Netaji Subhas Open University
&
Commonwealth Educational Media Centre for Asia

A collaborative initiative on

Implementation of Blended Learning Designs in Higher Education Institutions of West Bengal

Project Report

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About the Project:

The NEP 2020 puts forward a new vision for India's higher education system. Taking cognisance of the significance of higher education in promoting individual and societal wellbeing through knowledge creation and innovation in the 21st century, the policy focuses on restructuring the higher education system with a forward-looking vision. Following the cardinal principles of UN SDG-4, NEP 2020 is based on five pillars: Access, Affordability, Equity, Quality and Accountability. With this mandate, the university became accelerative with this project entitled, 'Implementation of Blended Learning Designs in Higher Education Institutions of West Bengal'. Netaji Subhas Open University (NSOU) with the support of Commonwealth Educational Media Centre for Asia (CEMCA) headed for this project. The project was carried out by conducting workshops at three venues of the NSOU for the improvement of the teaching-learning system in the post-pandemic period especially create situations for understanding Blended Learning (BL) and experiencing BL ecosystem in the respective context of HEIs located at different parts and fringes of West Bengal.

Goals of the Project:

- To strengthen the capacity of the teachers/ facilitators and in turn enhance the capacity of students/learners (recipients) to construe the BL ecosystem and technology in creating and participating in a blended learning environment for their quality livelihood.
- To improve (up skilling & reskilling) of the teaching-learning system in the post-pandemic period specially to orient and facilitate the blended learning ecosystem.
- To accrue benefit for the thousands of learners of both the NSOU and the HEIs.

About the Partnering Organizations:

The NSOU:

Netaji Subhas Open University (NSOU) is the premier State Open University in India and only Open University in West Bengal established in the year 1997 [W.B. Act (XIX) 1997] and recognised by UGC-DEB, RCI and AICTE. At present NSOU is offering Under Graduate, Post Graduate and Ph.D. programmes; good number of vocational courses and MOOCs. The University has been accredited by NAAC with Grade 'A' in its first cycle. NSOU operates through three Regional Centres (Kalyani, Durgapur, Jalpaiguri) and 175 Learner Support Centres across the state of West Bengal.

The CEMCA:

The Commonwealth Educational Media Centre for Asia (CEMCA) {cemca.org} serves as the regional educational media centre of Commonwealth of Learning, Vancouver (https://www.col.org/) for Commonwealth Asia, established at New Delhi in 1994. CEMCA promotes the meaningful, relevant, and appropriate use of media and technology to serve the educational and training needs leading to Sustainable Development through learning in Commonwealth member states of Asia. The Govt. of India by a Gazette Notification, dated 10th February 2000, notified CEMCA as a diplomatic mission under provisions of the United Nations (Privileges and Immunities) Act, 1947.

About the workshop:

The University has a network of 175 Learner Support Centres (LSCs) for the degree programmes and 35 LSCs for vocational courses. The teachers of these HEIs (LSCs) generally serve the university as academic counsellors. **COMMONWEALTH EDUCATIONAL MEDIA CENTRE FOR ASIA (CEMCA) & NETAJI SUBHAS OPEN UNIVERSITY (NSOU)** jointly conducted three collaborative Workshops on "Implementation of Blended Learning Designs in Higher Education Institutions of West Bengal". The Workshops were conducted in the NSOU Headquarters, Salt Lake, Kolkata, the Regional Centre of NSOU in Durgapur, and the Regional Centre of NSOU in Jalpaiguri West Bengal.

The workshops were marked by logical rationale, situational relevance, methodological instrumentality, and outcome-oriented approach

Logical Rationale

According to the Concept Note on Blended Mode of Teaching & Learning, published by the University Grants Commission of India, Blended Learning has been deemed as a pedagogical approach that is characterized by a mixture of face-to-face and online activities and the integration of synchronous and asynchronous learning tools, thus providing an optimal possibility for the arrangement of effective learning processes.

In the aforementioned Concept Note, it has been stated that Blended Learning is characterized by the following features; -

- Increased student engagement in learning.
- Enhanced teacher and student interaction.
- Responsibility for learning.
- Time management and flexibility
- Improved student learning outcomes
- Enhanced institutional reputation.
- More flexible teaching and learning environment
- More amenable to self and continuous learning
- Better opportunities for experiential learning

It has also been mentioned, that according to recent research, the key beneficial features of Blended Learning are as follows; -

- **Opportunity for collaboration at a distance:** Individual students work together virtually in an intellectual endeavour as a learning practice.

- **Increased flexibility**: Technology-enabled learning allows for learning anytime and anywhere, letting students learn without the barriers of time and location but with the possible support of in-person engagement. (Any speed, any mode, any language)

- **Increased interaction**: BL offers a platform to facilitate greater interactivity between students, as well as between students and teachers.

- **Enhanced learning**: Additional types of learning activities improve engagement and can help students achieve higher and more meaningful levels of learning.

- **Learning to be virtual citizens**: Learners practice the ability to project themselves socially and academically in an online community of inquiry. Digital learning skills are becoming essential to be a lifelong learner, and blended courses help Higher Education Teachers master the skills for using a variety of technologies.

- Blended learning provides making learning resources and experiences repeatable, reliable, and reproducible.

Apart from considering Blended Learning as a highly beneficial instructional methodology, the Concept Note published by UGC has also highlighted the transformation in the role of teachers in the Blended Learning Framework. It has been specifically mentioned that **Blended Learning shifts the teacher's role from knowledge provider to coach and mentor.**

Traditionally, classroom instruction has largely been teacher-directed, top-down, and one-size-fits-all, with a bit of differentiation thrown in, but with BL, it now becomes more student-driven, bottom-up, and customized, with differentiation as a main feature.

Since, Blended Learning yields more frequent and more personal teacher interaction with individual students, teachers have the opportunity to deepen and strengthen student/teacher relationships. The trust that comes with close relationships can give teachers insights into students' struggles and needs -insights that empower teachers to comfort and coach students through challenges that often serve as obstacles to learning.

Thus, it is distinctly discernible that a role shift of the teachers is essential in the Blended Learning Framework. From the status of providing common knowledge to a large number of students, a teacher will have to facilitate and coach individual students with greater attention and with a person-specific unique instructional approach.

It can also be rationally inferred that teachers need training on both Coaching & Mentoring skills as well as on Learning Experience Design for achieving the requisite competency to emerge as Effective Educators in the Blended Learning Framework.

The above inference logically justifies the joint initiative of CEMCA & NSOU
In organizing and conducting Workshops on Blended Learning for enhancing the capacity of teachers to emerge as Effective Educators in the blended Learning Framework.

Fundamental Objectives of the Workshops:

The three Collaborative workshops conducted jointly by CEMCA and NSOU aim **at enhancing the capacity of the Higher Education Teachers of West Bengal**.

