DISABILITIES and IMPAIRMENTS

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Development of Language Skills among the Children Using Cochlear Implant and Hearing Aids

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The purpose of the study is to compare the development of language skills among the children using cochlear implants and hearing aid users . The objectives of the study were 1)To find out the effect and compare the speech- language, phonology and cognitive skills of children using cochlear implants and hearing aid users . Sample comprised of 40 children with bilateral sensori neural hearing impairment aged 6-18 years. 20 children had moderately severe to severe hearing loss and using hearing aids, and 20 had severe to profound hearing loss and cochlear implantation was done. The measures consisted of the Peabody picture vocabulary test (PPVT-III), a widely used to measure the receptive vocabulary (Dunn and Dunn, 1997) and the clinical evaluations of language fundamentals test (CELF-4), a commonly used test to evaluate multiple dimensions of receptive and expressive language (Semel et al.),2003. The data was collected and results were analyzed by using IBM SPSS version 20.0. Differences in the main speech and language outcomes between the two groups (hearing aids vs. cochlear implants) were compared using independent samples Student's t tests. When data were normally distributed. Non-parametric tests (MannWhitney U test) were applied for scores that were not normal.

Key words: Language Skills, Cochlear Implants and Hearing Aid users

Hearing impaired students, through their handicap, display different characteristics of emotions, that are normally difficult to determine with certainty (Barbalet, , 1999). The teen

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years provide developmental challenges for all children. Their intimate attachment to parents and peers as well as belonging to social network is important for healthy development in adolescents as support from parents and peers help to cope with stress and give them emotional support.

Language regarding their roles and interpersonal relationship may create serious problems in this area. The deaf may be somewhat self-centered because they lack communication through language. Cochlear implantation has dramatically changed outcomes for children with severe to profound hearing loss by providing them with auditory information not available through conventional hearing aid technology (Geers et al., 2003). Outcomes in these children have been so encouraging that attention has also been directed to the implantation of children with less severe hearing loss. While there is clear evidence for improved outcomes from cochlear implants compared to hearing aid users for children with severe to profound hearing loss, there appears to be some difference in the interpretation of implant candidacy for children with significant residual hearing. Studies suggest that practitioners are regularly faced with decision-making about improving access to sound through cochlear implantation for children who have substantial usable hearing and open-set speech recognition with conventional hearing aids (Dettman et al., 2004). In recent years, there appears to be considerable difference in the interpretation of cochlear implant candidacy for children in the audio logic borderline category. A recent nationwide survey of pediatric cochlear implant centers in Canada showed substantial variation in the definition of borderline candidacy for implantation (Fitzpatrick et al., 2012).

The survey revealed that hearing loss definitions of borderline candidacy ranged from 70 to slightly better than 90 dB pure-tone average (PTA). However, the overwhelming majority of centers also reported that evaluation of borderline candidates requires careful examination of several factors that extend well beyond the audiogram and speech recognition scores, such as social and school functioning.

The present study was undertaken to document the performance of a group of children with severe hearing loss (=65 dB HL) who use hearing aids on a range of speech recognition, speechlanguage, and literacy measures and to compare these results with children with severe to profound hearing loss, which have learned language using cochlear implants.

Review of Literature:

Boothroyd (2008) proposed that children with cochlear implants functioned like children with hearing loss of 88 dB PTA who used hearing aids. Based on speech recognition results, other investigators have confirmed that many children using cochlear implants have a hearing level equivalent to those in the severe hearing loss. Tait and Lutman (1994) compared the preverbal conversational style of early-implanted children after 3 yr of device

use with similar children who were proficient hearing aid users (unaided thresholds 87 to 110 dB HL) and those who were poor hearing aid users (113 to 120 dB HL). The implant users and the proficient hearing aid users exhibited a preverbal conversational style that was typically vocal and auditory. In a later study, these preverbal behaviors were found to be associated with the development of linguistic communication proficiency (Tait&Lutman, 1997).

Blamey et al. (2001) reported that on average, scores on speech perception, speech production, and language were very similar for a group of 40 children with a mean hearing loss of 78 dB HL who used hearing aids and 47 children with a mean loss of 106 dB HL who used cochlear implants. Overall, traditional cochlear implant evaluation protocols have tended to focus on speech recognition as the best proxy of cochlear implant benefit. As recently noted by Moeller et al. (2007), although outcomes of cochlear implantation have been extensively reported, there are relatively little current outcome data on children with hearing loss in the mild to severe range.

The aim of the present study is to assess the Language Development Skills in the children of hearing impairment by using the assistive devices. The purpose of this study was to document the performance of a group of children with moderately severe to severe hearing loss who are using hearing aids on a range of speech recognition, speechlanguage, and literacy measures and to compare these results to children with severe to profound hearing loss, who have learned language through cochlear implantation. The following criteria were applied to select the participants with hearing aids: (1) age 6-18 years; (2) Bilateral sensory neural hearing loss, with a three frequency (500, 1000, and 2000 Hz) or high-frequency (2000 and 4000 Hz) PTA of 65 dB HL or greater in the better ear; (3) Known or presumed early onset of hearing loss before age 3 years; based on medical chart documentation; (4) Telugu as the primary language of education; (5) consistent use of amplification and enrolled in a rehabilitation program focused on oral communication; and (6) non-verbal intelligence in the average range.

Children with other documented disabilities that would interfere with oral language development were excluded from the study. Children in the cochlear implant group were a subset of children who participated in a separate study investigating .A battery of speech recognition measures as well as standardized speechlanguage and literacy, and cognitive measures were administered to both groups of children. The test battery has been selected because of the psychometric properties of the tests, their common use in the literature, clinical practice, and the need for a test protocol that could be administered to a school age population in a reasonable period.

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Objectives of the Study

- To find out the effect of speech- language, phonology and cognitive skills of children using cochlear implants.

- To find out the effect of speech- language, phonology and cognitive skills of children using hearing aids.

- To compare the speech- language, phonology and cognitive skills of children using hearing aids and cochlear implants.

Hypotheses

- There is a significant difference in the speech- language, phonology and cognitive skills of children using cochlear implants.

- There is a significant difference in the speech- language, phonology and cognitive skills of children using hearing aids.

- There is a significant difference in the speech- language, phonology and cognitive skills of children using hearing aids and cochlear implants

METHOD

The investigator had selected normative survey method. As the word normative implies, this method is used for the purpose of ascertaining which is normal or typical condition or practice. A normative method is that method of investigation, which attempts to describe and interpret what exists at present in the form of conditions, practices, processes, effects, attitudes, and beliefs. It is concerned with some phenomena that are typical or normal. In the present study, to ascertain the language development of hearing impaired students at age level of 6-18, survey method is adopted by the investigator for the collection of data. "A survey is an attempt to collect data from members of a population, in order to determine the current status of that population with respect to one or more variables" (Gay, 1996, p. 251). It is considered with the generalized statistics that results when data are abstracted from a number of individual cases. It is essentially cross sectional.

Sample

The study involved with the sample of 40 children with bilateral sensori neural hearing loss, aged 6-18 years selected from the SRAVANALAYA a Center for Audiology & Speech Therapy, Guntur District, Andhra Pradesh. The Sample of 20 children with moderately severe/severe hearing loss using hearing aids, and 20 children with severe to profound hearing loss using cochlear implants was selected using random sampling technique. To collect the data required

for the study, tools and techniques used and utilized from the center through the services of the head of the institution. The tools were administered by the investigator himself by personally visiting the selected center.

Tools

The measures consisted of the Peabody picture vocabulary test (PPVT-III), a widely used measure of receptive vocabulary (Dunn and Dunn, 1997) and the clinical evaluations of language fundamentals test (CELF-4), a commonly used test to evaluate multiple dimensions of receptive and expressive language (Semel et al., 2003). For this study, a core language score was computed to compare overall spoken language ability with a normative sample. Speech production was assessed using the sounds in words subtest of the GoldmanFristoe test of articulation (GFTA-2) (Goldman and Fristoe, 2000). The Wechsler individual achievement test (WIAT-II): word-reading and pseudo word subtests (Wechsler, 2001) and Spelling subtest of the Peabody individual achievement test-revised (PIAT-R) (Markwardt, 1998) was also administered. Finally, the Gray silent reading test (GRST) (Wiederholt and Blalock, 2000) was used to measure silent reading comprehension for children over 6 years of age. The Wechsler intelligence scale for children (WISC-IV) (Wechsler, 2003) was administered to assess the child's general intellectual functioning. Scores for the perceptual reasoning index (PRI) are reported in this paper as a non-verbal measure of cognitive abilities. Participants over the age of 16 years were tested using the Wechsler adult intelligence scale (Wechsler, 1997) and assessment was done.

