Status of Pre-School Education Programme for Children with Hearing Impairment in West Bengal

Jamirul Islam, Asst. Professor
Pingalakhi Public Welfare Organisation (College of Special Education), Puri
Email- jamirulislam59@gmail.com
and
Saikat Das, Guest Lecturer in Education
Email ID- saikat.das91@gmail.com,

Abstract

The aim of the present study was to investigate the status of pre-school education programme for children with hearing impairment in West Bengal. Samples of 30 pre-schools for children with hearing impairment in West Bengal were selected purposively for the study. To examine the status, a checklist based on three domain- infrastructure, resource (human and material) and curriculum was prepared. The findings of the present study revealed that in case of infrastructure the Government schools are in better position. The human resource and material resource are better in Government schools. In case of curriculum, both Government and Non-government schools are followed Total Communication as a communication method. For speech teaching both schools followed multi sensory syllable unit approach. The few Government and Non-government schools arrange Individualized Education Program (IEP). In case of evaluation the both Government and Non-government schools followed Formative and Summative evaluation.

Key Words- Pre-school education programme, status, Curriculum, CWHI, Teaching methods, ECCE.

Introduction

In every country, developed or developing, the resources and abilities of its society are constantly being challenged in search for strategies to meet the needs of children. The national policy on Education (1986) was a major break though for the concept of Early Childhood Care and Education (ECCE). The main aspects were: recognition of the holistic development of the child, emphasis on play as a medium of informal teaching, the use of non-formal methods, and a pluralistic and continuous approach (Murlidharn and Kaul, 1993). ECCE here derived its significance not only as an essential human development program, laying the foundation for lifelong growth in the first six years (0-6) of life, but also to serve as a support for universalization of elementary education. ECCE was essentially promoted as a play-based program which should not be reduced to formal teaching of the three to six (3-6) years. In India Pre-school education (PSE) is one of the crucial components of the ICDS scheme. This aims at development of school readiness and a positive attitude towards school education among children of the age group of three to six years through non-formal and joyful play way activities at Anganwadi Centers (AWCs). The objective of the PSE is also to strengthen the goal of universalization of primary education. The universalization of ICDS is an opportunity for the growing need of ECCE in the country. ICDS conceptually embodies a unique, integrated, cost-effective approach for holistic development, converging basic sectoral services, where child survival, growth and development go hand in hand.

Pre-School Education Programme for Children with Hearing Impairment (CWHI)

A preschool is an educational establishment offering early childhood education to children aged between three to five years prior to the commencement of compulsory education at primary school. They may be privately operated or government-run and the costs may be subsidized. The Planning commission of India in their six-plan of Framework stated "Attention should be paid to all children during the crucial developmental years. The pre-school years of a child is the period of its maximum learning and intellectual development and hence of gross potential

educational significance." Intervention program designed and followed for children prior to their formal education. It is a systematically planned program developed on the basis of the principle of child's needs, growth and development. A pre-school program for Children with hearing impairment is different from any other regular pre-school program in terms of infrastructure, candidacy, methods/techniques of teaching, personnel involvement, equipment; materials used followed curriculum and evaluation.

Infrastructure of a pre-school for CWHI

An ideal pre-school needed a formulated design that provides a perfect blend of style, aesthetics, reliability, child friendliness and functionality. Every piece of infrastructure is needed to suit the growing needs of learners. The set-up should provide a physical environment that has an inviting and stimulating place for young children with hearing impairment. It should be well connected by roads and railways and preferably located away from noisy environment. In the class room amplification device, special sitting arrangement, barrier free environment are provided to the children with hearing impairment.

Human Resource

For effective and efficient functioning of an ideal pre-school program, there is a need for head/in-charge/co-coordinator that is well trained and has experience working with young children with hearing impairment. Others professionals like Trained special (HI) teachers, trained teachers for co-curricular activities, a speech and hearing professional, a counselor/social worker, ear mould and hearing aid technician, a clerk, aye/care taker also needed for special school.