- ❖ Designing effective strategic pedagogy that is congruent to the concept, structured framework, and functional dynamics of Blended Learning

- ❖ Deploying the strategic pedagogy with the intent of facilitating the multidimensional learning process for enlightening Higher Education Teachers characterized by heterogeneity in Learning Styles
- ❖ Coaching the Higher Education Teachers for enhancing their performance level and enabling each learner to achieve his/her specific individualistic goals

Specific Objectives of the Workshops

- ❖ To make the participants appraised of the different models of Blended Learning
- ❖ To make the participants acquainted with the pedagogical interventions that are effective in the Blended Learning System
- ❖ To sensitize the participants regarding the requisite competencies that are essential for conducting the pedagogical interventions in Blended Learning System
- ❖ To apprise the participants regarding the relevant theories and models of Instructional Design that are instrumental in integrating Blended Learning into existing degree programs.
- ❖ To make the participants acquainted with the competencies for conducting Learning Facilitation & Performance Coaching
- ❖ To make the participants apprised of the techniques of Facilitation & Performance Coaching
- ❖ To make the participants familiar with the Digital Tools that can effectively facilitate the learning process in the Blended Learning System
- ❖ To make the participants aware of the concept and benefits of OER, Copyrights, Licensing
- ❖ To facilitate the participants in creating/executing Blended Learning Design to facilitate the participants in evaluating the effect of Blended Learning through Result Chain Frameworks
- ❖ To identify and summarize the prospects and challenges of providing online/blended learning in the context of Higher Education Institutions in West Bengal.

Methodologies of the Workshops:

Methodologies deployed for developing Factual knowledge on Blended Learning	• **Lecture & Presentation** • **Open Discussion & Group Discussion** • **Participatory Reflection**
Methodologies for Developing Conceptual Knowledge on Blended Learning	• **Concept- Framework Development** • **Mind Mapping** • **Collaborative effort in executing Comparative Analysis of similar concepts** • **Paraphrasing**
Methodologies for Developing Procedural Knowledge on Blended Learning	• **Application of acquired skill and knowledge under Guided Instructions and Scaffolding by the Facilitators**

	• **Role Play on the Process of orchestrating and structuring Blended Learning**
Methodologies for Developing Metacognitive Knowledge	• **Brainstorming** • **Design Thinking** • **Inquiry Based Facilitation** • **Analytical & Evaluative Exercise**

Facilitators of the Workshops

Professor (Dr.) Anirban Ghosh, Director, Center of Internal Quality Assurance, NSOU
Professor (Dr.) Arun K Chakraborty, Head, DLIS, NSOU
Dr. Papiya Upadhyay, Assistant Professor of Education, School of Education, NSOU
Mr. Purandar Sengupta, Certified Master Trainer (NIESBUD, Government of India) Certified Master Trainer & Facilitator (HRCI – Global Accreditation Body)

Dates & Venues of the Three Workshops

Dates	**Venues**	**No. of participants**
20th & 21st May 2023	Salt Lake, Head Quarters of NSOU	81
27th & 28th May 2023	Durgapur Regional Center of NSOU	44
24th & 25th June 2023	Jalpaiguri Regional Center of NSOU	31

Nature of the participants:

Teachers working in Higher Education Institutions (HEIs) in West Bengal and interested researchers participated in the workshop. A total of 156 (Male: 114, Female:42) such aspiring academicians were actively involved in the three workshops.

Session-wise topic distribution & pedagogical interventions

Day 1	**Topic**	**Methodology**
First Session	Concept of Blended Learning	• Open discussion • Group Discussion • Participatory Reflection • Concept Framework Development
Second Session	Theories & Models of Blended Learning	• Lecture, Presentation Participatory Reflection • Comparative Analysis of Models
Third Session	Instructional Methods & Strategies	• Presentation • Participatory Reflection • Inquiry Based Facilitation
Fourth Session	Designing Blended Learning Frameworks	• Scaffolding at the induction stage • Brainstorming at the Ideation Stage • Design Thinking at the Planning & Implementation Stage • Need-based Scaffolding at the Implementation Phase

Day 2	Topic	Methodology
Fifth Session	Competencies for executing Facilitation & Coaching Techniques of Facilitation	• Open Discussion& Reflection • Concept Framework Development • Role Play • Scaffolding
Sixth Session	Open Education Resources, Creative Commons Licenses Intellectual Property Rights MOOCs	• Lecture & Presentation • Participatory Reflection • Inquiry Based Facilitation
Seventh Session	Future of BL: Integration of Digital Tools & Technology with Higher Educational Curriculum & Instruction	• Lecture & Presentation • Participatory Reflection • Paraphrasing • Inquiry Based Facilitation
Eighth Session	Evaluation of Blended Learning Frameworks	• Inquiry Based Facilitation • Analytical & Evaluative Exercise

Beneficial Impact of the Significant Methodologies Deployed in the Workshops

Open Discussion	The participants got the opportunity of getting appraised of the views and opinions of the other participants The participants got the opportunity of adding value to their concepts, by leveraging the significant views and opinions of their peer Higher Education Teachers
Group Discussion	This methodology was instrumental in building rapport among the heterogeneous Higher Education Teachers The members of the group executed various strategic activities based on mutual resource leveraging and collaborative planning
Lecture & Presentation	This methodology enabled the participants in gaining adequate factual knowledge of relevant topics This methodology dispelled the ignorance of the participants and replenished knowledge-gap
Participatory Reflection	This methodology ensured proactive participation and deep engagement of the Higher Education Teachers in the learning process This Methodology created a bridge of understanding between the Higher Education Teachers and the Facilitators
Concept Framework Development	This methodology was instrumental in translating the abstract concepts of Higher Education Teachers into concrete concepts Documentation of the acquired knowledge and narration of the same enhances the retention of Higher Education Teachers by more than 70% (Edgar Dale)

Comparative Analysis	Developed the Analytical Flair of the Higher Education Teachers Played an instrumental role in facilitating Higher Education Teachers to achieve conceptual clarity on specific factual components
Scaffolding	This methodology proved to be an instrumental catalyst in the process of developing the Procedural Knowledge of the Higher Education Teachers Guided Instructions and handholding support are the two major components of Scaffolding. Guided Instructions and handholding support from the Facilitators were very effective in facilitating the Higher Education Teachers in translating their concept of Blended learning into the practical task of developing the Blended Learning Framework.
Role Plays	The participants who enacted Role Plays gained concrete experiential learning through Active Experimentation conducted during the enactment of roles The conception of the actors got translated into practice during the enactment of specific roles The viewers of Role play also incurred concrete Experiential Learning through Reflective Observation of the enactment of the Role Players and the process dynamics of Role Plays
Inquiry-Based Facilitation	Inquiry-Based Facilitation has been instrumental in eliciting the pent-up creative potential of the Higher Education Teachers It has also proved to be very effective in enhancing the Metacognitive Knowledge of the Higher Education Teachers **Self-Knowledge:** Higher Education Teachers could assess their competency and identify the competency gaps for orchestrating Blended Learning Program **Task Knowledge:** The Higher Education Teachers got acquainted with the intricacies of the task of setting up a Blended Learning System **Strategy Knowledge**: The Higher Education Teachers achieved the strategic knowledge for establishing and managing Blended Learning Systems in their institutions
Design Thinking	Design Thinking has facilitated higher Education Teachers to be empathetic toward their students and define their problems Design Thinking has also enabled Higher Education Teachers in

	generating innovative pedagogies which are appropriate for the Blended Learning Framework.
Analytical & Evaluative Exercises	These exercises have developed the analytical and evaluative competency of the Higher Education Teachers

