non-utilization of available resources.
11. Taking steps to tap resources available outside the school.
12. Enlisting involvement and co-operation of staff and students in resource mobilization.

Resource mobilization can be done in the following modes.

1. Getting grants from the government and other funding agencies.
2. Collecting donations in the form of fees, development fee donations from parents interested in the developmental activities, donations from philanthropic individuals and voluntary organizations.
3. Collecting donations in the form of materials like desks, benches, chairs, sports materials, laboratory equipments and instruments, and old magazines / books periodicals, teaching aids, stitched uniforms and so on from parents and voluntary organizations like Rotary Club, Lions Club etc.
4. Utilizing services of educated parents, house wives, retired teachers / experts for teaching students and advising and training teachers.
5. Utilizing community resources like banks, post office etc by taking students to visit them and learn about them,
6. Effectively utilizing all available resources within the school teachers, non-teaching staff, has laboratory, accommodation, furniture, instructional aids, sports materials and play ground to the maximum extent.
Importance

Resource Mobilization to the maximum extent and in an effective manner is very important for the development of an educational institution. Its importance is emphasized by considering the objectives it helps to achieve. The following objectives are achieved through an effective programme of resource mobilization.

1. It helps in the all round development of the school.
2. It paves way for maximum utilization of all available material resources in the school.
3. It helps to utilize the available human resources to the fullest extent possible.
4. It leads to qualitative improvement of academic functions of the school.
5. It helps to achieve the objectives set by the school.
6. It helps to organize the curricular activities of the school effectively.
7. It becomes possible to organize the co-curricular activities effectively.
8. It leads to all round development of students.
9. It economizes the expenditures of the school.
10. It helps to plan development activities for further improvement of the school.
11. It makes it possible to utilize various community resources to the maximum extent.
12. It helps teachers to carry out their teaching activities effectively.

33.4 Resource Mobilization

As noted in the previous section resources for running a school effectively are available from many sources within the school and outside the school-community, government, people in the community and the geographical environment. These resources have to be identified and mobilized effectively to the possible extent by the headmaster, teaching and non-teaching staff and members of school management development committee members. In this section let us examine as to how to mobilize resources from these sources and what kinds of resources can be mobilized.

33.4.1 From The Community

For the effective progress of a school an effective relationship between school and community is very essential. The responsibility of forgoing such effective school community relationship rests of the head of the institution and the members of staff and SDMC. A programme has to be prepared with the joint co-operation of community members, local
politicians, members of local self government institutions like village Panchayats, Zilla Parishads, voluntary organizations interested in education for the development of the school. Resources in the form of land, money, instruments furniture like chairs etc, used books and magazines form can be collecting.

Community members can be encouraged and requested to take up voluntarily to bear the expenditure involved in the repair work of renovation of school building, white-washing or painting them, constructing new class-rooms, compound wall, cleaning the play ground, purchasing required furniture, teaching aids, sports materials etc., Rich and philanthropic persons in the community may be requested to donate funds for instituting scholarships for meritorious poor students, purchasing uniforms and books for poor students. Community members are encouraged and invited to co-operate and participate in the programmes sponsored by the school like literary campaign, environment awareness and protection programme, community harmony programme, clearing the school / community environment activity, increasing school attendance, retaining children in the school, special teaching for backward children and so on. Such activities not only bring school and community closer but also provide public education to the community.

Continuous effort is required to enlist community co-operation. It is an essential duty of teachers though it is a difficult task. The Headmaster and SDM members must help the teachers in this activity. The Headmaster and the teachers should maintain cordial relationship with the community from the point of view of the development of the school. The school should adjust to the needs of the community to the extent possible. The curricular and co-curricular activities should reflect the local community needs. The timing of declaring holidays, socially useful and productive work, vocationally activities, cultural and festival activities, lectures etc. have to be organized keeping the community requirements in mind.

33.4.2 From Non-Governmental Organizations (Ngo’s)

A number of voluntary / non-governmental organizations are now working in society with their own aims and objectives. Most of these organizations are also interested in education. Some voluntary organizations like Pratham are specifically working for betterment of slue education and tribal children. Some voluntary organizations are managing children homes, student hostels, orphanage homes, and conducting classes to educate children who have left school or who have not been enrolled in the school. Some organizations like Rotary Club, Lions Club and so on set apart some amount in their budget to give out as donations to educational institutions and educational activities.

They are interested to take up the responsibility of sponsoring educational programmes in cooperation with the interested schools. They are ready to donate funds for purchase
of furniture, books, equipment, uniforms etc. They also institute scholarships and awards for meritorious students and economically backward students. Some organizations like ISCON in Bangalore and many mutts are coming forward to finance mid-day meal programme. The schools should identify such organizations and utilize the services of such organizations. In addition to providing materials help many voluntary organizations are willing to provide their human resources in the form of volunteers, part-time teachers, experts whose services could be utilized to the maximum extent for the benefit of educational institutions.

The services of voluntary organizations utilized for the school should be made known to the general public. Hence wherever a school gets some help from the community or NGO’s it should be publicized and should be acknowledged befittingly.

33.4.3. From the Government

Governments - central and state are another main source for educational finance State government directly finances educational institutions in the state in the form of salary grant, building grant, development grant and contingency grant for other expenses. The entire expenditure on education up to secondary education and junior colleges is borne by the government is spent by the schools and part of expenditure of aided schools and junior colleges is borne by the government in the form of various types of grants. Central government also gives grants for various types of educational activities directing the grant through state governments. Financial assistance is given by the central government to educational programmes like training for teachers, Sarva Shiksha Abhiyan, non-formal education and so on. Sometime several programs are organized by the national level organizations like NCERT, Department of Human Resource Development for the benefit of students and teachers.

At the state level several departments like Agriculture, Social Welfare, Health etc also give financial assistance to educational institutions. Universities also have provisions for giving financial help to education.

Educational Administrators (Headmasters and Principals) should tap these government sources to mobilize finance for the institutions. Grants should be claimed at the appropriate time and such grants must be used effectively and constructively. Financial assistance available from central government must be utilized effectively. Governments both central and state are very good resources for finance, land, buildings, materials and instruments, furniture, instructional aids, student scholarships, student hostels, teachers’ salary, increments and pension.
‘Check Your Progress’ - 1

1. What are the resources available from the community?

2. In what ways voluntary organization can provide resources for schools?

3. How can government provide resources for educational institutions?

33.5 Resource Mobilization-Role of

As it has already been noted earlier the process of Resource Mobilization is a cooperative task to be carried over by the joint efforts of the Headmaster, Teaching staff, Non-teaching staff and School Development / Management Committees. In his section let us explain the role of these in Resource Mobilization.

33.5.1 Role of the Headmaster

Headmaster or Headmistress is the leader of the school. A Headmaster / Headmistress should essentially possess the qualities of cleverness, trustworthiness, creativity, impartiality, objective attitudes, self-confidence, open-mindedness, punctuality, respecting others, sympathetic attitudes, helping nature, cooperativeness, ability of convincing others, honesty, service-mindedness, good character, self-confidence, self-respect, willingness to correct one’s mistakes and so on.