Procedure

Children's hearing aids or cochlear implant speech processors were fit and managed through the audiology program. Standard clinical procedures at the time were bilateral hearing aids and unilateral cochlear implants. All children will receive audio logic care at the time of the study. The child is hearing technology was worn at user settings as prescribed by the clinical audiologist. Listening checks were conducted prior to the test session.

A battery of speech recognition measures as well as standardized speechlanguage and literacy, and cognitive measures will be administered to both groups of children. The test battery will be selected based on the psychometric properties of the tests, their common use in the literature, clinical practice, and the need for a test protocol that could be administered to a school age population in a reasonable period of time.

The tests are divided into three categories of outcome measures: speech recognition, Speechlanguage and phonology/literacy measures. Cognitive measures are also collected during this study and are reported here to describe the children's' non-verbal functioning. All test results, with the exception of speech recognition, are reported as standardized

scores. This permits a comparison of scores for Children assessed at different ages since they are compared with large normative samples of their normal hearing peers of the same age. The speech recognition measures are scored as percent correct.

Data analysis

Differences between student characteristics for the two groups (hearing aids and cochlear implants) are analyzed descriptively. The primary outcomes analyzed for the study are communication and literacy skills. All analyses are completed using IBM SPSS version 20.0. Differences in the main speech and language outcomes between the two groups (hearing aids vs. cochlear implant) are compared using independent samples Student's t tests when data are normally distributed. Non-parametric tests (MannWhitney U test) are applied for scores that are not normally distributed. Outcomes are reported as percentage correct for the speech recognition tests and as standard scores for all other tests. Statistical significance is accepted at the 5% level and all P values are two-tailed. Ninety-five percent confidence intervals (95% CI) are also calculated where appropriate. Spearman correlations are conducted to examine the relationship between speech recognition scores and outcomes in speech production (GFTA-2), receptive vocabulary (PPVT-III), and language (CELF-4).will be used for data analysis & interpretation.

RESULTS

The collected data was analyzed employing appropriate statistical procedures and the results and interpretations are presented under the following heads.

Hypothesis.1 : There is significant difference in the acquisition of speech- language skills in the development of language skills between the cochlear implants and hearing aid users. To examine it data is subjected to Independent Sample T-Test and the results of the test are

TABLE 1

Independent sample t- test on acquisition of speech language in development of language skills

Users	n	Mean	S.D	t-value	Significance
Cochlear Implant	20	32.3500	1.89945	10.684	.000
Hearing Aid	20	24.7500	2.55209		

given in Table-I. It can be observed from the Table-I that the mean value is found more significant (32.3500) and (24.7500) in Cochlear Implant users. This indicates that there is significant difference in mean values of the Cochlear Implant and Hearing aid users. The mean value of cochlear Implants is found to be greater than the Hearing Aid users value. This implies that there is significant difference in Speech Language level in the Development

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of Language skills

Hypothesis.2 : There is significant difference in the acquisition of phonology in the development of language skills between the cochlear implants and hearing aid users. To examine it, data was subjected to Independent Sample t-test and the results of the test are given in Table-2. It can be observed from the Table-2 that the mean value is found more significant (33.10) and (22.50). This indicates that there is significant difference in mean values of the Cochlear Implant and Hearing aid users. The Mean value of cochlear implants is found to be greater than the Hearing Aid Users value. This implies that there is significant difference in Phonological level in the Development of Language skills.

TABLE 2

Independent sample t- test on acquisition of phonology in development of language skills

Users	n.	Mean	S.D	t-value	Significance
Cochlear Implant	20	33.10	1.25237		
				30.205	.000
Hearing Aid	20	22.50	.94591		

Hypothesis.3 : There is significant difference in the acquisition of cognition in the development of language skills between the cochlear implants and hearing aid users. To examine it data was subjected to Independent Sample t-test and the results of the test are given in Table-3.

TABLE 3

Independent sample t- test on acquisition of cognition in development of language skills

Users	n	Mean	S.D	t-value	Significance
Cochlear Implant	20	44.25	1.44641		
Hearing Aid	20	37.05	4.53611	6.763	.000

It can be observed from the Table-3 that the mean value is found more significant (44.25) and (37.050). This indicates that there is significant difference in mean values of the Cochlear Implant and Hearing aid users. The mean value of cochlear Implants is found to be greater than the Hearing Aid Users Value. This implies that it shows that there is significant difference in Cognitive level also in the Development of Language skills.

To examine whether there is any significant difference in both male and female development of Language Skills (Speech-Language, Phonology, & Cognitive) in Cochlear Implant users, data was subjected to Independent Sample t-test and the results of the test are given in table-4 which shows that the mean values are found more significant (32.00) and (32.70) in

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TABLE 4

Gender wise independent sample t- test on the development of language skills in cochlear implant users

Language Development Skills	Gender	n	Mean	S.D	t-value	Significance
Speech Language	Male	10	32.00	1.41421	.817	.427
	Female	10	32.70	2.31181		
phonology	Male	10	33.30	1.05935	.705	.491
	Female	10	32.90	1.44914		
Cognitive	Male	10	44.40	1.50555	.454	.655
	Female	10	44.1000	1.44914		

females when compared with the males in Speech-Language. The mean values are found more significant (33.30) and (32.90) in males when compared with the females in Phonology, and the mean values are found more significant (44.40) and (44.10) in males when compared with the females in Cognitive. It implies that there is a significant difference in Development of Language skills (Speech-Language, Phonology, & Cognitive) by Using Cochlear Implant. Males are showing significant difference in Cognitive and in Phonology but in Speech-Language the females are more significant difference when compared with the males.

TABLE 5

Gender wise independent sample t- test on the development of language skills in hearing aid users

Language Development Skills	Gender	n	Mean	S.D	t-value	Significance
Speech Language	Male	10	22.80	.78881	5.357	.000
	Female	10	26.70	2.16282		
Phonology	Male	10	23.00	1.15470	2.739	.023
	Female	10	22.00	.00000		
Cognitive	Male	10	34.40	3.16930	3.177	.006
	Female	10	39.70	4.21769		

To examine whether there is any significant difference in both male and female development of

Language Skills (Speech-Language, Phonology, & Cognitive) in Hearing Aid users, data was subjected to Independent Sample t-Test and the results of the test are given in Table-5 which shows that the mean values are found more significant (22.80) and (26.70) in females when compared with the males in Speech-Language. The Mean values are found more significant (23.00) and (22.00) in males when compared with the females in Phonology, and the mean values are found more significant (34.40) and (39.7000) in females when compared with the males in Cognitive levels of Development of Language Skills. This implies that there is a significant difference in Development of Language skills (Speech-Language, Phonology, & Cognitive) by using Hearing Aids. Females are showing more significant difference when compared with the males in Speech-Language and in Cognitive but in Phonology the males are having significant difference when compared with the females.

The results in the present study indicates that there is an improvement in the development of Language Skills (Speech-Language, Phonology, & Cognition) in Cochlear Implant users as an assistive device, when compared with Hearing Aids. Also males while using Cochlear Implant showed more improvement in Cognitive and in Phonology whereas females showed more improvement in speech language. While using Hearing Aids males showed more improvement in Phonology whereas females showed more improvement in Cognitive and speech language.

Limitations of the study

The sample for the study was taken from only one center in Guntur district, Andhra Pradesh for the hearing impaired. More samples can produce more results that can be generalized. Also, there can be several factors to assess the language development in the children with hearing impaired but in the present study only three variables -speech language, phonology/literacy, and cognition are taken into consideration. Only one category i.e. severely hearing impaired category has been taken in the present study, other categories like mild and moderate hearing impairment are not considered. The study intends only to compare the skills of language development using the cochlear implant and the variation with the hearing aid users and does not cover the physiology, medical, psychological, and therapeutically remedies for the hearing impaired.

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CHALLENGES IN PREPARING TEACHERS FOR INCLUSIVE EDUCATION

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Abstract

Inclusive education stands for improvement of schools in all dimensions to address the educational needs of all children. Recommendations to send children with disabilities to mainstream schools were first made in the Sargent Report in 1944, and again in 1964 by the Kothari Commission. Despite this, the change has been slow, with segregation in special schools dominating the scene until recently. There is no need of reinforcing the fact that teacher education remains a very weak link with respect to equipping teachers to be prepared for an inclusive classroom environment. As a result teacher education programs have made attempts to incorporate inclusive education as part of their curricula The teacher education diplomas and degrees offer "Education of children with special needs" as an optional subject, in order to prepare teachers to identify and diagnose disability. The challenges and prospects in India are elucidated in the present paper.