Effect of the Blended Pedagogy (encompassing the blend of diversified interventions) on Higher Education Teachers having heterogeneous cognitive proficiencies of Blended Learning:

Entry Level Cognitive Status	**Behavioral Indicator**	**Exit Level Cognitive Status**	**Behavioral Indicator**
Remembering	Higher Education Teachers are aware of the concept of Blended Learning but they do not have a detailed and thorough understanding of the theories and models of Blended Learning	Understanding	They can explain & illustrate the theories & models of Blended Learning

Entry Level Cognitive Status	**Behavioral Indicator**	**Exit Level Cognitive Status**	**Behavioral Indicator**
Understanding	Higher Education Teachers can explain & illustrate the theories & models of Blended Learning	Applying	They can organize Role Plays and demonstrate the subtleties and intricacies of Blended Learning through expressive Role Plays

Entry Level Cognitive Status	**Behavioral Indicator**	**Exit Level Cognitive Status**	**Behavioral Indicator**
Applying	Higher Education Teachers can practically demonstrate the theories and models of Blended Learning	Analyzing	They can execute comparative analysis among the different models of Blended Learning

Entry Level Cognitive Status	**Behavioral Indicator**	**Exit Level Cognitive Status**	**Behavioral Indicator**
Analyzing	Higher Education Teachers can	Evaluating	They can evaluate the relevant theories and

	execute comparative analysis among the different models of Blended Learning		models of Blended Learning and identify their pros and cons from the perspective of the learners, teachers, and institutions

Entry Level Cognitive Status	**Behavioral Indicator**	**Exit Level Cognitive Status**	**Behavioral Indicator**
Evaluating	Higher Education Teachers can appraise the different models of Blended Learning and diagnose the pros and cons of each model from the perspective of learners, teachers, and institutions	Creating	They are capable of deploying Design Thinking Methodology and can design collectively an innovative model of Blended Learning that can alleviate the multifarious problems of learners

Significant Reflections from the different groups of Higher Education Teachers in the Classroom

A. Reflections from the different groups of Higher Education Teachers in the Workshop conducted in the Head Quarter of NSOU at Salt Lake

ROLE PLAYS

First Role Play:

The theme of the Role Play: Appreciative Inquiry

Role Players:

Dr. Binayak Chanda (Assistant Professor in Education from Muragacha Government College) played the role of a Teacher

Dr. Dola Sarkar (Assistant Professor in Education from Plassey College) played the role of a student

Synopsis of Activities: Appreciative inquiry is a strength-focused intervention. It is ideal for students who are ignorant of their own competencies.

Appreciative Inquiry has four functional components- Discovery, Dream, Design & Deployment

In the role play it was observed that Dr. Binayak Chanda as the Teacher/Mentor executes the four steps of Appreciative Inquiry and shepherds his student Dr. Dola Sarkar toward

her aspired goal

- **Discovery:** Dr. Binayak Chanda Identifies the hidden competencies of his student Dr. Dola Sarkar
- **Dream:** Dr. Binayak Chanda inspires Dr. Dola Sarkar, in determining a goal that can be achieved by the utilization of her existing competencies
- **Design:** Dr. Binayak Chanda designs a strategic action plan that will facilitate Dr. Dola Sarkar to achieve her pre-determined goal.
- **Deploy**: Dr. Binayak Chanda motivates and guides Dr. Dola Sarkar in ensuring the judicious deployment of her competencies and facilitates her to achieve the pre-determined goal

Second Role Play:

The theme of the Role Play: Cognitive Re-engineering
Role Players:
Dr. Rakhi Bhattacharya (Assistant Professor in Education, Government General Degree College, Kalna) played the role of a Teacher

Dr. Papiya Upadhyay (Assistant Professor in Education from NSOU) played the role of a student

Synopsis of Activities: The student – Dr. Papiya Upadhyay is not interested in her curricular activities. She spends the whole day playing with highly speculative Mobile Apps that may lead to financial loss

The Teacher – Dr. Rakhi Bhattacharya identified the technical prowess of the student – Dr. Papiya Upadhyay. Eventually, the teacher executes the strategy of Cognitive Re-engineering.

As a result, the student's proclivity toward speculative apps got diluted and her propensity towards the Digital Learning Games got enhanced.

Thus, due to the execution of Cognitive Re-engineering, the student's technical prowess got utilized productively, instead of getting frittering away in socially injurious activities.

Designing Courses for the Blended Learning System through Situation Analysis Framework (SAF)

- One group designed a Course on Rhetoric
- One group designed a Course on Motivation
- One Group designed a Course on Intelligence Quotient
- One group designed a Course on the Influence of Curriculum & Instructions on the learners
- One Group designed a course on pollution due to the indiscriminate usage of Plastic
- One group designed a Course on Mathematics
- One group designed a course on the Influence of ICT Tools on Education**.**

B. Reflections from the different groups of Higher Education Teachers in the Workshop conducted in the Durgapur Regional Center of NSOU

Reflective Opinions from the different groups:

First Group:

- The blend was always there in the Higher Education Ecosystem from the perspective of the induction and combination of diversified teaching methodologies. However technological blend is a new phenomenon. It has both positive and negative impacts.

- Environmental awareness has increased. Blended Learning can reduce carbon emissions because the students will not have to class every day by diesel driven transport creates pollution Internet connectivity and electricity are issues in the remote rural areas

- Digital equipment, like cameras, computers, editing, etc. are not available in the remote rural areas Most of the Higher Education Teachers in West Bengal are not trained in Blended Learning.