A Headmaster / Headmistress has to play multiple roles in the school. He / She should be a teacher of teachers, supervisor of teaching and non-teaching staffs, person of disciplining students, a distributor of money for the expenditure of the school, sociologist in achieving cordial school-community relationship, an advocate in managing the legal transactions of the
It is the duty of the head of the school to prepare a complete plan for the functioning of the school to distribute the functions suitable for all the staff members and supervise the functioning effectively through the active and willing co-operation of all the staff members. He / She should see that all the activities routine administrative, curricular and co-curricular go on continuously without any obstacles. The functions of the head are not limited to school but they extend to outside the school limits. In order to implement the educational policies he/she should establish cordial social relations with government officers, educational officers, department of education, parents, community, parental organisations, voluntary organisations working for education, School Development Management committee. The head of the school enjoys a distinct position and respect in the community. He is not only a leader of the school, but he should to be ready to take leadership in community activities. As the school is a social institution, the head of the school must see that the ideals of the society are reflected in school activities. He should seek the help from the community to fulfill the requirements of the school and fulfill the needs of the community through the activities of the schools. Thus it becomes the primary duty of a Headmaster to develop a closer and cordial relationship between the school and the community.

The Headmaster should purchase stationary (paper, pen / pencils) dusters, blackboards, chalk, instructional aids (charts, maps pictures etc,) laboratory materials (equipments instruments), chemicals other required objects, services etc., books/magazines for the library, Radio/TV, CD’s, cassettes - audio, video, computers etc., for the technology lab, sports materials and equipment, furniture, and soon. Old furniture has to be repaired and new ones should be purchased. He should supervise that the class-rooms, library rooms, laboratory, staff-rooms, office rooms, other rooms and even play ground are cleared properly every day.

Supervising and managing the work of teaching and non-teaching staff effectively is also important for the optimum utilization of human resources in the school. This will go a long way in the effective resource mobilization.

A Headmaster/Headmistress who has successfully established a good and cordial school- community relationship can mobilize lot of resources available in the community. It is possible that community contains lot of resources which can be utilized for school activities. This becomes easy if there is cordial school-community relationship. The Headmaster should study the community to identify such resources which could be utilized by the school and prepare a list of such resources and chalk out a strategy to obtain those resources. Many materials required while organizing co-curricular activities can be obtained
by the community free of cost or with minimum cost some materials can be obtained temporarily for the functions and latter they can be returned to the owners with thanks. By effectively appealing to the community members the Headmaster can mobilize such resources like donations, furniture’s, land, equipments, books/magazines, sports materials and so on.

The Headmaster using his/her influence can mobilize lot of resources like donations, materials, services from interested voluntary organizations. He can organize many school activities in co-operation of voluntary organizations.

The Headmaster is mainly responsible to tap all the resources obtainable from the government and concerned departments. He should draw monthly salary for the staff and money for contingency expenditure. He should distribute the salary to the staff members and purchase whatever materials required for the school activities. He should also draw the other grants given by the government at the appropriate time and make use of the amount for the developmental activities of the school. Such grants include money for repair work, purchase of books, laboratory requirements, teaching aids, sports materials giving a scholarship to poor students and meritorious students and so on.

33.5.2 Role of the teachers

There is no doubt about the statement that the success of any educational system depends to a great extent on teachers. Hence highest importance is given to teachers by educationists, in all educational commissions and books on education. Teacher has been respected as equal to god, as friend, philosopher and guide of students. He has been praised nurturer and protector of culture, as the designer of students’ future. Thus classroom teacher is the main human resource responsible for the success of educational system.

Teachers must continuously try to get the support of community and voluntary organizations. It is a necessary duty of teacher, although it is a difficult task. The Headmaster and the entire school system should extend their co-operation to teachers in this task. As teachers have to strictly follow the rules and regulations of the government, sometimes it becomes, difficult for teachers to work with the community to mobilize resources for the school. But, in spite of such occasional difficulties teachers must try to establish cordial relationship with the community using their wisdoms and social skills. With the active co-operation and guidance of the Department of Education the teachers must explore the points or scope of possible meaningful participation of the community in the matters of school development and functioning for the effective and responsible community participation opportunities like social and cultural activities/festivals/ functions, cleaning of the school as well as the village, health enhancement programme, village fairs (Jathras), literacy campaign programme, religious functions public education programmes like Aids Awareness,
Environment Awareness programmes and so can be utilized by the teachers for the qualitative and quantitative improvement of school education. Also, relationship between the school and the community is very essential. As education is considered as a valuable human capital, teachers should try to develop and protect this human capital with community co-operation.

Teachers’ role in resource mobilization is very important. For the development of the school and for the qualitative improvement of education, teachers should also take the responsibility of resource mobilization. Every teacher must work to mobilize available resources from various sources—community, voluntary organizations, and government—for the benefit of the school. It is the duty of every teacher to mobilize resources systematically, use them effectively, and to protect the assets acquired from different sources.

33.5.3 Role of Non-Teaching Staff

Any institution must have staff members who are dedicated, honest, and efficient in their work if that institution aspires to achieve its objectives successfully. This equally holds good for educational institutions like schools and colleges. It is not enough if a school has a Headmaster, teachers and instructional materials. There is need of supervisors, clerks, attenders, peons, and assistants to help the Headmaster in the administration of the school. Experienced senior non-teaching staff members sometimes can also help the Headmaster to take decisions in administration. They provide required information like rules and regulations, previous examples, additional facts and figures within a short time and at the suitable time so that the Headmaster can take a right decision. Without the co-operation of the non-teaching, it is difficult to manage a school. It is with their help that the Headmaster prepares institutional plans and annual budget. Hence there is importance for the role of non-teaching staff also in school administration.

The non-teaching staff members can help in several ways in the task of smooth running of the school. It is their duty to maintain records of complete information about students, staff, and the assets of school and about the activities of the school. The clerical staff must do this job and other attendant staff members help the clerical staff in the maintenance of the school and cleaning of the buildings. Laboratory and library staff, technical assistants of technology room look after the functioning and maintenance of laboratory library and technology room. The non-teaching staff members help the Headmaster and teachers to plan and execute school activities. The duty of implementing the institutional plan is mainly the responsibilities of non-teaching staff.

The following cover the main functions of the non-teaching staff (clerical, executive and maintenance staff) of a school.

485
- Maintaining various registers of the school (Stock Register, Attendance, Register etc.)
- Maintaining the financial accounts of the school.
- Managing bank transactions.
- Managing routine office work.
- Maintaining and up keeping of school buildings.
- Preparing salary bill, scholarship disbursement, collection of fees, donations, etc.,
- Purchasing, as per the directions of the Headmaster, materials and services required for the school and supply them whenever they are required.
- Utilizing and Maintaining Library, Laboratory and Technical facilities available in the school.

In these ways the members of the non-teaching staff can help in resource mobilization.