Keywords*: Inclusive education, challenges, holistic perspective.*

Introduction

There are an estimated 25 million children out of school in India many of whom are marginalized by factors such as poverty, gender, disability, caste, religion etc. Therefore undoubtedly the idea of inclusive education is certainly highly relevant to our current condition, where differences in religion, faith, gender, ethnicity and ability are often seen as a threat rather than a source of richness and diversity. Inclusive education stands for improvement of schools in all dimensions to address the educational needs of all children.

Inclusive education (IE) is a new approach towards educating the children with disability and learning difficulties with that of normal ones within the same roof. It seeks to address the learning needs of all children with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners – with or without disabilities being able to learn together through access to common pre-school provisions, schools and community educational setting with an appropriate network of support services. This is possible only in flexible education system that assimilates the needs of diverse range of learners and adapts itself to meet these needs. Inclusion is not an experiment to be tested but a value to be

followed. All the children whether they are disabled or not have the right to education as they are the future citizens of the country. In the prevailing Indian situation resources are insufficient even to provide quality mainstream schools for common children, it is unethical and impracticable to put children with special needs to test or to prove anything in a research study to live and learn in the mainstream of school and community. The principle of inclusive education was adopted at the "World Conference on Special Needs Education: Access and Quality" (Salamanca, Spain 1994) and was restated at the World Education Forum (Dakar, Senegal 2000).

The 1995 Persons with Disability Act (PDA) states that disabled children should be educated in integrated settings where possible, although it seems that the lack of implementation may be due to there being no enforcement agency for this legislation. Despite the promotion of inclusive education, govt. documents focus on inclusive education as being about including children with disabilities in the education system, but not specifically the mainstream 2005a). However, inclusion in the education system is not the same as inclusion in the mainstream. It is however arguable that special education is in fact regarded as superior in India due to its preferred status and that it is inclusion in the mainstream that is currently seen as the resource – constrained inferior alternative. However the limited coverage of mainly urban-based, impairment specific special schools in India may result in the exclusion of children with disabilities who do not fit the categories of their institutions or who live in rural areas. Inclusive education may be the only way of facilitating educational access for these children.

 A focus on physical access to school, rather than access to curriculum and equal treatment once in the classroom is an additional barrier to inclusion, possibly resulting in dropout. too argues that government policy focus on resources and physical access (e.g. distribution of aids and appliances), or infrastructure such as ramps in schools, and the notion of social justice through equal distribution of benefit, seems to be more about inputs, not processes like pedagogy, curriculum or attitudes. It is this focus which results in selection of the relatively few-"Easy to accommodate children" with mild or moderate disabilities that do not need too much specialist assistance. This apparently selective inclusion, with children being 'prepared' in order to be 'ready' for the mainstream (NIEPA, 2003) seems to give inclusive education an exclusive favour, although this may be because homogeneity in the classroom can be perceived as an essential prerequisite to enable good teaching. This appears to directly contradict the understanding of inclusive education as a concept which is all about embracing

diversity in the classroom. Despite islands of govt. programme success, disability budgets remain under used (Thomas, 2005), and reserved jobs unfilled. These are sure signs of sporadic implementation of inclusive education, as is the persistently low percentage of children with disabilities being in school

Inclusive Education in Developing Countries

Inclusive education is defined by UNESCO as a process of addressing and responding to the diverse needs of all learners by increasing participation in learning and reducing exclusion within and from education. This means that all children have the right to a quality education that caters, to the extent possible, to their individual needs. Some countries have been successful in promoting inclusive education practices and policies that remove barriers and create conditions which enable all children to learn. However, in poorer developing countries, the process of creating an inclusive system is more difficult. Factors such as lack of available funding, administrative and policy level support, and trained personnel pose challenges that can slow down progress. As a result of these difficulties, some countries may choose to begin the process by first focusing on one group of children with the long-term goal of eventually including all excluded groups

Ministry of Human Resource Development (MHRD) Action Plan:

An outline of MHRD action plan is presented below: National Policy for Persons with disabilities

• To complement and supplement IEDC and Sarva Shiksha Abhiyan programmes in the movement from integration to inclusion.

• Enrolment and retention of all children with disabilities in the mainstream education system. (Free and compulsory education from 0 to 14 under draft Bill/free education 0 to 18 years under PWD Act).

• Providing need based educational and other support in mainstream schools to children in order to develop their learning and abilities, through appropriate curricula, organizational arrangements, teaching strategies, resource and partnership with their communities.

• Support higher and vocational education through proper implementation of the existing reservation quota in all educational institutions and creation of barrier free learning environments.

• Disability focused research and interventions in universities and educational institutions.

• Review implementation of existing programmes, provisions to identify factors leading to success or failure of the drive towards enrolment and retention of children with disabilities in mainstream educational settings. Address administrative issues arising out of review.

• Generating awareness in the general community, activists and persons working in the field of education and more specifically among parents and children that the disabled have full rights to appropriate education in mainstream schools and that it is the duty of those involved in administration at every level including schools to ensure that they have access to education.

• Ensure enrolment and intervention for all children with special needs in the age group 0-6 years in Early Childhood Care and Education Programs.

• Facilitate free and compulsory elementary education for children with special needs in the age group 6-14 (extendable to 18 yrs.) in mainstream education settings currently under the Sarva Shiksha Abhiyan (SSA) (SSA is a governmental program shared by both union and state governments for achieving universal elementary education in India by 2010) .

• Facilities for transition of young persons with disability wishing to pursue secondary education.

•Ensuring physical access of children and youth with disabilities in schools and educational institutions by enforcing the requirement for provisions of universal design in buildings and provide support in transportation.

• Development of national norms for Inclusive Education, to set standards of implementation, training, monitoring and evaluation for the program.

• Provide inputs in all pre-service and in-service training for mainstream and special education teachers to enable them to work with children with disability in an inclusive education system.

• Appropriate Resource Services support through appointment of special educators, rehab professionals, provision of resource rooms etc., to support mainstream schoolteachers in the classrooms.

• Put in place an effective communication and delivery system for specific delivery of TLM, aids and appliances, hardware/software.

• Participation in sports, co-curricular activities, to promote all round ability development.

• Ensuring physical access for young persons with disabilities (18 plus age group) in all colleges and educational institutions by enforcing the requirement for provisions of universal design in buildings and provide support in transportation.

Teacher Education Programmes

There is no need of reinforcing the fact that teacher education remains a very weak link with respect to equipping teachers to be prepared for an inclusive classroom environment. The teacher education diplomas and degrees offer "Education of children with special needs" as an optional subject, in order to prepare teachers to identify and diagnose disability. However it gives them a holistic perspective with respect to dealing with diversity or challenge negative attitudes. This reinforces the 'difference' of children with disabilities who, some believe, can only be taught by teachers qualified specifically for them. Although, it is ultimately teacher treatment of students in the classroom, rather than the training per se, that would reinforce this difference. Interestingly, distrust in both the special and mainstream education systems leads some parents to keep children with disabilities at home for fear of their abuse or neglect in the classroom; which may then be interpreted by teachers as a lack of community interest in education for their children, as demonstrated in the PROBE Report (PROBE,1999). There is evidence to suggest that many teachers do not feel equipped to teach children with disabilities and complain that they need more time to instruct these students. Many government programmes have included a teacher training component in an attempt to instigate institutional change. However, a 'special needs' focus and a lack of training for management, combined with didactic training methodology do little to alter the classroom. The poor quality educational provision in many schools is reflected in the fact that many govt. job reservations for adults with disabilities remain unfilled. It is more likely to be directly related to the fact that very few children with disabilities get to, or stay in, school that there is a lack qualified, let alone confident candidates.

Pre requisites for inclusion:

Inclusion is a complex issue. The curriculum is a powerful tool (Swann, 1988) . There are three pre requisites for inclusion:

 a) The preparation of the child

 b) The preparation of the receiving schools,

 c)   The preparation of parents, but it could not be achieved without,

 d) The preparation of the teachers.

a. **The preparation of the child:** Some children with special needs may require some prior training before they are placed in a regular school. Special educators made available for the purpose can provide such training and thereafter CWSN may be admitted in mainstream schools. States of Andhra Pradesh and Uttar Pradesh have conducted exclusive residential bridge course for CWSN to prepare them for regular schools but in rest of the states it is not yet to be done..

b. **The preparation of receiving schools**: Some mainstream secondary schools may be selected and developed as "Model Inclusive School" on priority basis. First of all barrier-free access to CWSN are made in all such institutions. Effort should be taken to provide disabled-friendly facilities in these schools. Development of innovative designs to provide an enabling environment for CWSN should also be made in these schools as a part of preparation programme

c. **The preparation of parents**: It has been seen that the parents/guardians of CWSN generally face problems, both social and psychological resulting into marginalisation and exclusion of CWSN in mainstream schools. Hence, it is important to undertake widespread awareness among the people especially parents of CWSN. They should be counsel so that they may prepare themselves to send his/her ward to mainstream schools. The preparation of the child: Some children with special needs may require some prior training before they are placed in a regular school. Special educators made available for the purpose can provide such training and thereafter CWSN may be admitted in mainstream schools. States of Andhra Pradesh and Uttar Pradesh have conducted exclusive residential bridge course for CWSN to prepare them for regular schools but in rest of the states it is not yet to be done..

d**. The preparation of teachers:** In India teacher training in special education is imparted through both face-to-face and distance mode.