- Less opportunity for training in Blended Learning in West Bengal Blended Learning is not learner-centric Reflective Opinion emanated by the members of the Second Group Traditional learning and online blend is effective

Second Group:

- Traditional learning and online blend is effective
- Integration of components of learning resources and teaching components should be there in both asynchronous and synchronous learning periods of the Blended Learning System
- Cultural activities should be inducted in the Blended Learning System
- Stress-management component should be there and there should be a dedicated person in Blended Learning Framework for alleviating the stress and anxiety of the learners in the Asynchronous Learning Period.
- Efforts should be made for enhancing the interest of the learners in the Higher Education Framework, towards Blended learning.
- Activity-driven engagement should be inducted into the Asynchronous Learning Period
- Digital efficiency of the teachers should be increased
- Technical advancements must be tracked continually and technological innovations should be harnessed into the Blended Learning Framework.
- Smart classroom is a good connect-creates a blended atmosphere

Third Group:

- Good teacher is heard by many students Hence online teaching is beneficial for many remote learners

- Appraisal should be both by the students-mode as well by the methods engineered by the teachers
- Problem analysis should be done in offline mode

Fourth Group:

- Global demand calls for a blended learning approach
- Comparative analysis of various educational transactions should be executed to trace out the most effective one from the perspective of the learners
- Overall learning achievement may be secured through a well-orchestrated blended learning system
- New policy intervention in the field of Higher Education can make Blended Learning mandatory for all institutions

Courses designed by the different groups of Subject Matter Experts with the help of the Situation Analysis Framework (SAF)

- The Humanities Group designed a Course on Sonnet
- The Social Science group designed a Course on Ancient History
- The Education Group designed a Course on E-Learning Content Development & Impact of MOOCs on Education
- The Science Group designed a Course on Water Pollution

C. Reflections from the different groups of Higher Education Teachers in the Workshop conducted in the Jalpaiguri Regional Center of NSOU

Reflections on Blended Learning from three different groups

Group 1:

- Mixing f2f and ICT Mode.
- Loss of class hours when the traditional methods are used.
- Govt policy perspectives are imperatives.
- Switching to Blended Learning is an advantage to compensate Teaching Learning Process.
- Provisions of ICT to cater to the needs of the learners.
- Blended learning is advantageous in academic-administrative aspects.
- Flexibility is a merit of Blended Learning.
- Infrastructure constraints may be surmounted through Blended Learning

Group 2:

- Apart from technology, teaching methods should also be blended to create Blended Pedagogy.
- Need analyses of the learners and appraisal of existing cognitive proficiency are essential
- Based on the findings of Need-Analysis and Cognitive-appraisal, heterogeneous interventions should be designed for satisfying unique needs and further development of existing cognitive competencies.
- Judicious use of tech & non-tech parts of the Teaching -Learning -Empowerment process
- Digital tools should be used judiciously for satisfying specific learning needs
- The content must be interesting and lucid

- Skills are necessary for teachers to conduct the classes in hybrid mode.

Group-3:

- Problems in rural areas reg online/ICT-backed pedagogy.
- A blending of strategies and methods is a good initiative
- Blend of F2F & online mode will be more purposeful and meaningful
- Difficult to ensure the Tech-savvy nature of senior Educators, especially above 45 yrs.
- Socio-emotional barriers between teachers and learners in the blended mode.
- Value degradation. Negative impacts on personality development owing to online activities.

Courses designed by different groups with the help of the Situation Analysis Framework (SAF)

Group-1: Social Sciences (12 members)-Designed a course on the **Concept of women empowerment in rural society**
Group-2: Science (06 members)- **Designed a Course on Global Warming**
Group-3: Education (08 members)- **Designed a Course on Socialization & Culture**
Group-4: Commerce (06 members)-**Designed a Course on Business Intelligence & Risk Analysis**

A highly relevant Role Play on Women Entrepreneurship was enacted by the Higher Education teachers of A.C College, under the leadership of Mr. Bhajan Basak, Assistant Professor in Political Science, A. C College

Project Outcomes:

I. Significant Personal Views and Opinions of individual Higher Education Teachers in the three Workshops

Name of the Higher Education Teacher	Views
Dr. Binayak Chanda Assistant Professor in Education Muragaccha Govt. College	Facilitation plays an instrumental role in enhancing the cognitive competencies of the learners. The diversified Facilitative Interventions are extremely effective in elevating the learners from their existing levels to the higher levels of Cognitive Taxonomy. For example, **Design Thinking** is instrumental in enhancing the creative competency of the learners and can shepherd learners to the highest level of Cognitive Taxonomy.
	Carl Roger's Theory of Facilitative Learning opines that Educators should have an Empathetic Understanding of the problems of the learners. Every Educator should be enriched with Empathy In this context, it is pertinent to mention that **Design Thinking** is the only strategic intervention in the global arena that starts with an empathetic approach. Thus, as a Facilitation Technique, **Design Thinking** is instrumental in crystallizing empathy within the Educators.
Name of the Higher Education Teacher	**Views**
Mr. Subhodeep Mukhopadhyay Asst. Professor Sadhan Chandra Mahavidyalay	The **ARCS Model of John Keller** is very relevant. It is essential to build up the confidence of the students for making them successful performers. Without confidence, the learners can't deliver a high level of performance It is possible to develop the confidence of the learners by making them aware of their latent potential. Strength-focused interventions like **Appreciative Inquiry** are instrumental in enhancing the self-esteem of the learners by making them aware of their latent competencies

Name of the Higher Education Teacher	Views
Dr. Rakhi Bhattacharya Asst. Professor in Education Government General Degree College, Kalna	During the Asynchronous Phase of Blended Learning, the Educators get the opportunity of interacting with each learner personally. Through personal interaction. the Educators can gauge the performance gaps of the learners and identify the factors that are responsible for such gaps Eventually, Educators can execute personalized Coaching for enhancing the causative competency factors and improving the resultant performance of the learners. Blended Learning Systems will transform the role of Educators from Knowledge-providers to Performance Coaches.
Name of the Higher Education Teacher	**Views**
Ashok Kumar Atta SACT, Commerce Bagnan College	Blended learning makes it possible for the learners to learn in their own style and at their own pace during the Asynchronous learning Period. Thus, Blended Learning fosters autonomy within the learners and facilitates them to emerge as Self-Learners

Name of the Higher Education Teacher	Views
Mr. Bhajan Basak Assistant Professor in Political Science Ananda Chandra College	Blended Learning enhances the flexibility and creativity of Facilitators During the Asynchronous learning period, the Facilitators can have direct and personalized interaction with the learners. Since each learner has a unique learning style, the Facilitator gets the opportunity of creating customized Facilitative interventions for each learner that becomes congruent to the learning style of that specific learner

Name of the Higher Education Teacher	Views
Dr. Binay Barman Assistant. Professor. in History Saldia College	The Flipped classroom model is a good source of learning Since the learners come to the class after studying the learning material at home, hence it is possible to carry out various analytical and creative activities in the classroom, based on the prior knowledge of the learners.