33.5.4. Role of School Management Development Committee

School Management Committee or School Development Committee is a committee consisting of the Headmaster, some government officials and members from the community. It is formed to look after the functioning of the school. Such committees help to bring community and school closer and to assist the Headmaster in the smooth running of the school. They also help in identifying the resources and in mobilizing such resources which can be utilized for the development of the school. Such objectives of School Development Committee can be achieved if its members evince high degree of dedication to duty, their mode of working, their attitude towards education, children and teachers. School Development Committees (SDM) can help in resource mobilization in the following ways

- Improving school buildings, extension of buildings.
- Providing additional furniture, laboratory equipments, books and magazines.
- Improving attendance of children
- Collecting donations in the form of cash or kind from the community for the school.
- Persuading government authorities for grants and other kinds of help.
- Organizing School- Community relationship activities.
- Participating in all school activities.
- Supervising the overall activities of the school.
‘Check Your Progress’ - 2

1. What role a Headmaster can play in resource mobilization?

2. In what way teachers can help in mobilizing resources?

3. Mention any four ways non-teaching staff can help in resource mobilization?

33.6 Les Us Sum Up

A close school-community relation is essential for qualitative and quantitative development of education. Both qualitative and quantitative growth of education should follow side by side. As education is considered as human capital, all teachers must try to enhance and conserve this human capital with the help of the, community. For this purpose all available resources from different sources-community, voluntary organization and government must be effectively mobilized and utilized. In this unit we have explained about the various sources from which various kinds of resources can be mobilized.

Through proper mobilization of resources the all round development of school can be achieved. We can utilize the available resources- physical and human resources to the fullest extent. It will also help for the improvement of quality of education. Students can progress in all aspects of their development. It helps teachers to do their functions successfully.

Money in the form of donations, land, equipment, furniture, equipment and books and any other things-materials and services can be mobilized form in the community, voluntary organizations can render their service in the form of construction and repair work of school building, donation of play ground, furniture, instructional materials and so on. Grants for
building, land for school building, furniture, teaching aids, books, laboratory equipment, scholarships, hostels and such other facilities can be obtained from the government.

The role of the Headmaster / Headmistress in resource mobilization is crucial. The Headmaster should mobilize resources required for the development of the school maintaining good relationship with the community and voluntary organizations. Teachers, non-teaching staff and even members of School Development / Management Committee also have to play a role in resource mobilization.

33.7 Answers to ‘Check Your Progress’

‘Check Your Progress’ - 1

1. Building Construction. - Instructional material.
   Furniture. - Donations.
   Conveyance. - Books and Magazines.
   Services - manual and teaching.

2. Voluntary organizations can provide financial help, services, furniture, teaching aids, laboratory equipment and so on.

3. Government gives salary for the staff, development grants, scholarships, etc.

‘Check Your Progress’ - 2

1. The Headmaster should take all measures to mobilize resources from various sources - community, voluntary organizations and government with the co-operation of staff members and SDM’s.

2. Refer sub-section 33.5.2.

3. Write any four points from sub-section 33.5.3.

33.8 Unit-End Exercises

1. Explain the sources for mobilization of resources for the school and the types of resources which can be mobilized.

2. Explain the role of the Headmaster, Teaching and Non-teaching staff and SDMCs in resource mobilization.
33.9 References

1. Hayle. E. - *The Role of the Teacher.*
34.1 Introduction

In the previous Unit, you have learnt about the various types of resources which can be mobilized and utilized for the improvement of functioning of schools. You also understood in that Unit about the role to be played by the Headmaster, Teaching and Non-Teaching Staff and School Development Management Committee.

After mobilizing the resources they have to be properly utilized, and maintained. Sometimes, where there is dearth of resources, they have to be shared between different schools. This will help not only to provide required resources to many schools but also to utilize resources to the maximum extent. Many Education Commissions have recommended such resource sharing. Utilizing school building by two schools on shift basis is one way of sharing resources. Similarly libraries, laboratories, play grounds and the like can be shared by more than one school. In a country like India which is still facing resource crunch especially in semi-urban and rural areas, resource sharing becomes necessary. This will also help in economizing educational expenditure.
School Complex is another strategy to enable sharing resources and to get maximum benefits from the resources, so that such benefits can be distributed to many schools. The idea of School Complex was first proposed by the Kothan Commission (National Education Commission of 1964-66). If we go back in the history of education in India, it can be found that even before 1948, the idea of school complex was implemented by a voluntary organisation called RISE in Maharashtra. The New Education policy of 1986 which intended to bring about significant changes in Indian educational system advocated once again for the need of School Complex. In this Unit you will study about School Complex as an important strategy in sharing resources.

34.2 Objectives

After studying this Unit you will be able to:

- Explain the meaning of School Complex.
- Bring out the need for sharing of resources.
- Bring out the importance of School Complex.
- State the objectives of a School Complex.
- Explain the functions of School Complex.
- Explain the procedure of the formation of a School Complex.

34.3 Resource Sharing—Meaning and Importance

**Meaning**: Resource sharing is an act of sharing the available resources for the school system in such a way that maximum benefits are obtained from the available resources by many schools. This kind of sharing resources assumes significance especially in developing and under developed countries which face the problem of resource crunch.

Resource Sharing can be done in the following ways.

- Sharing of school plant, especially if the plant is spacious and accommodative enough, by more than one school.
- The same building can be utilized by two schools or two schools of different levels—Primary / Secondary following shift system in the working hours.
- A well equipped Library / Laboratory / Technology Laboratory can be utilized by several nearby schools.
- Playground can be shared by many schools.
- Human Resources like expertise in teaching, training can be shared by several schools.

During holidays school building especially quadrangle and assembly hall can be utilized by the community for community as well as school-community joint activities.

**Importance:** The following points bring out the importance of resource sharing.

- It helps to solve the problem of resource crunch in Indian schools especially schools located in semi-urban and rural areas.
- It helps to economies educational expenditure.
- It helps to develop / enhance cordial relationship among schools.
- It develops good relationship and co-operation between schools.
- By sharing resources many schools can join together to develop good and well-planned academic programmes.
- By sharing resources schools which have adequate resources, schools having in adequate resources can improve their quality of functioning.

### 34.4 School Complex

#### 34.4.1 Meaning

A School complex is a cluster of schools. It is a group of neighborhood schools, comprising a number of lower primary, upper primary and secondary schools and one or more senior secondary schools which function together in an integrated way as one education unit. According to Indian Education Commission (1964-66) “The group of schools, built around a secondary school, as the minimum viable unit of educational reform is termed as school complex”. The Commission further says “It is possible to provide certain facilities and equipment when cannot be provided separately to each school, but jointly for all schools in a complex.”

The idea of school complex is not entirely new. Before independence in the State of Ajmer and the State of Bombay a system more or less similar to school complex was in existence. 1964-66 Education Commission gave a definite shape to the idea of School Complex and recommended for its implementation. The type of school complex recommended by the New Education Policy of 1986 was like this. A friendly co-operative complex unit of 3 to 5 nearby lower primary schools and a well established higher primary
school forms and a Primary school Complex 8 to 10 Higher Primary School and one High School complex forms a High School complex.

34.4.2 Importance

The main aim of implementing the scheme of School Complex is to enhance the quality of education. Primary Schools and High Schools can be located in close proximity especially in rural areas. If there is co-operation, and an act of give-take between such schools the purpose of education is served successfully. There should not be any discrimination between government and private schools, between urban and rural schools, if our aim is to improve quality of education as a whole. In the school complex scheme many lower primary school join with a well established higher primary schools, they in their turn can join with a good High School for many school activities. It is possible for High schools, Higher and Lower primary schools based within a radius of 15 kms can establish relationship in activities relating to teaching and to professional growth of teachers. Books in the Library, Laboratory and audio-video equipments, sound system etc can be exchanged between, the schools included in a school complex. Experience teachers from higher level schools can help and guide teachers working in lower level schools. School complex is like a ray of hope for rural schools. This scheme supports the view that teachers committed to teaching profession belong to one teaching fraternity which ever level they are working. Higher levels educational officers and school inspectors must work for the success of school complexes. School Complex is the way for development of oneness and brotherhood.