Prospects of Inclusive Education

Inclusive education is a developmental approach seeking to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalization and exclusion. An increasing number of publications, policy papers, workshops etc. have supported the ideology of inclusion. Some organizations and people, however, doubt whether the ordinary classroom can provide quality education for disabled children. This debate has been on, ever since people began to voice their reservation against

old segregated institutions and in turn raised their concern for equality of disabled children. These concerns must be taken seriously and dispelled by showing examples of positive experiences, which clearly demonstrate that inclusive education most definitely addresses quality issues in education. The major goal of inclusive education is the Flagship goal. Recognizing the right to education, the Flagship seeks to unite all EFA partners in their efforts to provide access to quality education for every child, youth and adult with a disability. The Flagship has been formed by an alliance of diverse organizations, including global disability organizations, international developmental agencies, intergovernmental agencies, and experts in the field of special and inclusive education. In order to reach this goal, the flagship will:

- Have the full participation of persons with disabilities and families in the design of all Flagship activities.

- Promote the full participation of persons with disabilities and families in the development of policies and guidelines related to the education of persons with disabilities at local, national, regional and global levels.

- Seek to ensure that all governmental entities, donors and NGOs endorse the universal right to education for all children, youth and adults with a disability.

- Act as a catalyst to fully incorporate the Flagship goal into national plans of action and regional policies.

- Seek to ensure that the EFA monitoring process includes specific quantitative and qualitative statistics and indicators related to persons with disabilities and documentation of resources allocated to the implementation of EFA for these individuals.

- Identify and disseminate effective practices and stimulate research and studies related to the Flagship goal to include such areas as:

- Quality teacher education

- Curriculum and pedagogy

- School organization including adequate accessible facilities

- Aids and appropriate materials many countries have developed programs, which promote equality of opportunity by allocating specific funds to areas of social and

economic need. If inclusion is to be successful, the following parameters need to be taken care of:

• Encouragement provided by the community for including children with disabilities in local schools

• Readiness of the general education system to accept responsibility for education of children with disabilities

• Willingness of parents of children with disabilities to send their wards to local schools

• General classroom teachers to be equipped to manage the education of children with disabilities

• Enrolment rate of children with disabilities at least 1% with that of nondisabled children.

• Retention of children with disabilities in schools.

• Availability of support from peer group to children with disabilities and vice-versa in teaching learning processes.

• Comparable achievement of children with disabilities in curricular and co-curricular activities as par with their capabilities.

• Availability of specialist teacher support, if possible to the regular classroom teachers.

Thus, we as teachers, parents, teacher-educators etc., have to facilitate the implementation of inclusive education not only as a program but also as an ideology- an ideology based on the principles of human rights approach wherein stress is laid on giving importance to the individual and respecting his/her potentiality in the teaching learning process.

An Inclusive Teacher Preparation Model

One of the greatest barriers to achieving this goal is the preparation teachers receive at the pre service level. Several researchers have noted the lack of professional training in inclusive techniques and practices for general and special education teachers. If teacher education programs are to prepare educators to be successful in the classrooms of the future they must re conceptualize and redesign their approach to pre service preparation of teachers.

Techniques and Strategies for Inclusive Education

Several researchers (Baker and Zigmond, 1990; Schu

mm and Vaughn, 1995; Giancreco, Dennis, Cloninger, Edelman, and Schattman, 1993) have noted the lack of professional training in inclusive techniques and practices for general and special education teachers. A tremendous amount of money is spent on in service training to give teachers instructional skills to teach students with diverse needs. These resources could

be directed elsewhere if teachers could emerge from their pre service training already possessing those skills. Pre service preparation should address appropriate accommodations in curriculum, instructional activities and evaluation procedures, the modification of materials, and the effective identification, development and utilization of resources. In addition, the pre service program should prepare teachers to use various types of instructional arrangements such as multi-level teaching, cooperative learning and peer tutoring. The third component of an inclusive teacher preparation model relates to Collaborative Experiences. The two previous components apply primarily to the classroom. This component relates to the field based experiences of the prospective teacher.

To Prepare Teachers for Inclusive Educational Settings

1) Instruction in the components of collaborative teaching;

2) Instruction in teaching strategies for inclusive settings;

3) Practicum experiences in inclusive settings;

4) Modelling of collaborative teaching by university professors;

5) Collaboration with practicing teachers regarding needed skills and experiences

6) Utilization of experts and specialists on inclusive practices via distance learning;

7) The development of web-based courses;

8) The development of a support network for new teachers in inclusive setting

Three Essential Components for Capacity Building in Inclusive Education

1. Increase Awareness and Attitudinal Change through Advocacy

2. Create a Future of Trained Professionals: Pre-Service Training

3. Build on Existing Human Resources: In-Service Training and Professional Development

And also there should be a, criteria for selection of teachers.

- Have positive attitudes towards children with disabilities
- Hold good qualifications and pedagogical performance records
- Be confirmed as long-term resources for schools and districts by local education authorities
- Demonstrate good collaboration and communication skills
- Have good skills as a trainer and facilitator
- Have a sound professional reputation
- Possess good counselling skills.

Conclusion

Preparing teachers at the pre service level to teach in inclusive settings is essential if our schools are to truly teach all students in inclusive, collaborative, and diverse settings. To accomplish that we must start designing and building an atmosphere of collaboration and inclusiveness at the pre service level, as well as practices that demonstrate to prospective teachers the possibilities and promise of an inclusive world,

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DURATION OF THE B.ED. (BACHELOR OF EDUCATION) COURSE: BOON OR BANE

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Abstract

Teachers are the greatest assets of any education system. They stand in the interface of the transmission of knowledge, skills and values. They are accepted as the backbone of education system. Teacher quality is therefore crucial and has been globally accepted to be significantly associated with the quality of education in general and students' learning outcomes in particular. According to Schulman's (1987) conceptualization of teacher's knowledge provides the base of teacher education curriculum structure a teacher should possess subject content knowledge, general pedagogical knowledge, and the knowledge of educational contexts and goals; and should be able to use this knowledge creatively to deal with ever changing classroom situations. If we analyse teacher education systems in different countries from this perspective we will find majority of teacher education reform efforts centred on reforming the knowledge base of teachers, and similarities can be observed in teacher education curriculum across various societies. The ability and attitude of teachers depend on the teacher education programme that is in operation. In this context pre-service teacher education, which is a major part of Teacher Education, assumes great significance. In pre-service teacher education if we talk of B.Ed. (Bachelor of Education) programmes, its duration is a controversial issue, because its duration is varied from 1,2 or 4 years (4years for integrated B.Ed.) all over India. There is a difference in opinion; with some arguing that course duration of B.Ed. should be of 1 year and others arguing that its duration should be more than 1year. These arguments are mainly based on Cost vs Quality.

Keywords: Teacher quality, Quality of education, structure of curriculum, duration of the course.

Introduction

The greatest resource and strength in Indian schools is our teachers. They account for the vast majority of expenditure in school education and have the greatest impact on student learning, far outweighing the impact of any other education programme or policy. The Code of Ethics of the teacher Education Profession indicates the aspiration of all educators and provides standards by which to judge conduct. The desire for the respect and confidence of one's colleagues, of students, of parents, and of the members of the community provides the incentive to attain and maintain the highest possible degree of ethical conduct.

The Education Commission (1964-66) of India accepted this influence of teachers in powerful words, "No system can rise above the status of its teacher…" Similar sentiments have been expressed by the Delors report (1996), and UNESCO report on *Teacher and Educational Quality: Monitoring Global Needs for 2015 (2006)* [1].

The organisation of teacher education in any system can be visualized at two levels. At the systemic level, the positioning of teacher education determines its nature. Teaching is a multifaceted and specialized activity, and therefore, is housed in single purpose institutions in majority of countries around the world. The second level is the structure of curriculum i.e. what should be taught and how it should be taught

In the belief that the quality of the services of the teaching profession directly influences the nation and its citizens, the educator shall exert every effort to raise professional standards, to promote a climate that encourages the exercise of professional judgement, to achieve conditions that attract persons worthy of the trust to careers in education, and to assist in preventing the practice of the profession by unqualified persons.