Name of the Higher Education Teacher	Views
Dr. Arun Kumar Roy Principal Barjora College	The University Grants Commission (UGC) of India, should frame a concrete policy on Blended Learning and make it mandatory for the Higher Education Teachers to ensure their adherence to that policy. There should be regulatory standards in Blended Learning and the Blended Learning Practitioners should adhere to the content of the Policy.

Name of the Higher Education Teacher	Views
Dr. Gurupada Adhikari Assistant Professor in Bengali MMM College	In the Asynchronous Learning Period of Blended Learning Systems, the highly meritorious students should be endowed with the responsibility of Peer -Mentor. As Peer-Mentors, they should facilitate the other learners in comprehending complex curricular components Peer Mentoring induces Collaborative Learning in the Asynchronous Learning period Moreover, while facilitating the Peer Learners, the retention power of the Peer mentor gets enhanced by more than 90%

Name of the Higher Education Teacher	Views
Arghya Das Research Scholar in Education Raiganj University	During the asynchronous learning period of Blended learning systems, the Educators can give Field Based Assignments to the Learners. Field Based Assignments will lead to socialization and the development of tacit knowledge from social interaction with the members of the society. Moreover, Field-Based Assignments will facilitate the learners to incur practical experiences. Eventually, the learners will elicit learning inputs from the incurred experiences Thus, the learners will undergo Experiential Learning with a greater individualized approach instead of structured Instruction induced learning.

Name of the Higher Education Teacher	Views
Tarun Kr. Maiti Academic Counsellor NSOU	Higher Education Teachers should achieve the capability of Mentoring the students throughout the period of learning, both during the Synchronous Learning Period and Asynchronous Learning period. Mentoring enhances the psychological resilience and fortitude of the learners and facilitates them to learn with deeper attention and an outcome-focused approach Unlike Coaching which is need-based and goal-oriented, Mentoring should be a continual process as long as the learner is in the institution.

II. Ascertained Outcome in the Workplace:

It has been ascertained that some of the Higher Education Teachers, who have been facilitated in one of the three collaborative Workshops conducted by CEMCA & NSOU, are implementing some of the pedagogical interventions shared by the Facilitators of the collaborative Workshops

A. Dr. Binayak Chanda, Assistant Professor in Education, Muragaccha Government College

He informed us, that he is administering the Cognitive Apprenticeship Model for enhancing the cognitive and psychomotor proficiency of the learners. He is deploying the Cognitive Apprenticeship Model, for supporting the performance of the learners in narrating Motivational Success Stories, enacting roles in Role Plays, demonstrating a theoretical topic, designing educational content and process, etc.

Following steps are being executed by Dr. Binayak Chanda in his effort to support his learners through the Cognitive Apprenticeship Model

Modeling	Dr. Binayak Chanda is demonstrating a Task
Coaching	Dr. Binayak Chanda is clarifying to the learners how to execute the task, what kind of probable challenges may emerge, and what strategies should be deployed for surmounting the challenges
Scaffolding	When the learners are executing the task, then Dr. Binayak Chanda is providing guided instructions and providing handholding support to the learners
Articulation	Dr. Binayak Chanda is encouraging the learners to implement the task independently without leveraging any external support.
Reflection	Dr. Binayak Chanda is motivating the learners to compare their operational maneuver while implementing the task with the operational maneuver that

	was demonstrated by Dr. Binayak Chanda himself.
Exploration	Finally, Dr. Binayak Chanda is inspiring the learners to explore alternative strategic maneuvers for implementing the task with greater precision and finesse

B. Mr. Anupam Roy, Assistant Professor in Sociology, NSOU:

He affirmed that he is deploying the Situation Analysis Framework for evaluating the project activities of his students. He specified that he has added two more parameters in the Situation Analysis Framework which are **the Timeframe of Implementation and the Process of Activity Implementation**

Thus, the value-added **Situation Analysis Framework** created by Mr. Anupam Roy is as follows:

Objective
Timeframe of implementation
Inputs
Activities
Process of implementing scheduled Activities
Quantitative Output
Qualitative Output
Output Indicator
Means of Verification

Quantitative Outcome
Qualitative Outcome
Outcome Indicator
Means of Verification
Social Impact Analysis

C. Mr. Bhajan Basak, Assistant Professor in Political Science, Ananda Chandra College:

He is deploying Creative Pedagogies like **Situation Driven Role Enactment, Situation Analysis & Strategic Task Planning** for breaking the monotony of traditional pedagogy and fostering the analytical & creative flair of the students

D. Ms. Puja Nandi, Assistant Professor in Sociology, Ananda Chandra College:

Instead of delivering continual lectures, she is eliciting reflections from the learners, during the process of lecture delivery.

According to Ms. Puja Nandi, this strategy of Participatory Reflection is ensuring cognitive engagement and mindfulness of the learners. This strategy is also instrumental in enhancing the self-confidence of the learners

She is also advocating the **Flipped Classroom Model** as a perfect instance of Blended Learning, where there is a blend between two different methodologies Home-study of the learning content, and Critical Analysis of the learning content in the class

E. Dr. Rakhi Bhattacharya: Assistant Professor in Government General Degree College Kalna

She is administering Role plays for demonstrating complex curricular components and making it easier for the participants to comprehend the complex curricular components. Moreover, Role Play triggers Experiential Learning for both categories of students, who are functioning as actors and who are functioning as viewers.

Learners who are enacting the roles in the Role Play	Active Experimentation & Concrete Experience, leading to Experiential Learning
Learners who are viewing the performance of peer learners and the process dynamics of Role Play	Reflective Observation & Concrete Experience leading to Experiential Learning
Learners who are viewing the performance of peer learners and the process dynamics of Role Play	Reflective Observation & Abstract Conceptualization leading to Experiential Learning
Learners are provided with an abstract concept and encouraged to translate the abstract concept into a Role Play	Abstract Conceptualization & Active Experimentation Leading to Experiential Learning

F. Dr. Dola Sarkar, Assistant Professor in Education, Plassey College:

She is administering the **Role Exchange Technique** for enhancing the psychological resilience of her students, for intensifying Experiential Learning for her students, and empowering her students to acclimatize to situational fluctuations and the resultant Role Shift.

Example-
Situation A: W is playing the role of Teacher -Educator, X is playing the role of a Teacher, Y is playing the role of student, Z is playing the role of Guardian,

Situation B: X is playing the role of Teacher Educator, W is playing the role of Teacher, Y is playing the role of Guardian, and Z is playing the role of student.

Inference: The **"Role Exchange Technique "**that is being orchestrated by Dr. Dola Sarkar has similarity to the **"Transformative Learning Theory" of Jack Mesirow** because both the intervention and the theory focus on the changed situation and role shift followed by **Cognitive Re-structuring** and **Behavioral Change** for adapting to the changes. In Situation & Role

G. Dr. Rakesh Manna, Ex. Research Scholar, University of Kalyani

In the Laboratory, he has adopted the strategy of **Scaffolding** and providing **guided instructions and handholding support** to his learners, during the dissection of specimens.