School Complex is important for its following advantages.

- School Complex helps to solve any academic problem being faced by any teacher.
- School complex facilitates exchange of ideas and suggestions between teachers.
- It is possible to get the facilities available in one school by the schools which do not have such facilities.
- It becomes possible to organize effectively workshops, demonstration lessons, film shows, Seminars and the like to improve the quality of education.
- Member-schools of school complex can jointly organize science fair, Talents Day, Books Exhibition etc in a systematic way in such a school which has all facilities.
- Through establishment of harmonious relationship between Lower/Higher primary schools and High schools, the school complex creates required co-operative
attitude and suitable environment for seeking solutions to various problems faced by teachers.

- It provides scope of development of leadership qualities hidden in teachers.
- Orientation programmes about population education, value education, environment awareness, and national integration and so on for teachers can be organized in the centre of school complex.
- When some teachers of member schools apply leave other teachers of school complex school can manage their work, so that teaching work will not be disturbed.
- School complex acts as a bridge of friendship between taluk level educational officers and district level officers and teaching.
- ‘Activities like examination; valuation etc. can be conducted at cheaper expenditure.

‘Check Your Progress’ -1

1. What is Resource Sharing?

2. What are the ways of sharing resources?

3. Mention any four points about the importance of resource sharing?

4. Who advocated the idea of school complex for the first time?
5. What is the meaning of school complex?

6. Mention any 5 points to show the importance of school complex.

34.4.3 Objectives

1. Breaking the isolation: A school complex aims at breaking the isolation that exists between one school and the other. They will come closer, to work for the common cause.

2. Collective effort: It will promote joint and co-operative effort among all the functionaries working in these schools. There will be exchange of experiences to prepare common workable policies.

3. Sharing resources: It will make possible the sharing of available resources and make the best possible use of these resources.

4. Solving problems: Common problems will be more effectively tackled through the joint efforts of a school complex.

5. Common planning: It provides assistance and opportunity for common and comprehensive planning, for the overall functioning of member schools.

6. Educational standards: A school complex can make serious efforts for improving the educational standards of the school belonging to it.

7. Guidance: Finally a school complex is a source of guidance for the constituent schools, in the use of better methods of teaching, understanding projects, organizing co-curricular activities and institutional planning.

8. Better teaching and evaluation: School complex will be a manageable unit for trying and introducing better methods of teaching and valuation. The teacher can come together to work out an improved approach in their activities.
### 34.4.4 Functions of School Complex

**i) Providing Academic Guidance:** A school complex can discover experts amongst its teachers and headmasters to harness their services to provide academic guidance to a member school. It is a source for guidance towards better method of teaching. The subject committees can be formed in each one of the subject to perform the activities like:

- Divisions of syllabus for the preparation of unit plan,
- Preparation, collection and maintenance of audio-visual aids for the entire complex.
- Discussion on new method of teaching and other innovation in teaching.
- Giving model lessons for the benefit of subject teachers.
- Supervision of lessons by more competent senior teachers.
- Supervising the diaries of teachers.
- Preparation of model lesson plans.
- Providing supplementary reading material.
- Making collective arrangement for remedial teaching in the case of slow clearness and backward students.
- Organizing team teaching.
- Arranging special talks on topics of common interest.
- Planning and executing projects.
- Providing guidelines in setting up of question papers, question bank and actual conduct of examinations.
- Arranging complex level academic competitions for both teachers and students.

The School Complex will provide guidance in the co-curricular activities, like:

- Inter-school friendly matches and tournaments.
- Inter school competitions in debates, poetry, singing etc.
- Tours and excursions.
- First aid in the member schools.
- Exchange of good organizers of various co-curricular activities.
- Sharing of material, facilities, playgrounds, auditoriums etc.

A School Complex can create in it a cell for suggesting improvement projects for each member school.

**ii) Providing Equipment:** Arrangement and exchange of equipment is the second important function of a school complex. The better equipped school may be in a position to lend material to the other needy school of the complex. Some of the items of equipment
which can be borrowed and shared are: library book, laboratory equipments, teaching aids, sport materials etc.

iii) Supervisory Role: The head of the nucleus school, heads of the member schools and senior teachers of various subjects can constitute a supervisory team to supervise the instructional work, organizational work and other activities of the constituent schools and give their suggestion so for improvement. This team can take care of the follow-up work also.

iv) Evaluation Function: The School complex will also ensure improvement in the evaluation work: of the member schools. Subject wise committees may be set up to prepare better question papers, prepare and maintain cumulative records, and to introduce innovations in the evaluation programmes.

v) In-service Training: It will also look after the in-service training, professional growth and updating of the teachers. For this purpose, it can maintain a central circulating library forth teachers. It can also arrange periodical meetings of teachers for discussion and exchange of experiences. Some talks, demonstration lessons and paper reading can also be arranged. During long vacations some special orientation courses may be held to meet their requirements in respect of new techniques of teaching and new additions to the body of knowledge as a part of their in service training. Audio - Visual aids can also be jointly prepared by a group of teachers.

vi) Imparting Educational Information: The nucleus school may serve as a clearing house for expertise, educational information, latest educational literature, educational data, educational news and trends in education. An average teacher does not enjoy access to these items of information on its own. Only a central body with better sources can acquire such valuable information for him.

vii) Institutional Planning: The nucleus school with the cooperation of member schools will draw up institutional plans for every member school and get it executed. For the purpose of model a master plan may be prepared by it. Each institution should be guided and motivated to draft its own plan in respect of curricular, co-curricular and developmental activities.

viii) Administrative Functions: The nucleus school has to discharge some administrative functions also. If it is a school complex consisting of government schools, then the pivotal school may perform financial and other administrative functions on behalf of the department. Even the local adjustment of curricula, time table, examinations etc., may be made through this school complex. It may provide leave substitute for the teachers in the member schools. It may also look after the correspondence, grant-in-aid financial aid, scholarship etc.

34.4.5 Formation of School Complex:

The School Complex will be organized or formed though a 3-tier set-up for establishing link between institutes of various levels.
First tier: In the first tier or the lowest tier, each middle school will be integrally related to 8 or 10 primary schools of the neighborhood. The head of the middle school will provide professional and academic leadership to tie hands and teachers of the primary schools under his charge. He/she has to ensure qualitative improvement in these schools.

Second tier: In the second tier all the middle schools in a particular area will be related to one high school in the neighborhood. The high schools will the head of this cluster of middle schools and will ensure quality education in all of the schools.

Third tier: In the third tier all high schools in a particular locality may be associated with a Higher Secondary School.

‘Check Your Progress’ - 2
1. Write the objectives of school complex briefly.