Curriculum

In special pre-school need based adapted curriculum are followed. The area of development which preschool education covers varies from country to country. However, the following main themes are represented in curriculum that are i) Personal, social, economical, and emotional development, ii) Communication, including sign language, talking and listening, iii) Knowledge and understanding of the world, iv) Creative and aesthetic development, v) Mathematical awareness and development, vi) Physical development, vii) Self-help skills, viii)Social skills, ix) Scientific thinking, x) Creative arts, xi) Literacy, xii) Speaking ability is started too. Allowing preschool aged children to discover and explore freely within each of these areas of development is the foundation for developmental learning. Side by side for co-curricular activities the following main themes are represented in the majority of systems: i) Personal, social, economical, and emotional development, ii) Communication, including sign language, talking and listening, iii) Knowledge and understanding of the world, iv) Creative and aesthetic development, v) Mathematical awareness and development, vi) Physical development, vii) Self-help skills, viii)Social skills, ix) Scientific thinking, x) Creative arts, xi) Literacy, xii) Speaking ability is started too. Allowing preschool aged children to discover and explore freely within each of these areas of development is the foundation for developmental learning.

Method/technique for language teaching

In special pre-school for CWHI followed structural/natural/combined method for language teaching and several alternative assessment and evaluation are used.

Operational Definition:

Status & Infrastructure

In this study, the status means the present situation or position of the pre-school for children with hearing impairment regarding infrastructure, resources and curriculum.

The infrastructure means basic physical and organizational structures and facilities (i.e buildings, playground, barrier free classroom, library,) needed for operating a special pre-school for children with hearing impairment.

Resource

Resource means the human and material resources needed for proper functioning of pre-school for children with hearing impairment.

Curriculum

Curriculum can refer to the total structure of ideas and activities developed by pre-school for children with hearing impairment to meet the needs of students and to achieve desired educational aims.

Pre-school

Pre-schools an *early* childhood *program* in which three to five years old children combine *learning* with play in a *program* run by professionally trained.

Children with Hearing Impairment: (CWHI)
Children with Hearing Impairment are those who had hearing loss more than 60dB HL in the better ear, studies in pre-school, had no other additional impairment, use total communication as a mode of communication and have no specific learning difficulties or intellectual impairment.

Methodology
The main focus of the study was to investigate the present status of Pre-school education for Children with Hearing Impairment in West Bengal. A checklist was developed to obtain data from the schools. In order to study, a descriptive survey research design was followed. The current chapter describes in detail the methodology followed for the study. Sample of 30 schools providing Pre-school education to the Children with Hearing Impairment in West Bengal were selected. A purposive sampling technique was used for the study. Firstly, schools for CWHI were divided into two regions i.e. North Bengal and South Bengal. Lastly North Bengal was divided into four districts and South Bengal into seven districts and from the mentioned districts data were collected.

To find out the status of pre-schools for CWHI, three domains namely infrastructure, resource (material and human) and curriculum were chosen for the study.40% weightage was allotted to the domain of infrastructure which consists of 20 questions, 30% weightage was allotted to the domain of Resources which consist of 50 questions, and 30% weightage was allotted to the domain of curriculum which consists of 30 questions. The objective type of questions were prepared from the selected domains and organized according to the weightage. The check list was developed by the researcher on the following way on the basis of three domains namely infrastructure, resource (material and human) and curriculum. Validity of checklist was done with the help of 1 administrator (Social Welfare officer), 1 special educator, 1 lecturer (education), 1 lecturer (audiology) and 1 ASLP having more than 5 years experience in the field of School education for the children with hearing impairment.

Preparation of final checklist:
Those questions were marks as relevant, if consider/rate so by 80% or more by the judges was including the final checklist. Those below 80% and above 60% were modifying on the basis of the suggestion given by the judges and those below 60% were replaced by the researcher while finalizing the question. After judging the weightage of domains, they recommended as well as allotted 20% weightage to the domain of infrastructure, 50% weightage to the domain of resources, 30% weightage to the domain of curriculum. In the final checklist, 6 out of 35 questions were selected against the domain of 'Infrastructure', 20 out of 35 questions were selected against the domain of 'Resource' and 9 out of 35 questions were selected against the domain 'curriculum. Thus, the checklist was finalized.
Various special pre-schools for CWHI from West Bengal were conducted telephonically and personally for permission of data collection. On confirmation, the researcher personally visited the schools to meet the school authority and collect the data. The data was classified, codified, analyzed by using simple percentage method as per the requirement of available data for the study.