Whenever his students are delivering good performances, Dr. Rakesh Sarkar is providing **Positive Reinforcing Stimuli** in the form of appreciation and acknowledgment for enhancing the morale, self-esteem, and achievement motivation of those performers and encouraging them to deliver appreciable performance on a sustained basis

H. **Dr. Anirban Ghosh, Associate Professor of Zoology, Durgapur Regional Center, NSOU**

He is facilitating his learners on the topic of Water Pollution, through **Community Based Comparative analysis**

He is encouraging his learners to trace out the community-based water bodies that are polluted by *Salmonella Typhosa* and some other community-based water bodies polluted by *Vibrio cholerae*.

He is facilitating the learners to execute a comparative analysis of the detrimental effects of the two pathogens in the Community-Based Water Bodies

Then he is asking the students to mobilize the community members and train them in the process of identification and removal of the two aforementioned pathogens from water bodies

I. **Ms. Beauty Sarkar**, Assistant Professor in Education, Rajendra Academy for Teachers Education

She is evaluating the projects assigned to her students through **Situation Analysis Framework.**

J. **Ms. Swagata Chaudhury, SACT, Ananda Chandra College**

She is evaluating the projects assigned to her students through **Situation Analysis Framework.**

K. Mr. Souvik Paul, Ph.D. scholar in Education, Raiganj University:

He is deploying the intervention of **Appreciative Inquiry** for the identification and judicious utilization of the latent competencies embedded within the learners

L. Ashima Sarker, Assistant Professor in English, AC College:

She is fostering the practice of **Peer-Mentoring.** She has selected four meritorious students and motivated each of them to facilitate a group of ten students. Thus, she is inducing **Collaborative Learning Model**. She is also fostering **Observational Learning** & **Behavioral Modelling**.

The ten students of each group are considering the Peer-Mentor of that group as a Role Model, and are making earnest efforts in replicating the outcome-oriented behavior of the Peer -Mentor

M. Kashinath Nandi, Guest Lecturer of English, DIET Bankura

He is evaluating the projects assigned to his students through **Situation Analysis Framework.**

N. Jagabandhu Das SACT-II in History, Memari College

He is making an earnest effort to elevate his learners from the **Application Level** of Cognitive Taxonomy to the **Analysis Level** of Cognitive Taxonomy **by assigning projects on Comparative Analysis**

O. Dr. Hemanta Saha Assistant. Prof. Suri Vidyasagar College (C03) Botany

He is evaluating the projects assigned to his students through **Situation Analysis Framework.**

P. Ms. Aparupa Khara, SACT in Microbiology, MMM College

After the Workshop, she changed her teaching methodology from Deductive Strategy to Inductive Strategy. She is exposing her students to challenging situations and encouraging them to solve situational problems. While solving the situational problems, the students are getting engaged in active learning and gradually they are getting capable of identifying the guiding theory and principles

Analysis of Feedback from the Participants collected through Google Form

Analysis and interpretation on feedback:

Out of total 156 participants, feedbacks were received from 136 participants through Google form. The Google form was designed to capture the views of the participants on two aspects viz. i) Workshop Evaluation and ii) Outcome Evaluation.

Section I: Workshop Evaluation includes -

a) Workshop Content
b) Trainers' engagement
c) Trainers' knowledge
d) Relevancy of presentation materials
e) Trainers' preparedness
f) Relevancy of activities
g) Relevancy and usefulness of ICT tools
h) Relevancy and usefulness of learning materials

Section II: Outcome Evaluation includes -

a) Knowledge about blended learning
b) Knowledge about instructional design and competencies
c) Knowledge about ICT tools
d) Knowledge about OERs and Licenses
e) Knowledge about learning interventions

Analysis and interpretation on Section I:

As per Table 1 and Figure 1, all the participants opined that the workshop content of the session was well organised and easy to follow. They also agreed that the trainers were engaging and knowledgeable. The presentation materials were relevant. The trainers were well prepared and able to answer any questions during the session. The whole workshop was based on various activities. They agreed that the activities were engaging and relevant. The trainers demonstrated several ICT tools for teaching-learning. They agreed that ICT tools were relevant and useful. During the workshop learning materials were circulated among the participants through WhatsApp group in PDF versions which were relevant and useful. Most of the participants stated that the programme was excellently effective in achieving the learning objectives (Figure 2).

Table 1: Workshop Evaluation

Statements	The content of the session was organised and easy to follow.	The trainers were engaging.	The trainers were knowledgeable.	The presentation materials were relevant.	The trainers were well prepared and able to answer any questions.	The activities covered were engaging and relevant.	The ICT tools discussed were relevant and useful.	The learning materials provided are relevant and useful.
Strongly Agree	94	96	113	107	103	96	97	98
Agree	42	39	23	29	33	40	39	38
Indifferent	0	1	0	0	0	0	0	0
Disagree	0	0	0	0	0	0	0	0
Strongly Disagree	0	0	0	0	0	0	0	0
Total	**136**	**136**	**136**	**136**	**136**	**136**	**136**	**136**