2. In what specific ways a school complex can help in academic activities?

3. What are the main functions of school complex?

4. How is a school complex formed?

34.5 Let Us Sum Up

In this Unit you have learnt about resource sharing and its importance in a country like India in which semi-urban and rural schools are still facing resource crunch. You also learnt
about the scheme of school complex, as an important measure of resource sharing. Resource sharing is an activity to make use of available resources between many schools so that the resources are utilized to the maximum and to provide required resources to needy schools. The importance of resource sharing was explained.

School complex is a cooperative complex of schools around a good school having good resources. The Education Commission of 1964-66 recommended the school complex scheme. The school complex has many specific objectives like breaking isolation, collective effort, sharing resources, solving problems and so on. School complex functions like an academic adviser, provider of equipment, supervisor of academic activities, evaluation, in-service training, provider educational information and Manager of administrative functions.

School complex is formed at three levels in a three tier set up-primary school and middle school complex, middle school and high school complex, and high schools and higher secondary school complex.

### 34.6 Answers to ‘Check Your Progress’

**‘Check Your Progress’ -1**

1. Resource sharing is mutual distribution of, sharing of available resources among many schools on co-operative basis.

2. -Sharing of school plant.
   -Utilizing the same building on shift basis.
   -Utilizing library, Laboratory and Technology Laboratory
   -Sharing play ground
   -Using school building for community activities during holidays.
   -Sharing human resources.

3. Write any four points from sub section 34.4.2 to show the importance of Resource sharing.

4. The idea of school complex was first advocated and implemented by a voluntary organisation know as BISE in Maharashtra even before 1948.

5. A school complex is a cluster of schools. It is a group of high neighbourhood schools, comprising a number of lower primary, higher primary and secondary schools and one or more senior secondary schools which function together.

6. Write any five points from sub section 34.4.2 about the importance of school complex.
‘Check Your Progress’ -2

1. The following are the objectives of school complex.
   a) Breaking the isolation.
   b) Collective effort
   c) Sharing resources
   d) Common planning
   e) Solving problems
   f) Achieving educational standards.
   g) Providing guidance
   h) Providing better teaching and evaluation.

2. Functions of school complex.
   a) Providing academic activities.
   b) Providing equipments.
   c) Supervisory role.
   d) Evaluation functions.
   e) In-service training.
   f) Imparting educational information.
   g) Institutional planning.
   h) Administrative function.

3. 
   - Division of syllabus for the preparation of unit plans.
   - Preparation, collection and maintenance of audio-visual aids for the entire school complex.
   - Discussion on new methods of teaching and other innovations in teaching.
   - Giving Model (Demonstration) lessons for the benefit of subject teachers.
   - Supervision of lessons by more competent senior teachers.
   - Supervising the teaching diaries of teachers.
   - Preparation of model lesson plans
   - Providing supplementary reading materials.
Making collective arrangement for remedial teaching for slow learners and backward students organizing team teaching.

- Arranging special talks on topics of common interest.
- Planning and executing projects.
- Providing guidelines in setting up of question papers, question banks and conduct of examinations.
- Arranging complex level academic competitions for both teachers and students.

4. School complex can be formed in three tiers.

**First tier:** Primary schools and a middle school complex.

**Second tier:** Middle schools and high school complex.

**Third tier:** High schools and a senior secondary school complex.

### 34.7 Unit-End Exercises

1. Justify the need for resource sharing among schools in Indian context. It what walls resources can be shared?
2. What is a School Complex? Explain its objectives and functions.
3. Bring out the importance of School Complex.
4. How is School Complex formed?

### 34.8 References

1. Hayle. E. - *The Role of the Teacher.*
35.1 Introduction

The Headmistress / Headmaster (H.M.) is the major component of school administration of whose, ability and skill and personality and professional competency will largely determine on the efficiency of the school. H.M. plays a very significant role in the personnel management of all the people concerned with school, which includes teachers, pupils, administrative staff, parents and people of community. H.M has to bring all these together in an efficient manner such that they can contribute best for the progress of the school. H.M. is the leader who knows how to involve people, how to arrange conditions and initiate processes that will bring out the best in each of the participants. H.M. is the group leader to direct and stimulate group efforts.

H.M. holds the key position in the administrative network of schools. All the things in and around school demand his attention and all the personnel’s in school look to him for guidance By virtue of his office, he has to be a nexus between the government and the school authorities the management and staff, the masters and pupils and the parents and teachers. Character rather than capacity, tact rather than authority, sympathy rather than severity are his/her/ forte - Joshi S.B.
35.2 Objectives

At the completion of this unit your will be able to:

- Identify the qualities and characteristics of HM
- List the duties of HM

35.3 Qualities and Competencies of Headmaster

In order to hold his/her key position efficiently, a HM is required to be a person of qualities. Since H.M. is a teacher first and H.M. later lie/she should have all the qualities of a teacher. Apart from this, H.M. should have clear understanding of the philosophy of life. He / She should know the values on which society is based and should have made deep study of various aspects of education. It is said that H.M’s belong to the higher order of human race.

High Scholarship: The H.M. should have higher general academic education and professional training. They should have up-to date knowledge of various subjects.

Adequate Professional Training: Educational administration is a specialized job and has to be learnt practically through years of experience as teachers, officiating as H.M. in various situations and visits to model-schools.

Good Health–Physical, Mental and emotional Health : H.M.’s work is heavy work so she/he should be physically fit, should have the mental power of concentration, steadfastness in pursuit of goal good memory, observation et. She / He should be emotionally stable, should not lose temper, not have likes and dislikes, know the value of truth etc.

Personality Qualities: H.M. should be cheerful, democratic with a sense of humour. H.M. should possess scientific attitude. She/he should be open to new ideas. He / She should take full responsibility when there is a failure but give the followers full credit when there is success.

Proficiency in Human Relationship: Being in charge of personnel management, he/she should bring all the personnel’s together in an efficient manner. Hence, H.M. should be a friend, guide and philosopher and know how to win the good-will of the people and how to motivate him to put in their best effort for the success of the school. His-her relationship with others is as follows.

H.M. and Teachers: H.M. should develop good rapport between is staff. He / she
should encourage frank discussion regarding welfare of the school. He / She should recognize individual difference between the staff and distribute work.

**H.M. and Pupil:** Know each child through their own eyes. The pupils should both love and fear the H.M. According to Mohiuddin “Dignity does not consist in aloofness and in maintaining an air of superiority. It rather consist in being helpful and doing the right thing. Great H.M.’s have always been friend of their pupils”.

**H.M. and Parents:** No H.M. will be successful if he / she do not look beyond to the four walls of the class room. H.M. should take every opportunity to get to know the parents of pupils. Parents and pupils are the real customers of schools.

**H.M. and Community:** School is a social institution. It should function according to the needs and social background of the community. He / She should exploit all the resources of the community for the benefit of the school and also allow the community to use the school resources.

**H.M. and Managing Committee:** H.M. should keep the management well informed about the progress of the school, its needs and requirements. But it should not be allowed to interfere with, the internal affairs of the institution.

**H.M. and State Department:** The H.M. should be fully aware of the rule and regulations fixed by department regarding admission, attendance, promotion, class size, leave rules etc.

### 35.4 Duties and Function of the Headmaster

The H.M. holds the key position in the administrative network of schools. As the head of the whole activity, HM is to make everything move. Dr. Jaswant Singh says, “On the ability and skill as sound and effective educational leader, depends the success of a school system.” The H.M. has to discharge a large number of responsibilities and perform multifarious duties. For the purpose of convenience and understanding and the functions of the H.M. can be classified under specific and general duties.