Results
The present research was focused on the status of Pre-school education program for Children with Hearing Impairment (CWHI) in West Bengal. It was further aimed to find out the availability of i) infrastructural, ii) resource and iii) nature of curriculum facilities at preschools for Children with Hearing Impairment. The data obtained was processed for analysis. The analysis of data was carried out through percentage based on the mentioned objectives.

1. **Infrastructural Facilities**
Table- 1.1Classroom Amplification Device including Individual Hearing Aids

Type of school	Percent (%)	
	Present	Absent
Government sponsored	79	21
Non-Government	86	14

Table- 1.1.1 Availability of Hardware, Loop Induction, FM and Combined

Type of school	Only Hardware		Only Loop induction		Only FM system		Combined	
	P (%)	A (%)	P (%)	A (%)	P (%)	A (%)	P (%)	A (%)
Government sponsored	36	64	0	100	0	100	55	45
Non-Government	75	25	8	92	8	92	9	91

Table- 1.1 shows that 79 % Government sponsored schools have classroom amplification device facility in which 36% are hardware system with 90% in working condition. All Govt. sponsored school has reported that they have neither loop induction nor FM system as their classroom amplification device for CWHI. On the other hand, 86% Non-government schools have classroom amplification device facility in which 75% are hardware system with 70% in working condition and remaining 30% are out of order. It is also found that only 8% Non-government schools have the facility of loop induction and FM system.

So, the availability of hardware system is found to be higher in Non-Government schools than Government sponsored but working condition is found to be better in Government sponsored schools. The facility of loop induction and FM system found to be better in Non-Governmental schools than Government schools. But the combine system is found to be better in Govt schools (55%) than Non-Government schools (9%) for CWHI.

Table- 1.1.2 Individual Hearing Aid

Type of school	Body level hearing aid		Behind the ear hearing aid	
	Present (%)	Absent (%)	Present (%)	Absent (%)
Government sponsored	79	21	64	36
Non-Government	79	21	79	21

From the abovementioned table, it may be stated that the children with hearing impairment in from both Government and Non-Government pre-school wears body level hearing aid with 79%. BTE hearing aid users are found to be less in number than body level hearing aid users. Hearing aids are expensive and therefore the cost is one of the reasons for not wearing of hearing aids in Pre-schools.

Table-1.2 Seating arrangement

Type of school	Present (%)	Absent (%)
Government sponsored	79	21
Non-Government	100	0

79% Government schools (Table 1.2) expressed that they have proper seating arrangement. Among these arrangements, 27% are in semi circle shape, 27% in U type shape, 36% in oval, 9% in flat and 9% in round type shape. In comparison with Government, Non-Government schools said that they have 100% (Table 1.2) seating arrangement facilities along with 21% in semi circle shape, 43% U type shape, 21% oval and 14% in form of chair table. Overall it may be concluded that the Non-Government schools have better seating arrangement facilities than the Government sponsored schools. But both schools do not have specific idea regarding the seating arrangement.

Table- 1.3 Availability of electrification

Type of school	Present (%)	Absent (%)
Government sponsored	100	0
Non-Government	100	0

100% Government and Non-Government schools (table-1.3) for children with hearing

impairment in West Bengal are well electrified. There is no deficiency of electricity both of those schools setting. In West Bengal, Government Sponsored schools are regulated by Mass Education Extension Depart and NGOs are regulated by Dept of MSJE and other agencies. Both agencies relatively provide enough funds for recurring and non-recurring items. Electric is one of the essential things for today's life. So, it is to be believed that due to sufficient financial supports, both Govt. and NGO school shows equality in percentage of electrification.