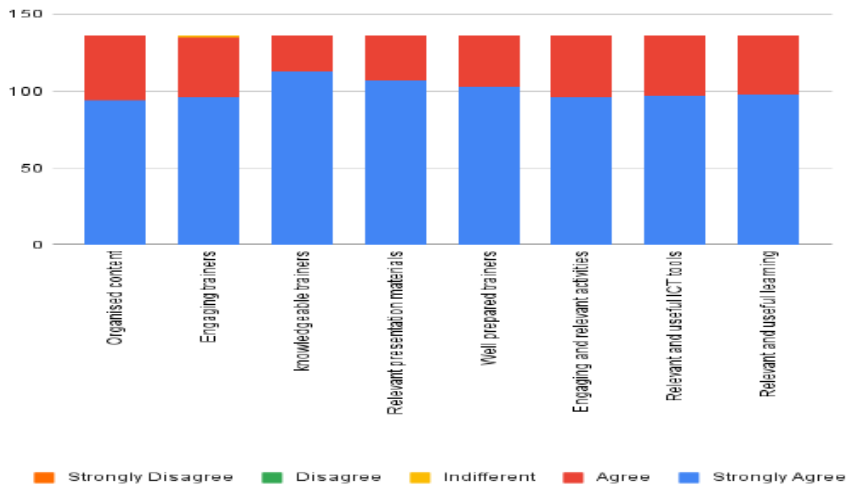

Figure 1: Workshop evaluation based on different dimensions

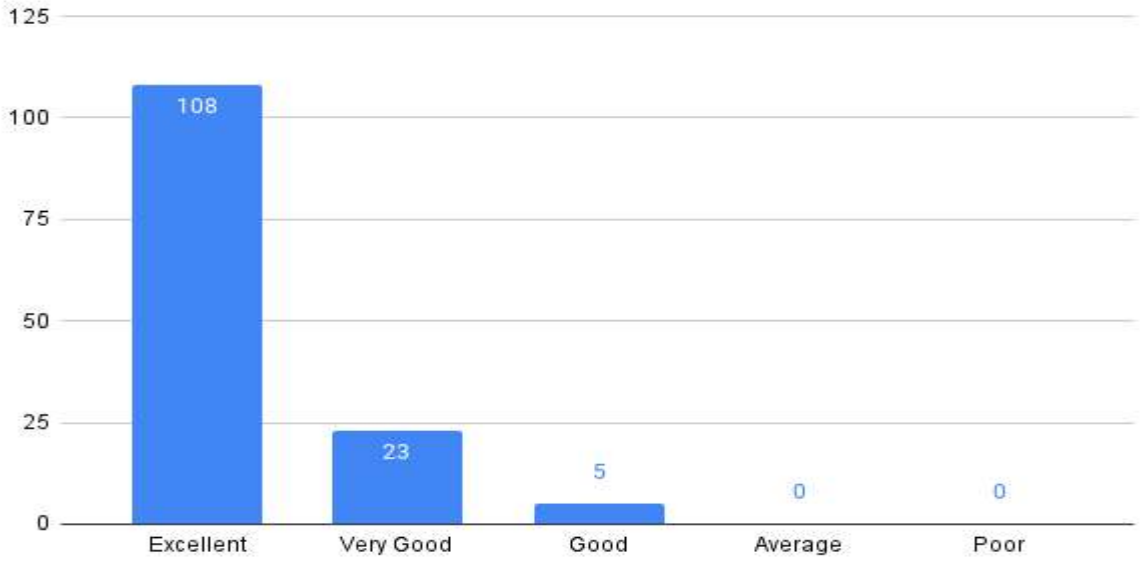

Figure 2: How effective was the program in achieving the learning objectives?

Analysis and interpretation on Section II:

The parameters of section II were identified to measure or evaluate the outcome of the workshop. The outcome of the workshop was measured through five parameters by evaluating the knowledge of the participants' changes after attending the workshop. From the figures 3, 4, 5, 6, 7, it is evident that there was a significant change in knowledge about blended learning, instructional design and competencies, ICT tools, OERs and Licenses, learning intervention after the workshop among the participants.

At the end of the Google feedback form, the participants were asked whether they prefer to recommend this workshop to their colleagues. In response to this question, 98.5% of the participants said 'yes', they will recommend their colleagues to participate in this type of workshop to improve the teaching learning process through blended learning (Figure 8).