#### 35.4.1 General Duties

a. **Duties before the re-opening of the school:** Preparation of school calendar, distribution of work-teaching and administrative, preparation of school timetable, purchase of necessary equipment and stationery, completion of admission, planning of the reopening etc.
b. **Duties throughout the year:** Organizing and supervising curricular and co-curricular activities, arranging for medical examination, supervising the conduct of tests and examination, reporting student’s progress, inspecting sanitary arrangements of the campus, attend office work etc.

c. **Duties at the close of the academic year:** Arrangement of the final examination programme, setting and printing of question papers, conduct of examination, valuation of answer books, declaration of results, preparation of the annual report of the school.

### 35.4.2 Specific Duties

**Supervision:** The H.M. as the leader of the school has to supervise various types of activities organized by the teachers and other personnel. H.M. has to supervise curricular and co-curricular activities, evaluation work, welfare activities of the pupil, office work, discipline, betterment committee, PTA, subject clubs etc. Supervision involves overseeing of the work done by others. Supervision should be comprehensive, democratic and creative, supervision should ensure that all the personnel under him have equitable quantum of work. There is need for flexibility, so that nothing gets imposed on others dogmatically. The H.M. should recognize individual differences among the pupils under him / her and encourage each and every one to put in best ability.

**Teaching:** Teaching is a very importance functions of the H.M. Despite the frustration of administration and demand, of the position hold by him, one experts the H.M. to be in touch with his/her subject of specialization and also other subjects. H.M. has to be an effective instructional leader who is in a position to guide other teachers in threat of teaching various subjects. Teaching provides an excellent opportunity for the H.M. to come in contact with pupils, to know their level first hand and establish proper rapport with them. The H.M. should take both lower and higher classes. Teaching also provides an excellent opportunity for H.M. to understand the difficulties of teachers.

**Management:** Duty of H.M. includes management of the school plant, equipment and supply of materials, school finance, and school office. Management of school plant includes, review of effective use of building, class room equipments, etc. to serve educational and other purposes. School office management includes responsibility for preparing budgets, crediting receipts, authorizing expenditures, making payments, providing for periodic audits etc. In a modern secondary school, so many special services have been introduced for the purpose of proper development of the pupils.

**Special Services:** This includes special services like school health services, school guidance services, school uniform etc. It is obligatory on the part of H.M. that the auxiliary
services are administered properly so that maximum numbers of pupils are benefited.

‘Check Your Progress’ – 1

1. List the special qualities and competencies of a Headmaster.

2. What are the general duties of a Headmaster?

3. Mention the specific duties of a Headmaster.

4. What are the aspects of school administration are included in the school management by a Head Master?

35.5 Let Us Sum Up

In the unit you have learnt about the required qualities and competencies required for a Headmaster and about the duties of a Headmaster. Headmaster / Headmistress play an important role in school administration and management. A Headmaster is described as a navigator who navigates the ship of school. The successful functioning of a school, to a great extent depends directly on the personality qualities, the leadership qualities and the managerial skills of the Headmaster. In the unit the qualities and competent of a Headmaster were explained. The qualities of a Headmaster both general and specific and the aspects of school management a Headmaster has to manage were also considered.
35.6 Answers to ‘Check Your Progress’

‘Check Your Progress’ -1

1. Section 35.3

In order to hold his/her key position efficiently, a HM is required to be a person of qualities. Since H.M. is a teacher first and H M later he/she should have all the qualities of a teacher. Apart from this H.M. should have clear understanding of the philosophy of life. He / She should know the values on which society is based and should have made deep study of various aspects of education. It is said that H.H.’s belong to the higher order of human race.

2. Subsection 35.4.1

a. Duties before the reopening of the school: Preparation of school calendar, distribution of work-teaching and administrative, preparation of school time-table, purchase of necessary equipment and stationery, completion of admission, planning of the reopening etc.

b. Duties throughout the year: Organizing and supervising curricular and co-curricular activates, arranging for medical examination, supervising the conduct of tests and examination, reporting student’s progress, inspecting sanitary arrangements of the campus, attend office work etc.

c. Duties at the close of the academic year: Arrangement of the final examination programme, setting and printing of question papers, conduct of examination, valuation of answer books, declaration of results, preparation of the annual report of the school.

3. Specific duties of Headmaster include

Supervision: The H.M. as the leader of the school has to supervise various types of activities organized by the teachers and other personnel. H.M. has to supervise curricular and co-curricular activities, evaluation work, welfare activities of the pupil, office work, discipline, betterment committee, PTA, subject clubs etc. Supervision involves overseeing of the work done by others. Supervision should be comprehensive, democratic and creative, supervision should ensure that all the personnel under him have equitable quantum of work. There is need for flexibility, so that nothing gets imposed on others dogmatically. The H.M. should recognize individual differences among the pupils under him / her and encourage each and every one to put in best ability.

Teaching: Teaching is a very importance functions of the H.M. Despite the frustration of administration and demand, of the position hold by him, one experts the H.M. to be in touch with his/her subject of specialization and also other subjects. H.M. has to
be an effective instructional leader who is in a position to guide other teachers in threat of teaching various subjects. Teaching provides an excellent opportunity for the H.M. to come in contact with pupils, to know their level first hand and establish proper rapport with them. The H.M. should take both lower and higher classes. Teaching also provides an excellent opportunity for H.M. to understand the difficulties of teachers.

School Management: It includes management of the school plant, equipment and supply of materials, school finance, and school office. Management of school plant includes, review of effective use of building, class room equipments, etc. to serve educational and other purposes. School office management includes responsibility for preparing budgets, crediting receipts, authorizing expenditures, making payments, providing for periodic audits etc. In a modern secondary school, so many special services have been introduced for the purpose of proper development of the pupils.

35.7 Unit-End Exercises

1. Describe the special qualities and competencies of a Headmaster.
2. List the duties of a Headmaster.
3. Recall the head of a school / college you have studied who impressed you and explain the qualities in him / her which impressed you.
4. What aspects do you include in the institutional management by a Headmaster?

35.8 References

UNIT 36 ActionButton RESEARCH AS A SCHOOL DEVELOPMENT PROGRAMME

Structure

36.1 Introduction
36.2 Objective
36.3 Meaning and Importance of Action Research
36.4 Identification of Problems in School and Class Room
  36.4.1 Areas of Problems
  36.4.2 Examples of Problems.
36.5 Steps in Action Research
36.6 Let Us Sum Up
36.7 Answers to ‘Check Your Progress’
36.8 Unit-End Exercises
36.9 References

36.1 Introduction

The basis of all good behavior is good education and the basis of all good education is research. Research basically helps to add to the existing knowledge in any field of study. All significant research leads to progress in some field of life or the other. The goal of all research is progress and good life. It has proved to be an essential and powerful tool towards the progress of man. It opens new avenues and provides between alternatives.

Research is simply the process of arriving at dependable solution to problems through planned and systematic collection, analysis and interpretation of data. Educational research is directed towards, the solution of educational problems-problems faced by pupil, teacher, administrators, educationists. As in any other field of study, there is strong need for research in education with respect to educational practices, policies, methodology, curriculum, evaluation, planning etc.