In this era of rapid explosion of knowledge and advancements in the field of technology, quality education is a great concern for all of us today. Of all the factors that influence the quality of education, the quality of teachers is undoubtedly the most significant. In fact no innovation or change in education is going to bring a change in the quality of product unless the teachers are of quality. Nothing is more important than securing a sufficient supply of high quality candidates to the teaching profession and providing them with the best possible professional preparation. "quality of teachers mainly refers to the teachers' competency in the subject that he/she deals with, expertise to use methods and techniques of teaching, ability to understand learners' problems and the teachers attitudinal makeup." (pradhan, 2001) the ability and attitude of teachers depend on the teacher education programme that is in operation. In this context pre-service teacher education, which is a major part of teacher education, assumes great significance. In pre-service teacher education if we talk of b.ed. (bachelor of education) programmes, its duration is a controversial issue, because its duration is varied from 1,2 or 4 years (4years for integrated b.ed.) All over india. There is a difference in opinion; with some arguing that course duration of b.ed. Should be of 1 year and others arguing that its duration should be more than 1year. These arguments are mainly based on cost vs quality. So, here main questions that arise are;

Does the duration of the B.Ed. course affect the quality of teachers? and if it does then, Is there any solution for it?

In this paper an effort is being made to focus on arguments in favour and against one year B.Ed. programmes with respect to the NCTE (National Council of Teacher Education) framework of 1998 and also various alternative ways have been suggested to increase its duration.

NCTE has suggested the following specific objectives and curriculum framework for teacher education at secondary level in its document on 'Curriculum Framework for Quality Teacher Education' in 1998.

Specific objectives

- ❖ To enable the prospective teachers to understand the nature, purpose and philosophy of secondary education.
- ❖ To develop among teachers an understanding of the psychology of their pupils.
- ❖ To enable them to understand the process of socialisation.
- ❖ To equip them acquire competencies relevant to pedagogy, curriculum development, its transaction and evaluation.
- ❖ To enable them to make pedagogical analysis of the subjects they are to teach at the secondary stage.
- ❖ To develop skills for guidance and counselling.
- ❖ To acquaint them with factors and forces affecting educational system and class room situation.
- ❖ To acquaint them with educational needs of special groups of pupils.
- ❖ To enable them to utilise community resources as educational inputs.
- ❖ To develop communication skills and use the modern information technology.
- ❖ To develop aesthetic sensibilities.
- ❖ To acquaint them with research in education including action research

Curriculum frame work

 Theory

Emerging Indian Society; Secondary Education in India – status, problems and issues; Psychology of Teaching and Learning; Guidance and Counselling; Assessment, Evaluation and Remediation ; Curriculum Design and Development ; School Management; Comparative Education; Action Research.

Practice Teaching

➢ Pedagogical analysis of two school teaching subjects

➢ Practice teaching in schools

➢ Observation of Model Lessons

Practical work

Internship and School Experiences; Field Work with community based programmes; Creativity and Personality Development Programmes; Work Education; Sessional/practical work; Physical Education Activities, games and sports and other school activities; Aesthetic Development Programmes and Activities; Action Research studies.

Arguments In Favour Of One-Year B.Ed. Programme

Students get the admission in B.Ed. after completion of Bachelors or Masters degree in their discipline. If we increase the duration of B.Ed. programme from 1 year to 2 years the total duration of education, will increase from (10+2+3+1) 16 years/ (10+2+3+2+1) 18 years, to (10+2+3+2) 17 years/(10+2+3+2+2) 19 years. In general it increases another one educational year if we implement 2 year B.Ed. programmes. Due to this a student who passes out of this programme gets a job late by one year.

"Generally good and bright students show interest towards the professional courses that can be completed in less time and can provide good job opportunities. Increasing the duration of B.Ed. programme may attract less number of bright students." (Biswal, 1999)

Students who are doing B.Ed. will have studied their respective subjects for 3 years in Bachelor degree and 5 years in Master degree. So it seems that there is no need to teach them content of the subjects which they are supposed to teach in the school. In B.Ed. by only taking one more year we just have to mould them to become effective teachers. Only giving education about different methods and approaches of teaching is enough. Other things they learn by practice.

If we increase the duration of any course then it also increases the cost involved in it. As it becomes costly some students of low and average SES (Socio-Economic Status), though they are bright in studies, might show less interest towards the course. It also increases the cost on part of the university and the central government.

If any university takes an innovative step by increasing the duration of B.Ed. programme, it does not give any special benefit for the students who passed out through that programme. They are also treated in the same way as the students who have completed B.Ed

in one year. They are not getting any benefit in any term except professional proficiency so, it seems to be no need to increase the duration of B.Ed. programme.

Arguments against one-year B.Ed. Programme

The arguments against one-year B.Ed. programmes are in realms of:

Specific objectives

The specific objectives given by NCTE in 1998 are very broad. And these should be achieved within the limited duration of one year. Looking at these objectives it seems that it is very difficult to achieve these completely in a short duration of one year.

Theory

'The Emerging Indian Society' included in the theory part, mainly deals with factors and forces operating in Indian society. It includes Special Education, Value Education, Vocational Education, Population Education, Environment Education etc. It should not only be taught but also dealt in detail to broaden the vision of the prospective teachers. All other things in the curriculum like- Psychology of Teaching and Learning, Guidance and Counselling etc., include many things that are important for the prospective teacher. And in one year B.Ed. programmes all these things of curriculum cannot be dealt with in detail, though they are necessary for the teachers.

In this age of technology, ICT (Information and Communication Technology) has become an important part of education, therefore ICT has been introduced as a compulsory course in some universities in B.Ed. curriculum. In the ICT main stress is given on Computer Education, Internet and multi-media. But only giving information is not sufficient. Prospective teachers should be taught how to integrate all these things in the teaching-learning process and for this, enough time should be given to prospective teachers to practise it. Finding of a study also states, the comprehensive B.Ed. curriculum was not effectively taught due To time shortage. (Hemambujam,1983)

Content mastery

The competency of a teacher in the content that the teacher is assigned to teach, plays a very significant role in determining the teacher's success in teaching. The teachers can put the pedagogical skills in effective use, only when he/she has got subject matter competency. With the enrichment of the school curriculum in every year the subject matter competency has become all the more necessary. In one-year B.Ed. programmes, content of the subject is omitted from the curriculum on the argument that the university degree equips the graduates

or post-graduates with the requisite knowledge of their respective subjects. But it is felt that it is necessary to teach and learn the subjects from the point of view of prospective teacher. By taking help of some experts of the education field, complex content, should be identified which could be taught from the point of view of the prospective teachers. When content is taught in an integrated manner it becomes very helpful to develop teaching competency.

Methods of teaching

There are certain assumed competencies that are required of all teachers, many of these competencies are related to the development of attitude, personal traits and skills. It is therefore, not enough to teach theory subjects in the traditional fashion and prepare the prospective teacher for external examination. As B.Ed. is a professional degree, teacher educators have used some innovative techniques for teaching. And it also requires thorough preparation on the part of teacher educator, for this they should have enough time.

 Practical work

"The teaching profession expects a variety of work experiences from teachers. Adequate scope should be there in B.Ed. programme, for preparation of learning material, question bank preparation, construction of tests, and preparation of different type of assignments." (Goel, 1999)

Practice teaching

Due focus should be given on microteaching and practice teaching because the crucial test of a teacher's competency is his/her performance in school. In micro teaching the prospective teacher should be given enough time to practice each skill adequately, because this is first time where he/she is exposed to teaching skills. After each lesson it should be discussed with the teacher educators.

"Practice teaching is now not merely confined to the teaching of certain subjects. Pedagogical analysis of the subjects offered for practice teaching has been made compulsory." (NCTE, 1998)

In the practice teaching phase, the prospective teacher's lessons should be arranged in such a way that teacher educator is able to observe (evaluate) at least half of a lesson (if possible full). By this the teacher educator can give enough feedback to prospective teachers to improve their performance. Its gain would be acquisition of higher level of teaching competency. Thus practice teaching requires thorough preparation, detailed supervision and adequate time.

Internship

Internship is a very important component of B.Ed. programme but due to lack of time, enough stress is not given on it as much as it should be given. In many institutions internship is generally omitted due to time constraints. But research recommends that, Internship in teaching should be for a period of 3 months. (Kakkad,1983). All the theory that a trainee learns in educational psychology,school organization, and techniques of teaching should be applied in the school organization. The opportunity for this application can be given to the prospective teacher in the programme of internship in teaching where the student teacher is working full time in a school, as an apprentice for 8-12 weeks. By this the prospective teachers would observe and learn different kind of activities of the school other than teaching.