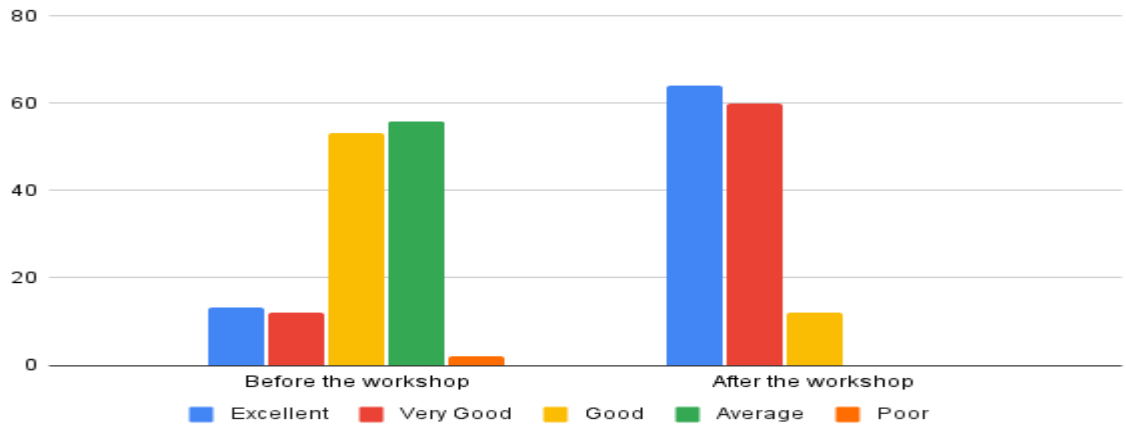

Figure 3: Changes in knowledge about blended learning

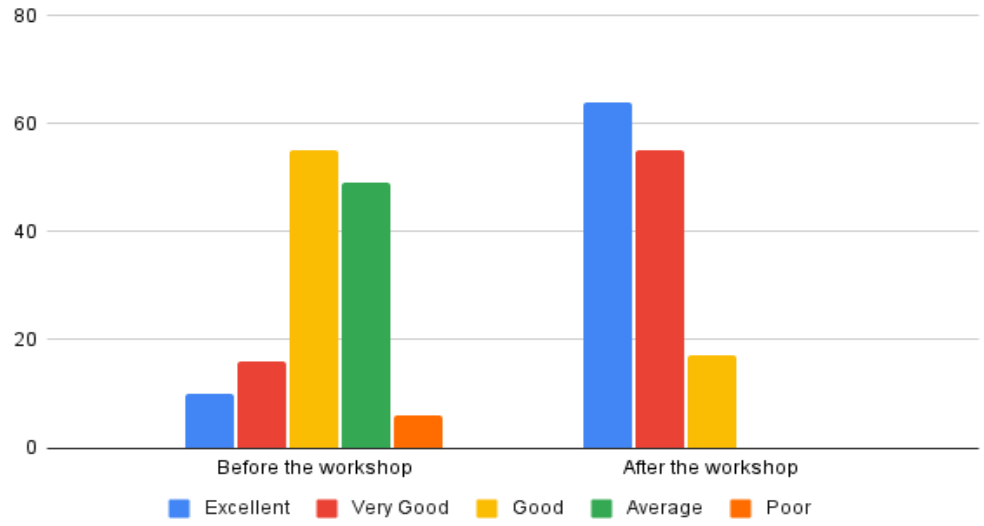

Figure 4: Changes in knowledge about instructional design and competencies

Figure 5: Changes in knowledge about ICT tools

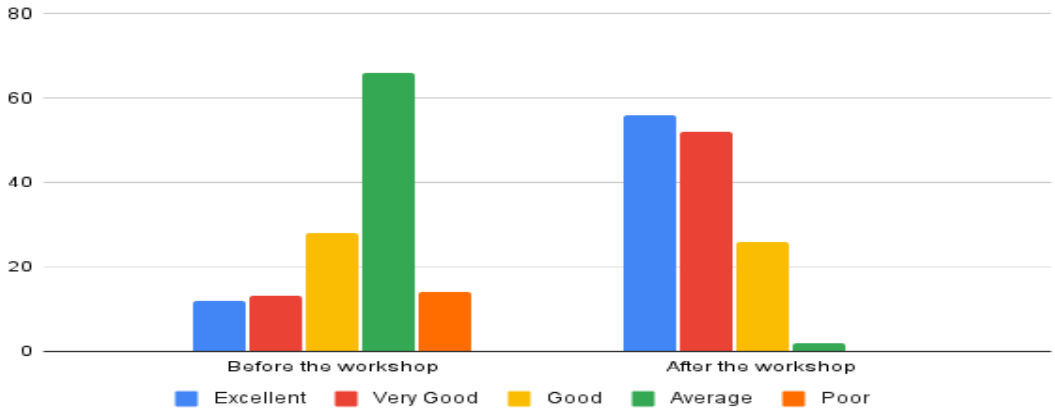

Figure 6: Changes in knowledge about OERs and Licenses

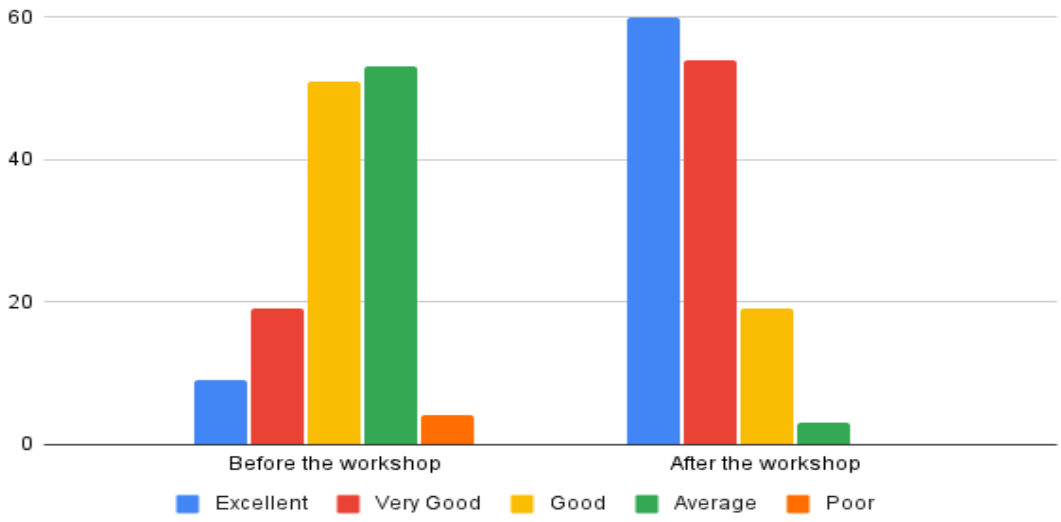

Figure 7: Changes in knowledge about learning interventions

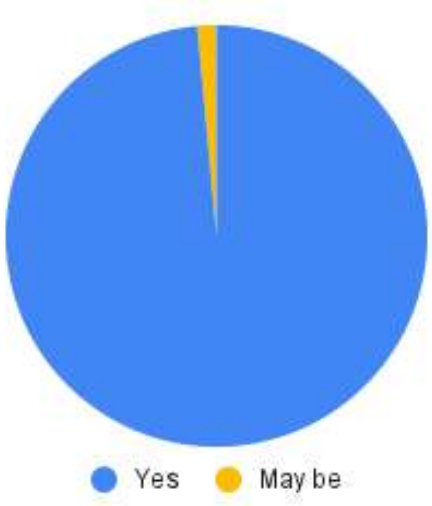

Figure 8: Would you recommend this Capacity Building Program to your colleagues?

Suggestions received:

- Interactive and activity-based workshop with rigorous practice sessions frequently with extended periods
- Workshop on Flipped learning
- Workshop on Instructional Design
- Workshop on ICT tools

Recommendation for the future:

It is recommended that after an interval of six months from the implementation of the third collaborative workshop, a comprehensive Qualitative Evaluation should be implemented for appraising the performance of the trained Higher Educational Teachers in fostering Blended Learning in the various nooks and corners of West Bengal

The Performance Evaluation based on Qualitative Research should try to address the following issues

- Role of the trained Higher Education Teachers in advocating the concept and models of Blended Learning
- Methodology adopted by the trained Higher Education Teachers in advocating the concept and models of Blended Learning
- The specific Target Segment covered under this Advocacy Campaign For fostering Blended Learning
- Desired Attitudinal Change to be engineered within the target segment by the advocacy on Blended Learning
- Actual Attitudinal Change engineered within the target segment by the advocacy campaign for fostering Blended Learning
- Identification of the Gap between Desired Attitudinal Change & Actual Attitudinal Change engineered within the target segment by the advocacy of Blended Learning
- Gap Analysis with sheer objectivity
- Strategy of Re-engineering the Advocacy Campaign for fostering Blended Learning

Conclusion

All the members of the project team ~~of NSOU~~, earnestly acknowledge the contribution of the **Commonwealth Educational Media Centre for Asia (CEMCA) and the Netaji Subhas Open University towards** the project and convey profound gratitude **to the Director of CEMCA – Dr. B. Shadrach and Prof. Chandan Basu, Hon'ble Vice Chancellor, NSOU for their unstinted support and unflagging inspiration**

The activities of this collaborative project of CEMCA & NSOU witnessed phenomenal success from the perspective of the reaction of the participants. The participants earnestly appreciated the curriculum and the instructional methodology of the Workshops. They acclaimed the effort of the Facilitators in ensuring their cognitive engagement and behavioral spontaneity

The Project Director, **Professor (Dr.) Anirban Ghosh** has evinced his outstanding leadership quality while managing the entire project with seamless precision. He was instrumental in steering the project in accordance with the principles of Result Based Management System and achieved colossal success in generating tangible output

The Project Coordinator and the principal facilitator– **Dr. Papiya Upadhyay** was instrumental in Curriculum Planning & Instructional Design. Moreover, she has reflected her prowess in Facilitation in all three workshops.

The Co-facilitator **Mr. Purandar Sengupta**, Master Trainer, (GoI certified) played a key role in skirting all the three workshops with vibrancies and enabling to achieve the Project goals effortlessly and effectively. His presence in steering the workshops lauded inspiration and motivation among the partakers.

The other facilitators, **Prof. Arun K Chakraborty and Dr. Shaunak Roy** were remarkably acknowledged for their scholarly sessions during the workshops.

All Head of the Institutions and academicians (participants) are acknowledged for their sincere involvement and diligence.

All support staff of NSOU received appreciation for untiring support and cooperation in conducting all the three workshops at different venues.

It is expected that the collaborative effort of CEMCA and NSOU will continue to create sustainable and effective developmental changes in the Higher Education Sector of West Bengal.

GLIMPSES FROM THE THREE WORKSHOPS






Report prepared by:
The Project Team