Traditionally educational research is carried out in post-graduate departments in universities and in centers for advance studies, for over a period of years by scholars /
experts. This type of research is not necessarily directed towards the solution of some immediate or pressing problems faced by the practitioners.

In the field, Practitioners (teachers, administrators etc.) often get impatient with research workers. Having a strong desire to improve educational practices they would not be willing to wait for research to tell them what to do. In such a situation, to solve educational problems, they require immediate attention and is more constructive to attack these problems on-the-spot rather than by resorting to the procedures of fundamental research. “Such in the spot research aimed at the solution of the immediate problem, is generally known in education as “Action Research.”

In this unit, you will be studying about meaning and importance of action research, some areas of problems in school and classrooms. Also you will know about the steps to be followed to solve problems through action research and various innovative practices which can be used.

36.2 Objectives

At the end of this unit, you will be able to:

- Define Action Research
- Identify the importance of Action Research in the class room
- Identify the problems in the classroom which can be tackled through Action Research.
- Mention the different steps involved in the Action Research.
- Define a problem in clear cut terms.
- State action hypothesis for a problem
- Design action plans
- Interpret the findings of the research.

36.3 Meaning and Importance of Action Research

Day to day problems faced by teachers, supervisors, head of institutions and others require immediate consideration and solution. Some of the problems they face are indiscipline, lack of interest in certain subjects (Among students) consistent and persistent absenteeism in the part of some students, poor study habits, lack of good rapport between pupils and teacher, absence of co-operation of pupils in the school work etc.
Often, the practitioners intend to try out innovative practices in their institutions. They try modifying and bringing in changes in current school practices. Action research takes care of these specific requirements. It is rightly termed as on the spot research. Those who are connected with the class room teaching will have to take spot decisions in order to make the educative process more meaningful and effective. In fact, if there is to be a revolution in educational research, it should come from the classroom teacher. He must be interested in such a type of research that improves his teaching ‘here and now’. That type of research is action research. In fact, it should be research in action and for action. Viewed in this sense, action research is research for better teaching-learning.

The involvement of teachers, curriculum framers and other practitioners in education is a new and significant trend in educational research. Action research is undertaken by educational practitioners because they believe that by doing so they can make better decisions and engage in better actions. A teacher conducts action research to improve his own teaching. A school administrator conducts action research to improve his administrative behaviour.

Active research represents an approach to be more disciplined, more objective and more scientific. It is a procedure where in ‘Problem solving’ comes into close proximity with reality, at every stage. Instead of focusing in the development of theory, it focuses all immediate applications.

Action research (as mentioned earlier) does apply scientific thinking and methods to real life problems and represents a greater improvement over teacher’s subjective judgment and common sense methods to real like problems and represents a greater improvement over teacher’s decision based on their limited personal experience.

**Here are a few definitions of Action Research**

1. “Action Research is the process by which practitioners attempt to study their problems scientifically in order to guide, correct and evaluate their decisions and action”. - Stephen M. Corey.
2. Action Research is focused on the immediate application, not on the development of theory. It has placed its emphasis on a real problem here and now in a local setting. “J.W. Best”.
3. Action research as care Cully planned and controlled research in the classroom which can be one of the best laboratories for the discovery of means to improve instruction”.
   a. It is the practitioners who take up and carry out action research.
b. It centers round problems faced by them.
c. It applies scientific thinking and methods.
d. The purpose of action research is to help teachers to take better decisions regarding educational matters and to improve instruction.
e. Class room is the place where innovative practices could be tried out through action research.

Thus we came to know that the scope of action research is very vast. This approach of dealing with practical problems seems to be appropriate and promising for all kinds of professional workers in education so long as their desire is to improve their own professional practices.

**Importance of Action Research**

The importance and value of action research lies in the fact that it helps the schools to work on scientific and objective and objective lines. It is a method of trying consciously, to find out whether or not certain activities do lead to the result that was anticipated. By offering practical solutions to the pressing problems, action research helps in bringing about desirable reforms in the system itself. It does not involve heavy expenditure. One need not be a trained expert to carry out action research. It does not involve any sophisticated statistics and hence easy to comprehend and adopt.

Action research helps the teachers to face their problems with a bold outlook. It leads to trying out innovative practices by the teacher. It provides the teachers with insight into the nature of educational problems and of research techniques, giving a psychological satisfaction. It also gives an excellent opportunity for teachers to report and communicate their ideas to others for wider dissemination and replication. It encourages scientific thinking among the practitioners to deal with their day to day problems. Involvement in research is likely to result in some change in attitude and thinking.

Thus, action research can become great instrument “in determining the kinds of changes that should be introduced in the curriculum and co curricular activities in view of the changing conditions of society.”

### 36.4 Identification of Problems in School and Class Room

#### 36.4.1 Areas of Problems

The problem arises because of the gap between the teacher’s expectations regarding the honesty and dependability of pupils and the pupil’s actual behaviour. If the process
followed by the teacher during instruction is proved to be unsuccessful, then there arises a need to search for an experiment with something new. Action research can be undertaken in all the areas pertaining to school education. Some major problem areas would be:

Learning and instruction, curriculum organization, co-curricular programmes, examination and evaluation, interests and attitudes of pupils, behaviour problems of pupils; School Organization and Administration etc. These areas circle round four central instruction questions. “What should be my teaching aims”? How can I motivate my pupils?” “What should be the learning activities?” and “How can I find out if my pupils have learned?”

36.4.2 Examples of Problems

An illustrative list of kinds of problems, many alert teachers might face in their day to day teaching, is given below. (The problems are considered here as ‘topics’ for action research)

- A study of effectiveness of different methods of teaching in various subjects.
- Diagnostic and remedial programme for improving pupil’s achievement.
- Developing speed of reading comprehension.
- Introducing graded assignments for weak pupils.
- Improving study habits of pupils.
- Improving reading habits of pupils through a planned use of the school library.
- Utilizing community resources for better learning.
- Use of bulletin boards for improved teaching.
- Trying out instructional material in the different content fields.
- Trying out new programmes in school assembly.
- Trying ways to increase general knowledge level of pupils.
- Trying out different ways of organizing co-curricular activities.
- Developing pupils interest in selected areas like science, mathematics, literature etc.
- Trying out different systems of assessment.
- Improving pupil’s attitude towards work.
- Investigation of the effect of continuous evaluation on pupil’s study habit and achievement.
- Effective organization of time table to utilize radio broadcasts / television programmes.
An experiment on better use of leisure time by pupils.

Trying out different ways of improving drawing skill of pupils etc

Trying out innovative ways develop social skills and qualities of democratic leadership among pupils

Developing interest in applying the principles of general science which is taught in the class to the daily life

Developing the ability to make the correct, proper and best use of reference materials borrowed from the school library

The list here given is very short but for a classroom teacher, for carrying out action research, is very vast. Action research provides a means to attack their own problems directly rather than by broad basic and general principles.

36.5 Steeps in Action Research

The purpose of action research is to take care of teacher’s day to day problems for immediate solutions. Hence it is accepted that teachers and others concerned, have to attempt to solve their problems through action research. This specifies the imperative need for them to know the different steps involved in action research.