"Internship in teaching provides each student teacher with a broad and comprehensive experience in the development of teaching competency far beyond the usual practice teaching. The prospective teacher works in the cooperating school full time and participates in all the activities of the school. This close relationship between the college and cooperating school is bound to result in many benefits to both institutions and also to trainee." (Mukerji, 1968)

To get such benefits the basic condition is to have internship in B.Ed. programme and it should be for 2-3 months. In one-year B.Ed. programmes, approximately 9 months are available as a working period, and from 9 months one cannot afford to have an internship of 2-3 months.

Co-curricular activities (CCA)

It is a very important feature of B.Ed. programme. It leads to the overall development in personality. It includes morning assembly, cultural programmes, educational tour etc. In school, the teacher is not only a part of it but he also has to organize such activities, for that they should participate in such activities in B.Ed. But in B.Ed., students are not participating in such activities because of exams or practical work. By increasing the duration of B.Ed. programme we can provide sufficient time gap between CCA activity and curricular activity. Finding of a study also states "The whole programme is so over-crowded that they (student) do not get time for participation in other activities." (Sultana, 1976)

Relation with parents

A teacher's work is not only limited to the school. For the overall development of the child, teachers have to meet the parents from time to time.

For that the teacher should know:

❖ What to talk with parents;

❖ how to talk with parents;

❖ how to give important suggestions for the development of the child

The prospective teacher should be prepared for this and proper training should also be given to them. It could be put in an effective way by including it in theory as well as in practical work.

Thus increasing the duration of B.Ed. programmes will provide ample time for achieving all the points mentioned above.

"Increase in duration of B.Ed. programme will provide a strong base for pursuing M.Ed. programme." (NCTE, 1998)

Some studies also revealed that

1. It should be preferable to have the duration of the course for two years. (Sharada, 1964)

2. Most of the teachers felt that duration of training course was not sufficient. (Gunju, 1973)

Recommendations by Different Committees and Commissions.

All the above arguments are supported by the recommendation given by different committees and commissions in education to increase the duration of B.Ed. programmes. Some of the important recommendations by different bodies are

Even before independence, Report of the Committees appointed by CABE (Central Advisory Board of Education) in 1938-43 states that "in the case of teachers…….. the committee feels that the actual training of teacher might be completed in one year, although a minimum courses of 18 months is to be preferred"

Secondary Education Commission, 1952-53 also states that "Graduates-training is restricted to one year, and although we have recommended as a long-term programme the desirability of increasing this period to two academic years…."

Committee on Emotional Integration in1961 states that "The duration of teacher training courses should not be less than two years at any level."

Recommendation of NCTE Seventh General Body meeting held on 31st December 1983 state that "The B.Ed. programme be increased to two years duration

Recommendation of the National Commission on Teachers-I in 1985 states that "The existing one year B.Ed. course must be made effective both by lengthening the time available and by revamping the current courses and curricula. Today most colleges of education are, in

effect, reported to be working for not more than 170-180 days in the year. We are of the view that the two-summer months may be added to the academic year ensuring a working year of at least 220 days. An increase in the working hours per day may also be considered. We are aware that in some places this will entail the appointment of additional staff and a restructuring of the programme of studies allowing sufficient time for practical work in the school and community. But the urgency is such that the extra costs and other implications of the reform have got to be accepted."

Recommendation by NCTE in the document on ' Curriculum Framework for Quality Teacher Education ' in 1998.

The last recommendation in 1998 for two years duration of B.Ed. programme was formulated on the basis of countrywide 'discussion document' by NCTE. The tryout of the programme has also been started in institutions like, the RIEs (Regional Institute of Education) at Bhopal, Ajmer, Bhubaneswar and Mysore. Also in Gujarat in Gujarat Vidyapeeth at Ahemedabad, it has been started on trial basis from 1999-2000.

From the above arguments and recommendation it seems that there is a need to increase the duration of B.Ed. programme. But how i.e. in which mode it should be increased is also a debatable issue. Such suggested and probable models and its related problems are discussed below.

Alternative models to increase duration for all universities of India

Biswal in 1999 suggests the following models.

Making B.Ed. programme of two year

In this case the strength of the students at a time will be doubled in the institutions, which needs double infrastructure, double manpower and even we need more number of schools for practice teaching. In this case the cost of teacher training will be nearly doubled for that the institution will require a large amount of money directly or indirectly from the central government.

Admitting once in two years

In this mode, the B.Ed. training institutions would take students in the alternate years. Here, it may not create any problem for teacher training institutes in terms of manpower and infrastructure facilities. But it also creates some of the problems like.

- Reduction of trained manpower.
- Loss of one year for the students aspiring for B.Ed.

Admitting half the strength yearly

In this mode, B.Ed. training institutions would admit half of the total intake strength of the students every year. We have two sections (A & B) in function due to the high number of inputs i.e. 180. In this case, when the input will be reduced to half i.e. input could be reduced to 90. Then the college will be able to function with first year and second year like section A & B. But related problem is that the number of completers will be reduced to half.

Making B.Ed. programme of one year and three months

As in The Maharaja Sayajirao University of Baroda, application forms of B.Ed. are to be filled in Jan./Feb. the students who are appearing in the final exam of graduation or post-graduation are not able to apply and thereby fail to get admission. As a result they have to wait for 1 year to get admission. Another hypothetical mode of implementation may work out. That is if we would start distribution of forms in Sept./Oct. We could start the new academic year in January. In the month of May, teachers have vacation and in the month of June and December, the students have to appear for the final exam of 1st and 2nd semester respectively. In the next year in the month of January to April students would be going for internship and come to college only on Saturday to meet their respective teachers. (New batch of students would be going for observation of school activities on Saturday in February and March.) Result would be declared in May. Still increasing the duration will not serve the purpose. Before starting the new system of increased duration of B.Ed. programme, we should be prepared for the maintenance of the new system, as most of the new untested systems are prone to errors and problems.

Will the schools be open for internship?

If admissions are given in every two years or if intake is cut down by half will the education system be in a position to stand social pressure?

Will the Government of India make some policy to attract bright students toward B.Ed. programme after increasing its duration?

Though these questions are at present unanswered we have to find more alternative solutions to different problems. We should not be discouraged looking only to a few alternatives. We have to find more and more logistic and fool proof solutions to make ourB.Ed. programme more realistic and quality oriented. We have to work hard to make the entire spectrum of B.Ed. forward looking. We have to maximize our strengths and minimize

our weaknesses. We have to cross thousands of hurdles in the journey to make our education, life oriented and better than the best.

Teacher and his education are very significant aspects of any nation. The education gives a new shape to the individual and the nation as well. It is a well known saying that teacher is the nation builder. The quality of teacher education programme needs to be up graded. Teacher education has not come up to the requisite standards. Teachers are not able to think critically and solve the issue related to teaching methods, content, organisation etc. teacher education programme needs a comprehensive reform and restructuring curriculum of teacher-education programme needs to be revised according to changing needs of society. No doubt a lot of stress is given on teacher-education course in India. Unfortunately still there are several loopholes in the system. Hence the Centre and States Governments should join the hands to bring the quality and improvement in the teacher education, then bright future of teacher education is possible.

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TEACHER EDUCATION CURRICULUM:
REFLECTIVE PRACTICES

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Duration of the Course: boon or bane

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ABSTRACT

Teachers are the greatest assets of any education system. They stand in the interface of the transmission of knowledge, skills and values. They are accepted as the backbone of education system. Teacher quality is therefore crucial and has been globally accepted to be significantly associated with the quality of education in general and students' learning outcomes in particular. According to Schulman's (1987) conceptualization of teacher's knowledge provides the base of teacher education curriculum structure a teacher should possess subject content knowledge, general pedagogical knowledge, and the knowledge of educational contexts and goals; and should be able to use this knowledge creatively to deal with ever changing classroom situations. If we analyse teacher education systems in different countries from this perspective we will find majority of teacher education reform efforts centred on reforming the knowledge base of teachers, and similarities can be observed in teacher education curriculum across various societies. The ability and attitude of teachers depend on the teacher education programme that is in operation. In this context pre-service teacher education, which is a major part of Teacher Education, assumes great significance. In pre-service teacher education if we talk of B.Ed. (Bachelor of Education) programmes, its duration is a controversial issue, because its duration is varied from 1,2 or 4 years (4years for integrated B.Ed.) all over India. There is a difference in opinion; with some arguing that course duration of B.Ed. should be of 1 year and others arguing that its duration should be more than 1year. These arguments are mainly based on Cost vs Quality.