Table- 1.4 Barrier Free Environment

Type of school	Present (%)	Absent (%)
Government sponsored	100	0
Non-Government	72	28

100% Government schools and 72% Non-Government schools stated that they provide barrier free environment to the students with hearing impairment. The availability of barrier free environment is found to be higher in Government sponsored schools than Non-Government schools.

Table- 1.5 Sanitation

Type of school	Present (%)	Absent (%)
Government sponsored	100	0
Non-Government	100	0

Both Governments sponsored (100%) and Non-Government (100%) schools provide equal sanitation facility. But in the case of providing sanitation separately for girls and boys, the Government schools are found to be better than Non-Government schools.

Table- 1.6 Drinking water facility

Type of school	Present (%)	Absent (%)
Government sponsored	100	0
Non-Government	86	14

In case of providing drinking water the Government schools have 100% facility whereas 86% Non-Government schools have the same facility. 50% Government schools provide water facility through aqua guard, 21% through deep tube well, 21% through municipal water supply and 8% are not mentioned specifically. In the same way 43% Non-Government schools provide water facility through aqua guard, 21% through deep tube well and 36% through municipal water supply. From this result, it may be concluded that the majority of Government and Non-Government schools, provide aqua guard facility. The result also remarked that the Government schools provide better safe drinking water facility then the Non-government schools.

RESOURCE

2. a   Human Resource

Table-2.a.1 Trained and Untrained teacher

Type of school	Trained (%)	Untrained (%)
Government sponsored	98	2
Non-Government	82	18

Comparatively, more trained teachers are found in Government than the Non-Government schools (Table-2.a.1). The results point out that the Government's strict recruitment policy is the fact of betterment of Government schools.

Table-2.a.2 Various Human Resources

Type of school	Audiologist		Ear mould Technician		Speech Therapist		Psychologist		Sign language Interpreter	
	P (%)	A (%)	P (%)	A (%)	P (%)	A (%)	P (%)	A (%)	P (%)	A (%)
Government Sponsored	43	57	36	64	36	64	14	86	21	79
Non-Government	29	71	50	50	57	43	7	93	7	93

Table- 2.a.2 shows that, 43% Government schools have the post of audiologist, but filled up posts are 67% and 33% post are still vacant. In case of Non-Government schools, only 29% have the post of Audiologist in which 50% post are still vacant. The result concluded that the Government schools have more post as well as filled post of audiologist than Non-Government schools.

In case of ear mould technician 50% Non-government schools have the post which 71% post are filled up and 29% post are still vacant. But in Government schools have 36% post which 50% post are filled up and 50% are still vacant.

36% Government schools have post of speech therapist but most of the posts are still vacant. On the other hand, 57% Non-Government schools have the post of speech therapist. One school has only one post of speech therapist or audiologist. The evidence supports the result that most of the schools do not have the post of speech therapist (Eleweke, c. J. 1997a).

Majority of Government (14%) and Non-Government schools (7%) do not have the post of psychologist.

Table 2.a.2 shows that 57% Government sponsored schools have post of physical education teacher in which filled up post are 86%. On the other hand 79% Non-Government schools have the post. So, it may be concluded that the Non-Government schools are in a better position in case of physical education teacher than Government sponsored schools.

It is significant that 79% Government schools do not have any post of sign language interpreter and the same the condition has been found (93%) in Non-Government pre-schools also.

2. b   Material Resource

Table-2.b.1 Material Resource

Type of school	Materials for speech therapy		Materials for auditory training		Materials for teaching learning	
	P (%)	A (%)	P (%)	A (%)	P (%)	A (%)
Government sponsored	93	7	64	36	100	0
Non-Government	93	7	36	64	100	0

The table 2.b.1show that both Government and Non-Government schools have sufficient teaching learning materials (100%). In case of auditory training material, Government (64%) schools have better situation than Non-Government (36%) schools. From the table it may be concluded that Non-Government schools are in a very low position of arrangement of auditory training materials.