The following steps of procedure are involved in solving a specific problem through action research.

i) Selection of the Problem: This represents a broad about which teacher is sufficiently concerned and in which he wants to bring about improvements or tryout new procedures and practices. It requires an inquisitive and imaginative mind to translate one of the classroom problems into a worthwhile and practicable research project. It amounts to identifying the problem worthy of investigation. The teacher should act objectively while making a selection. One should know, how far the working of the system would be influenced after a solution has been found According to John W Best: “Teacher will discover acres of diamonds in their own backyards and possessors of inquisitive mind may translate one of the problems into a worthwhile and practicable research project”.

(Examples of problems are given under sub-section 36.4.2)

ii) Pinpointing the Problem. This refers to defining the selected problem in clear terms. It has to be realized that “success in research is better defined by the clarity with which the problem is seen in all its complexity than by the commotion it endangers”. (George Mouly p.101) when the problem is properly and clearly defined, it enables the
researcher to plan the study properly. It is almost impossible to start to work on problem that is poorly defined. According to Geroge Mouly, “In the End analysis, it is the problem as defined that determines the data at needed and only data that fit the framework of the problem should be collected. It follows that the whole problem must be explicitly defined from the stand point of both, specific questions to be answered and the techniques to be followed in providing the required answer - before any attempt is made to gather the data”. “A carefully defined problem is partly solved.

Another aspect of this step is to “pin-point” the difficulty. No matter how carefully a teacher defines his problem, it remains broad in its scope, if the difficulty is not pin-pointed. In that case it discourages the research and experimentation. To do something, a classroom problem must be narrowed down from a broad area to a focused, specific difficulty.

Thus, it is necessary to analyze a problem after its selection, in its various aspects. This analysis will lead to exact definition of the problem to be stated in limited words in terms (defining a problem) of limited area of distribution (pin-pointing the difficulty).

iii) Action Hypothesis: This is a tentative assumption drawn from knowledge, theory and personal experience. After the problem, has been defined, the action researcher makes an attempt to search for the causes of the difficulty or the reasons for the existence of the problem. “A hypothesis is a tentative assumption that is formulated and provisionally accepted to explain observed facts or conditions and to guide in future investigation”. (Good and Seats - Elements of Research).

Before arriving at the action hypothesis, the relation between the stated reasons and the difficulty of the problem should be well established. Formulating hypothesis is important in the sense that it brings clarity and definiteness to the work of action research. Hypothesis properly formulated enables the research worker to collect proper data - they also act a frame work for the conclusions to be drawn. It helps to predict the procedure to be adopted for reaching the goal.

Some examples of action hypothesis are:

- Adoption of remedial measures, will improve students ability to solve richer problems in geometry.
- Planned literary activities in addition to routine classroom instruction will improve oral expression of students in English.
- Providing adequate time for observation of specimens will improve pupils ability to draw diagrams in Biology.
iv) Designing an Action Plan: This briefly explains how the study is conducted after the teacher finalizes the action hypothesis, he designs a plan to test the hypothesis.

- The research design for an action hypothesis involves the following aspects.
- Description of activities and procedures for getting evidence or for collecting data.
- An outline of sources, research tool to be used to execute the design.
- The role of the personnel involved.
- Methods suitable/appropriate for collecting data.
- Time required finalizing the action and completing procedures.
- The research design usually involves giving attention to several research problems.

v) Collection, Presentation and Analysis of Data. First the procedure or the steps envisaged in the action plan would be tried out. The action taken and the evidence gathered would be recorded. Earlier to this the data collection may be done using the suitable method. Since action research does not involve any sophisticated statistics in it, the method followed for the collection of the data need not be the traditional formal method. Indirect oral exam, observation, interview, etc., could also be used. Any other research tool can also be employed to gather suitable data.

After the data have been collected, it is essential to put unorganized information in a systematic manner in order to obtain the desired results and their interpretation scientifically. Classification and tabulation of data are the methods of systematically arranging the observations according to their similarities of attributes and other features so as to present classification not only gives the total number of the group but also gives the number of subgroups and the nature of these sub groups.

Though classification and tabulation plays an important role in presenting the collected data, sometimes graphical representation of data is more effective in attracting the attention of the reader than any other method. Data which is essential for testing the hypothesis should be presented. The analysis of the data may be done by using relevant statistical method or by using textual discussion.

vi) Conclusion and Interpretation. Conclusion would be drawn based on the results of the analysis of data. Analysis of data also helps in accepting or rejecting the action hypothesis. Conclusions should be drawn without any personal basis. Findings and conclusions form the basis for suitable interpretations. Interpretation in a very simple way means the translation of a statistical result into an intelligible description. In order to draw correct and valid interference from the data the pre-requisites are:
• The data should be homogenous.
• The data should be adequate.
• The data should be appropriate.
• The data should be scientifically analyzed.

Sometimes, errors are committed in interpreting. The main sources of errors in interpretation are: personal bias, the type of average used, drawing wrong inferences, drawing unwarranted conclusions, misuse of statistical concepts etc. Care should be taken by the action researcher to overcome these.

**Follow up**

This indicates how the results of the study can be implemented in schools. Follow-up stage also provides the nature of reorganization and rearrangement that may be necessary for implementing the results of the study.

**‘Check Your Progress’ - 1**

1. Recall and write the definitions of Action Research given by Stephen M. Corey and J.W. Best.

2. Make a list of the steps of Action Research.

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**36.6 Let Us Sum Up**

Action research is an on the spot research, aimed at the solution of an immediate problem. It is the process by which practitioners attempt to study their problems scientifically in order to guide, correct and evaluate their decisions and actions. The scope of action research is limited to the functioning of educational institutions. In action research, the research problem is located as and when it arises in the educative process.
Areas of problem include the following: Teaching, Curriculum, Examinations, Administration, Co-curricular activities, School organization, School Community relationship, Guidance and Counseling’s, School health services etc.

**The different steps to be followed in action research:**

- Selection of the problem
- Pinpointing the problem
- Action Hypothesis
- Designing an action plan.
- Collection, presentation and analysis of data
- Conclusion and interpretation.
- Follow-up

Despite its limitations, action research is certainly to be encouraged. It has led to the solution of many class-room problems and has contributed to the advancement of education as a science by providing tentative hypotheses and tentative generalization of immediate practicality. Hence the participation by teachers in the solution of their problems is to be encouraged.

### 36.7 Answers to ‘Check Your Progress’

**‘Check Your Progress’ -1**

1. “Action Research is the process by which parishioners attempt to study their problems scientifically in order to guide, correct and evaluative their decision and action”. - Stephen M. Corey

2. Action Research is focused on the immediate application, not on the development of theory. It has placed its emphasis on a real problem here and now in a local setting” - J.W. Best

2. Steps in Action Research
   a. Selection of the problem
   b. Pin-pointing the problem
   c. Action Hypothesis
   d. Collection, Presentation and Analysis of Data,
   e. Conclusion and Interpretation.
36.8 Unit-End Exercises

1. Find out a problem which you come across in the class room and try to find a solution to the same through action research.

2. A pupil of IX standard is very intelligent and industrious. His performance in the terminal examinations is not quite satisfactory. What steps would you take to find a solution to this problem?

36.9 References

5. NCERT: *A Scheme of Assistance for Project & Experiments in Secondary Schools.*