Keywords: Teacher quality, Quality of education, structure of curriculum, duration of the course

Introduction

The greatest resource and strength in Indian schools is our teachers. They account for the vast majority of expenditure in school education and have the greatest impact on student learning, far outweighing the impact of any other education programme or policy. The Code of Ethics of the teacher Education Profession indicates the aspiration of all educators and provides standards by which to judge conduct. The desire for the respect and confidence of one's colleagues, of students, of parents, and of the members of the community provides the incentive to attain and maintain the highest possible degree of ethical conduct.

The Education Commission (1964-66) of India accepted this influence of teachers in powerful words, "No system can rise above the status of its teacher..." Similar sentiments have been expressed by the Delors report (1996), and UNESCO report on *Teacher and Educational Quality:Monitoring Global Needs for 2015 (2006)* [1].

The organisation of teacher education in any system can be visualized at two levels. At the systemic level, the positioning of teacher education determines its nature. Teaching is a multifaceted and specialized activity, and therefore, is housed in single purpose institutions in majority of countries around the world. The second level is the structure of curriculum i.e. what should be taught and how it should be taught

In the belief that the quality of the services of the teaching profession directly influences the nation and its citizens, the educator shall exert every effort to raise professional standards, to promote a climate that encourages the exercise of professional judgement, to achieve conditions that attract persons worthy of the trust to careers in education, and to assist in preventing the practice of the profession by unqualified persons.

In this era of rapid explosion of knowledge and advancements in the field of technology, quality education is a great concern for all of us today. Of all the factors that influence the quality of education, the quality of teachers is undoubtedly the most significant. In fact no innovation or change in education is going to bring a change in the quality of product unless the teachers are of quality. Nothing is more important than securing a sufficient supply of high quality candidates to the teaching profession and providing them with the best possible professional preparation. "quality of teachers mainly refers to the teachers' competency in the subject that he/she deals with, expertise to use methods and techniques of teaching, ability to understand learners' problems and the teachers attitudinal makeup." (pradhan, 2001) the ability and attitude of teachers depend on the teacher education programme that is in operation. In this context pre-service teacher education, which is a major part of teacher education, assumes great significance. In pre-service teacher education if we talk of b.ed. (bachelor of education) programmes, its

duration is a controversial issue, because its duration is varied from 1,2 or 4 years (4years for integrated b.ed.) All over india. There is a difference in opinion; with some arguing that course duration of b.ed. Should be of 1 year and others arguing that its duration should be more than 1year. These arguments are mainly based on cost vs quality. So, here main questions that arise are;

Does the duration of the B.Ed. course affect the quality of teachers? and if it does then, Is there any solution for it?

In this paper an effort is being made to focus on arguments in favour and against one year B.Ed. programmes with respect to the NCTE (National Council of Teacher Education) framework of 1998 and also various alternative ways have been suggested to increase its duration.

NCTE has suggested the following specific objectives and curriculum framework for teacher education at secondary level in its document on 'Curriculum Framework for Quality Teacher Education' in 1998.

Specific objectives

- ❖ To enable the prospective teachers to understand the nature, purpose and philosophy of secondary education.
- ❖ To develop among teachers an understanding of the psychology of their pupils.
- ❖ To enable them to understand the process of socialisation.
- ❖ To equip them acquire competencies relevant to pedagogy, curriculum development, its transaction and evaluation.
- ❖ To enable them to make pedagogical analysis of the subjects they are to teach at the secondary stage.
- ❖ To develop skills for guidance and counselling.
- ❖ To acquaint them with factors and forces affecting educational system and class room situation.
- ❖ To acquaint them with educational needs of special groups of pupils.
- ❖ To enable them to utilise community resources as educational inputs.
- ❖ To develop communication skills and use the modern information technology.
- ❖ To develop aesthetic sensibilities.
- ❖ To acquaint them with research in education including action research

Curriculum frame work

Theory

Emerging Indian Society; Secondary Education in India – status, problems and issues; Psychology of Teaching and Learning; Guidance and Counselling; Assessment, Evaluation and Remediation ; Curriculum Design and Development ; School Management; Comparative Education; Action Research.

Practice Teaching

- ➤ Pedagogical analysis of two school teaching subjects
- ➤ Practice teaching in schools
- ➤ Observation of Model Lessons

Practical work

Internship and School Experiences; Field Work with community based programmes; Creativity and Personality Development Programmes; Work Education; Sessional/practical work; Physical Education Activities, games and sports and other school activities; Aesthetic Development Programmes and Activities; Action Research studies.

Arguments In Favour Of One-Year B.Ed. Programme

Students get the admission in B.Ed. after completion of Bachelors or Masters degree in their discipline. If we increase the duration of B.Ed. programme from 1 year to 2 years the total duration of education, will increase from (10+2+3+1) 16 years/ (10+2+3+2+1) 18 years, to (10+2+3+2) 17 years/(10+2+3+2+2) 19 years. In general it increases another one educational year if we implement 2 year B.Ed. programmes. Due to this a student who passes out of this programme gets a job late by one year.

"Generally good and bright students show interest towards the professional courses that can be completed in less time and can provide good job opportunities. Increasing the duration of B.Ed. programme may attract less number of bright students." (Biswal, 1999)

Students who are doing B.Ed. will have studied their respective subjects for 3 years in Bachelor degree and 5 years in Master degree. So it seems that there is no need to teach them content of the subjects which they are supposed to teach in the school. In B.Ed. by only taking one more year we just

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have to mould them to become effective teachers. Only giving education about different methods and approaches of teaching is enough. Other things they learn by practice.

If we increase the duration of any course then it also increases the cost involved in it. As it becomes costly some students of low and average SES (Socio-Economic Status), though they are bright in studies, might show less interest towards the course. It also increases the cost on part of the university and the central government.

If any university takes an innovative step by increasing the duration of B.Ed. programme, it does not give any special benefit for the students who passed out through that programme. They are also treated in the same way as the students who have completed B.Ed in one year. They are not getting any benefit in any term except professional proficiency so, it seems to be no need to increase the duration of B.Ed. programme.

Arguments against one-year B.Ed. Programme

The arguments against one-year B.Ed. programmes are in realms of:

Specific objectives

The specific objectives given by NCTE in 1998 are very broad. And these should be achieved within the limited duration of one year. Looking at these objectives it seems that it is very difficult to achieve these completely in a short duration of one year.

Theory

'The Emerging Indian Society' included in the theory part, mainly deals with factors and forces operating in Indian society. It includes Special Education, Value Education, Vocational Education, Population Education, Environment Education etc. It should not only be taught but also dealt in detail to broaden the vision of the prospective teachers. All other things in the curriculum like- Psychology of Teaching and Learning, Guidance and Counselling etc., include many things that are important for the prospective teacher. And in one year B.Ed. programmes all these things of curriculum cannot be dealt with in detail, though they are necessary for the teachers.

Content mastery

The competency of a teacher in the content that the teacher is assigned to teach, plays a very significant role in determining the teacher's success in teaching. The teachers can put the pedagogical skills in effective use, only when he/she has got subject matter competency. With the enrichment of the school curriculum in every year the subject matter competency has become all the more necessary. In one-year B.Ed. programmes, content of the subject is omitted from the curriculum on the argument that the university degree equips the graduates or post-graduates with the requisite knowledge of their respective subjects. But it is felt that it is necessary to teach and learn the subjects from the point of view of prospective teacher. By taking help of some experts of the education field, complex content, should be identified which could be taught from the point of view of the prospective teachers. When content is taught in an integrated manner it becomes very helpful to develop teaching competency.

Methods of teaching

There are certain assumed competencies that are required of all teachers, many of these competencies are related to the development of attitude, personal traits and skills. It is therefore, not enough to teach theory subjects in the traditional fashion and prepare the prospective teacher for external examination. As B.Ed. is a professional degree, teacher educators have used some innovative techniques for teaching. And it also requires thorough preparation on the part of teacher educator, for this they should have enough time.

Practical work

"The teaching profession expects a variety of work experiences from teachers. Adequate scope should be there in B.Ed. programme, for preparation of learning material, question bank preparation, construction of tests, and preparation of different type of assignments." (Goel, 1999)

Practice teaching

Due focus should be given on microteaching and practice teaching because the crucial test of a teacher's competency is his/her performance in school. In micro teaching the prospective teacher should be given enough time to practice each skill adequately, because this is first time where he/she is exposed to teaching skills. After each lesson it should be discussed with the teacher educators.

In the practice teaching phase, the prospective teacher's lessons should be arranged in such a way that teacher educator is able to observe (evaluate) at least half of a lesson (if possible full). By this the teacher educator can give enough feedback to prospective teachers to improve their performance. Its gain

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would be acquisition of higher level of teaching competency. Thus practice teaching requires thorough preparation, detailed supervision and adequate time.