Table- 2.b.2 various facilities related to material resources

Type of school	Medical check-up		Regular health care		Regular hearing aid check-up		Hearing aid repairing		Hearing aid assessment		Ear mould making		Library		Free Text book		Free uniform	
	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A
Govt	79	21	64	36	57	43	14	86	57	43	21	79	43	57	86	14	100	0
Non-Govt	86	14	64	36	50	50	14	86	43	57	21	79	50	50	64	36	57	43

Table- 2.b.2indicates that both Government and Non-Government schools have similar regular health care (64%), hearing aid repairing (14%), and ear mould making (21%) facility. In case of medical check-up (79%), library facilities (43%) Govt. schools show poorer results than Non-Government schools. But in case of regular hearing aid check-up(57%), hearing aid assessment(57%), free textbook(86%) and uniform(100%) distribution they shows better result than Non-Government schools.

3. Curriculum

Table-3.1 Various Curriculums

Type of curriculum	Government sponsored (%)	Non-Government (%)
Teacher made curriculum	14	21
West Bengal state curriculum	86	86
CBSE curriculum	0	0
ICSE curriculum	0	0
Other	0	7

The table- 3.1show that 86% of the Government and Non-Government schools follow the West Bengal State Curriculum and where as few Government (14%) and Non-Government (21%) schools follow Teacher Made Curriculum. None of the Government and Non-Government schools follows CBSE, ICSE curriculum.

Table-3.2 Admission Test

Type of test	Government sponsored (%)	Non-Government (%)
Formal	57	7
Informal	50	100

It has been found that Government schools (57%) apply more Formal test than informal test for taking admission. All Non-Government schools (100%) use Informal test for taking admission.

Table-3.3 Method of Communication

Type of method	Government sponsored (%)	Non-Government (%)
Orals	0	29
Total communication	93	71
Educational bilingualism	7	0

93% of Government Sponsored Schools use Total communication as Method of communication where as 71% of Non-Government Schools use Total communication as Method of communication. No one school under Sponsorship of Government use Oralism as Method of communication whereas 29%

Non-govt. schools reported that they use Oralism as Method of communication. Only 7% Government Sponsored Schools use Educational Bilingualism as Method of communication.

Table-3.4 Approach of Speech Teaching

Type of approach	Government sponsored (%)	Non-Government (%)
Auditory global approach	7	7
Multi sensory syllable unit approach	72	79
Associated phoneme unit approach	0	0
All	14	14

The table 3.4 shows that Multi Sensory Syllable Unit Approach is followed by 71% Government and 79% Non-Government schools. No one school has followed associate phoneme unit approach for speech teaching to the children with hearing impairment. It is also seen same percentage Govt. and Non-govt (7%) followed auditory global approach as their approach to teaching speech.

Table-3.5. Individualized Education Program (IEP)

Type of school	Present (%)	Absent (%)
Government sponsored	79	21
Non-Government	57	43

Table 3.5 revealed that 79% Government and 57% Non-Government schools provide Individualized Education Program for Children with hearing impairment.

Table-3.6. Other Classes

Type of School	Regular physical Education class		Co-curricular activities	
	Present (%)	Absent (%)	Present (%)	Absent (%)
Government Sponsored	93	7	100	0
Non-Government	79	21	93	7

Table 3.6 show that 93% Government and 79% Non-Government schools have done regular physical education class. On the other hand, most of the Govt. and Non-govt. schools

conducted various co-curricular activities for Children with hearing impairment.

Table-3.7 Method of Teaching Language

Type of method	Government sponsored (%)	Non-Government (%)
Natural	21	14
Structural	7	0
Combined	86	86
Any other	0	0

Table- 3.7analyzed that 21% Government schools followed natural method, 7% schools followed structural method, 86% schools followed combined method for language teaching to the children with hearing impairment and none of these schools have follow others method. On the other hand 14% Non-Government schools followed natural method, 86% schools followed combined method and none of these schools have follow others method. for language teaching to the children with hearing impairment.

Table-3.8 Type of Evaluation

Type of evaluation	Government sponsored (%)	Non-Government (%)
Formative	79	86
Summative	64	71
Continuous and comprehensive evaluation	7	14
Others	7	0

In the table No. 3.8 explored that 79% Government sponsored schools are followed formative evaluation, 64% schools followed summative evaluation, 7% schools followed continuous and comprehensive evaluation and 7% schools followed others. On the other hand 86% Non-Government schools followed formative evaluation, 71% schools followed summative evaluation, and 14% schools followed continuous and comprehensive evaluation and no one school have followed others.

Discussion
The main aim of the present study was to investigate the status of Pre-schools for Children with Hearing Impairment in West Bengal. In order to study, a descriptive survey research design was followed. Samples of 30 schools for the children with hearing impairment in West Bengal were selected purposively for the study. To obtain data from the schools a checklist was developed. The checklist was consisted of information regarding infrastructure, resource (materials and human) and curriculum of schools. The respondents were the Principle, Officer- In-Charge, Director, Headmaster, Headmistress, Secretary, and Teacher-in-Charge from special schools for children with hearing impairment. IEP is a very important for each CWHI. But some Government and Non-Government schools does not provide this facility. Most of the Government and Non-Government schools provide physical education class and various co-curricular activities. In case of language teaching, most of the Government and Non-Government schools followed combined method, some schools followed Natural method and only few Government schools followed Structural method. Both Formative and Summative evaluation are followed most of the Government and Non-Government schools, but CCE is followed in few schools.

Conclusion
The study concluded that in case of human resource, like trained teacher, audiologist, psychologist and sign language interpreter are found more in number in Government schools than Non-Government but Ear Mould Technician and Speech Therapist are found better in number in Non-Government schools. The results of this study offer a relevant data about present status of Government and Non-Government Pre-Schools for the CWHI in West Bengal which are required for focusing on the necessary changes in their curriculum. Such changes might include providing sufficient number of amplification device, to recruitment more number of trained Teachers for better educational support, to provide regular health care facility and safe drinking water for maintaining hygiene, Physical Education Teacher for physical exercise, art and craft facilities for recreation, computer education and vocational guidance to develop self dependent skill, Sign Language Interpreter, Speech Language Pathologist, Audiologist and Ear Mould Technician for required professional

support. These changes can bring the better educational provision for CWHI. The findings of this study may provide an opportunity for administration to revise school curriculum through effective and efficient resource and budgetary allocation.

Limitation & future Direction

The study was carried out with a small sample size i.e. with 30 pre-schools for Children with hearing impairment and samples were selected from only few districts in West Bengal. Only three domains and only objective type questions were taken into consideration for developing checklist.

Study can be done on a large number of schools for generalization of the results. Similarly a comparative study can be carried out with status of facilities available in Pre-school and resource room for CWHI. Similarly a comparative study can be carried out with status of facilities available in Pre-schools for CWHI in South Bengal and North Bengal. Similarly a comparative study can be carried out with status of facilities available in Pre-schools for CWHI in Rural and Urban areas in West Bengal.

References

Adelogbe, R. A. (1974). Curriculum and methods in education of deaf in Nigeria.UNESCO Headquarter, Paris.

Avoke, M. (2005). Special educational needs in Ghana: Policy, practice and research. Winneba: Special education Books.

Bashir, S. (1997). 'The Cost Effectiveness of Public and Private Schools: Knowledge Gaps, New Research Methodologies, and an Application in India', in C. Colclough (ed.) Marketizing Education and Health in Developing Countries: Miracle or Mirage, Oxford: Clarendon Press.

Beveridge, S. (1999). Special educational needs in schools. London: Roughtledge.

Bunch, G. (1987).The curriculum and the deaf and hard-of-hearing student: Theoretical and practical considerations. Boston: Little, Brown and Company.

Cenkner, W. (1994). The Hindu Personality in Education: Tagore, Gandhi, Aurobindo. New Delhi: Manohar.

Clements, D. H. & Sarama, J. (2003). Young children and technology: What does the research say? Young Children, 58, 34-40.

Department of Human Development and Family Studies (1997). 'Early Childhood Care and Education: Issues and Alternatives', paper presented at Seminar for School Principals of Baroda.

Di Bona, J. (1998). 'Going Back to the Educational Future: Using Indigenous Ideas to Meet the Challenge of the 21st Century', in S. Bhattacharya (ed.) The Contested Terrain: Perspectives on Education in India, New Delhi: Orient Longman.

Definition of a Quality Preschool Experience LAUP (n.d). Retried from https://www.google.co.in/?gws_rd=ssl#q=Definition+of+a+Quality+Preschool+Experience-24-08-2015.

Eccarius, M. (1997). ED414668 1997-08-00 educating children who are deaf or hard of hearing: Assessment. ERIC Digest#550.

Elementary Education in West Bengal Current Status and Issues (n.d). Retried from https://www.google.co.in / search?sclient =psy-ab & site =&source= hp&btnG=Search&q =Elementary+Education+in+West+Bengal+25-08-2015.

Eleweke, C. J. (1997a). Analysis of service provision for deaf people in Nigeria: Implication for future developments. Unpublished doctoral dissertation, University of Manchester, England.

Eleweke, C. J. (1997a). A review of issues in deaf education under Nigeria's 6-3-3-4 education system. Journal of deaf stadies and deaf education. 7(1), 2002.

El-Zraigat, I. (2009). Hearing loss: Principles of audiological, speech, and educational rehabilitation. Amman, Jordan: Dar Al-Fiker.

El-Zraigat, I. A. & Smadi, Y. (2012). Challenges of Educating Students Who are Deaf and Hard-Of-Hearing in Jordan. International Journal of Humanities and Social Science, 2(8).

Essel, J. (2002). Foundations in special education: The Ghanaian perspective. Winneba: Department of Special Education.

Excellence and Education Network (2011). Special schools for children with special needs in Nigerian (on line). Available:// www.exced net/index.

Ghanem, N. M. A. (2014). Educational Challenges Facing Deaf and Hearing Loss Students in Secondary School.University Journal of Islamic Studies, educational and psychological, 22 (I), 1 - 31.

Ghosh, P and Ratna, K (2010). Status of Elementary Education in Bihar. Asian Development Research Institute (ADRI) and Pratichi (India) Trust.

Husain, Z. (2003). A study of self image of deaf community in Lahore, Unpublished Master's Thesis: Department of special education; University of Punjab, Lahore.

Inan, N. U. (2003). Computer usage in pre-school. In M. Sevinç (Ed.), New approaches in early childhood development and education. Istanbul: Morpa Kultur Publishing.

Johnson, H. (2004). U.S. Deaf education teacher preparation programs: A look at the present and a vision for the future. American Annals of the Deaf, 149 (2), 75-91.

Kamens, M., Loprete, S. J. & Slostad, F. A. (2003). Inclusive classrooms: What practicing teachers want to know. Action in Teacher Education, 25(1), 20-26.

Kandır, A. & Orcan, M. (2010). Teaching maths in pre-school period. Istanbul: Morpa Kultur Publishing.

Kaul, V. (1998). 'Minimum Standards for Quality in Early Childhood Education', in Report of the National Consultation Meeting on Streamlining of Early Childhood Services, New Delhi: National Institute of Public Cooperation and Child Development.

Khatoon, A. (2003). A historical and evaluative study of special education in Pakistan. Doctoral Thesis: Special Education Department, University of Karachi, Karachi.

Lang, H.G. & Meath-Lang, B. (1995). Deaf persons in the arts and sciences. Connecticut: Greenwood Publishing Group.

Majeed, Z., & Saeed, A. (1998). Evaluation of the audiological services available in special schools in Pakistan: Journal of Special Education, 1 (1), 33-40.

Mani, R.S. (1961). The Educational Ideas and Ideals of Gandhi and Tagore: A Comparative Study with Relevance to Modern India. New Delhi: New Book Society of India.

Mohite, P. (1998). 'Interface between Pre-Primary and Primary Education', unpublished report. Department of Human Development and Family Studies, M.S. University of Baroda. Vadodara.

Muralidharan, R. and V. Kaul (1993) 'Early Childhood Care and Education: Current Status and Problems', in T.S. Saraswathi and K. Baljit (eds), Human Development and Family Studies in India: An Agenda for Research and Policy. New Delhi: Sage.

Naiman, D. (1979). Educating severely handicapped deaf children. American Annals of the Deaf, 124 (3), 381-396.

Nasser Mohammed Ghanem, A. (2014). Educational Challenges Facing Deaf and Hearing Loss Students in Secondary School".

National Evaluation of Civil Works for the Sarva Shiksha Abhiyan. West Bengal.(2007). Retried from
https://www.google.co.in/search?sclient=psy-ab&site=&source=hp&q=National+Evaluation+of+Civil+Works+for+the+Sarva+Shiksha+Abhiyan+%E2%80%93+West+Bengal+December+2007&oq=National+Evaluation+of+Civil+Works+for+the+Sarva+Shiksha+Abhiyan+%E2%80%93+West+Bengal+December+2007&gs_l=hp.12...24641.24641.0.28982.1.1.0.0.0.0.0.0...0.0....0...1c.2.64.psy-ab..1.0.0.Mhtaa9d fSg & pbx =1&bav =on.2,or. & biw=1366 & bih=599 & dpr=1 & ech=1 & psi=xoflVYuMMoaWuATIu6n4BA.1441105880 895.3&ei=xoflVYuMMoaWuATIu6n4BA & emsg=NCSR & noj=1. 20-07-2015.

NAYEC (National Association for Education of Young Children). (1996). Technology and young children—Ages three through eight. Young Children, 51(6), 11-16.

Nikolaraizi, M. (2000). The need for specialist training in the education of deaf children in Greece: Listening to teachers' perceptions. Mediterranean Journal of Educational Studies, 5 (2), 19-38.

Nwazuoke, I. A. (1998). The challenge of educating children with hearing impairment in twenty-first century". Nigerian Journal of Speech and Hearing, 1(2), 38-40

Opoku, V. (2005). Inadequate facilities, cause of school drop-out rate educationist, Education. Retrieved from http. /www.modernghana.com/ news/ 81052/ 1/ inadequate -facilities-cause-of-school-drop-out-rat.html on 25.7.15

Rajalakshmi, M.S. (n.d.). Under the Banyan Tree. Chennai: Children's Garden School Society.

Rajalakshmi, M.S. (1998). 'A Gem among Women', The Children's Garden School Society, Souvenir. Chennai: Children's Garden School Society.

Roopnarine, J.L. Z. Hossain, P. Gill and H. Brophy (1994). 'Play in the East Indian Context', in J. Roopnarine, J. Johnson and F.

Hooper (eds) Children's Play in Diverse Cultures. Albany: SUNY Press.

Seventh all India school education survey (2006). National tables on schools, physical and ancillary facilities. New Delhi, a joint project of NCERT & NICMIT.

Stone, P. (1997). Educating Children Who Are Deaf or Hard of Hearing: Auditory/Oral. Former AGBell Association for the Deaf President and the Council on Education of the Deaf. Retrieved from the ERIC database. (ED551).

Swaminathan, M. (1993) 'Current Issues in Early Childhood Care and Education', in T.S. Saraswathi and K. Baljit (eds) Human Development and Family Studies in India: An Agenda for Research and Policy, 221–32. New Delhi: Sage.

Swaminathan, M. (1998). The First Five Years: A Critical Perspective on ECCE in India. Sage: New Delhi.

The Education Reform Review Committee (2002). Meeting the challenges of education in the twenty: First century. Michigan State University. Michigan.

Thurman, M.S. (2003). Access to basic education in Ghana. Retrieved from http:www.create-rpc.org / pdf % 20 documents Ghana % 20 car % 20 min % document. pdf. (26-08-2015).

World Bank (1999b). Nigeria: Consultations for improved primary education. Washington, DC: author.