Internship

Internship is a very important component of B.Ed. programme but due to lack of time, enough stress is not given on it as much as it should be given. In many institutions internship is generally omitted due to time constraints. But research recommends that, Internship in teaching should be for a period of 3 months. (Kakkad,1983). All the theory that a trainee learns in educational psychology,school organization, and techniques of teaching should be applied in the school organization. The opportunity for this application can be given to the prospective teacher in the programme of internship in teaching where the student teacher is working full time in a school, as an apprentice for 8-12 weeks. By this the prospective teachers would observe and learn different kind of activities of the school other than teaching.

To get such benefits the basic condition is to have internship in B.Ed. programme and it should be for 2-3 months. In one-year B.Ed. programmes, approximately 9 months are available as a working period, and from 9 months one cannot afford to have an internship of 2-3 months.

Co-curricular activities (CCA)

It is a very important feature of B.Ed. programme. It leads to the overall development in personality. It includes morning assembly, cultural programmes, educational tour etc. In school, the teacher is not only a part of it but he also has to organize such activities, for that they should participate in such activities in B.Ed. But in B.Ed., students are not participating in such activities because of exams or practical work. By increasing the duration of B.Ed. programme we can provide sufficient time gap between CCA activity and curricular activity. Finding of a study also states "The whole programme is so over-crowded that they (student) do not get time for participation in other activities." (Sultana, 1976)

Relation with parents

A teacher's work is not only limited to the school. For the overall development of the child, teachers have to meet the parents from time to time.
For that the teacher should know:

❖ What to talk with parents;
❖ how to talk with parents;
❖ how to give important suggestions for the development of the child

The prospective teacher should be prepared for this and proper training should also be given to them. It could be put in an effective way by including it in theory as well as in practical work.

Thus increasing the duration of B.Ed. programmes will provide ample time for achieving all the points mentioned above.

"Increase in duration of B.Ed. programme will provide a strong base for pursuing M.Ed. programme." (NCTE, 1998)

Some studies also revealed that

1. It should be preferable to have the duration of the course for two years. (Sharada, 1964)
2. Most of the teachers felt that duration of training course was not sufficient. (Gunju, 1973)

From the above arguments and recommendation it seems that there is a need to increase the duration of B.Ed. programme. But how i.e. in which mode it should be increased is also a debatable issue. Such suggested and probable models and its related problems are discussed below.

Alternative models to increase duration for all universities of India

Biswal in 1999 suggests the following models.

Making B.Ed. programme of two year

In this case the strength of the students at a time will be doubled in the institutions, which needs double infrastructure, double manpower and even we need more number of schools for practice teaching. In this case the cost of teacher training will be nearly doubled for that the institution will require a large amount of money directly or indirectly from the central government.

Admitting once in two years

In this mode, the B.Ed. training institutions would take students in the alternate years. Here, it may not create any problem for teacher training institutes in terms of manpower and infrastructure facilities. But it also creates some of the problems like.

● Reduction of trained manpower.
● Loss of one year for the students aspiring for B.Ed.

Admitting half the strength yearly

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In this mode, B.Ed. training institutions would admit half of the total intake strength of the students every year. We have two sections (A & B) in function due to the high number of inputs i.e. 180. In this case, when the input will be reduced to half i.e. input could be reduced to 90. Then the college will be able to function with first year and second year like section A & B. But related problem is that the number of completers will be reduced to half.

Making B.Ed. programme of one year and three months

As in The Maharaja Sayajirao University of Baroda, application forms of B.Ed. are to be filled in Jan./Feb. the students who are appearing in the final exam of graduation or post-graduation are not able to apply and thereby fail to get admission. As a result they have to wait for 1 year to get admission. Another hypothetical mode of implementation may work out. That is if we would start distribution of forms in Sept./Oct. We could start the new academic year in January. In the month of May, teachers have vacation and in the month of June and December, the students have to appear for the final exam of 1st and 2nd semester respectively. In the next year in the month of January to April students would be going for internship and come to college only on Saturday to meet their respective teachers. (New batch of students would be going for observation of school activities on Saturday in February and March.) Result would be declared in May. Still increasing the duration will not serve the purpose. Before starting the new system of increased duration of B.Ed. programme, we should be prepared for the maintenance of the new system, as most of the new untested systems are prone to errors and problems.

Will the schools be open for internship?

If admissions are given in every two years or if intake is cut down by half will the education system be in a position to stand social pressure?

Will the Government of India make some policy to attract bright students toward B.Ed. programme after increasing its duration?

Though these questions are at present unanswered we have to find more alternative solutions to different problems. We should not be discouraged looking only to a few alternatives. We have to find more and more logistic and fool proof solutions to make our B.Ed. programme more realistic and quality oriented. We have to work hard to make the entire spectrum of B.Ed. forward looking. We have to maximize our strengths and minimize our weaknesses. We have to cross thousands of hurdles in the journey to make our education, life oriented and better than the best.

Teacher and his education are very significant aspects of any nation. The education gives a new shape to the individual and the nation as well. It is a well known saying that teacher is the nation builder. The quality of teacher education programme needs to be up graded. Teacher education has not come up to the requisite standards. Teachers are not able to think critically and solve the issue related to teaching methods, content, organisation etc. teacher education programme needs a comprehensive reform and restructuring curriculum of teacher-education programme needs to be revised according to changing needs of society. No doubt a lot of stress is given on teacher-education course in India. Unfortunately still there are several loopholes in the system. Hence the Centre and States Governments should join the hands to bring the quality and improvement in the teacher education, then bright future of teacher education is possible.

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EDUCATIONAL TECHNOLOGY IN TEACHING

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Abstract

Today, more than ever, the role of educational technology in teaching is of great importance because of the use of information and communication technologies. With the help of various applications for distance education, the Internet, teachers, and students themselves, they see the advantage of educational technology. The question is whether schools and teachers themselves are ready for the use of technology in education and whether they are aware of its benefits? In this paper, I try to give an overview of the importance and use of educational technology in the classroom.

Keywords: *Educational technology, Technology and learning, School, Teachers, The impact of technology on learning.*

Introduction

Educational technology is a systematic and organized process of applying modern technology to improve the quality of education (efficiency, optimal, true, etc.). It is a systematic way of conceptualizing the execution and evaluation of the educational process, i. e. learning and teaching and help with the application of modern educational teaching techniques. It includes instructional materials, methods and organization of work and relationships, i.e. the behavior of all participants in the educational process. The term "teaching resources" is commonly used, although they are not synonymous (Pedagoški leksikon, 1996). The word technology is derived from the Greek word "techno" which means the willingness, skills, knowledge of the way, rule, skill, tools and "logos" which means science, word, learning, mental state. There is no single term for educational technology. Different countries use different terms and synonyms as educational technology, educational equipment, AV resources, the technology ofteaching...

Terminological differences mostly occur on the grounds of the approach to the technical characteristics and the use of modern appliances, and not their actual application in teaching i.e. their actual pedagogical application. For this reason, there are different opinions among teachers in the field of social and technical sciences. Therefore, the application of educational technology requires knowledge from several areas: pedagogy, psychology, didactics,

computer sciences, informatics... Because of this diversity, there are also different perceptions of educational technology, where every author defines the concept of educational technology, according to their needs. Educational technology is still not being applied sufficiently, mostly for reasons of lack of school equipment necessary resources and insufficient qualification of teachers for the implementation of these funds. Educational technology has three domains of use: Educational technology has three domains of use:

- Technology as a tutor (computer gives instructions and guides the user),
- Technology as a teaching tool and
- Technology as a learning tool.

A number of authors (Clements and Sarama, 2003; Glaubke 2007; Dynarski et al. 2007) suggest that we should focus on five areas of software programs that have the potential to strongly influence children's learning experience:

- ➢ The educational value of the program,
- ➢ Its ability to engage children in learning,
- ➢ Ease of use,
- ➢ Interactivity between the child and programs,
- ➢ The possibility that a software program monitors the progress of the child.
- ➢ Without unpleasant feeling of their ignorance, no frustration, and humiliation while for the most advanced children teaching will be boring.

The fast-paced development of technology is seen in every field and it eases our lives. It is a must to integrate developments in information and communication technology with educational programmes to keep abreast of contemporary education level. In today's changing and developing world, individuals are not expected to obtain knowledge from a sole source but they are encouraged to find ways to reach knowledge, use it when problems are encountered and create solutions by using information.

The importance of Educational Technology in Teaching

Since computers are still not widely used in many schools, the teaching process is dominated by traditional methods form of work where the teacher had enough interaction with students. Failure to thrive at their own pace and insufficient activity of students was one of the drawbacks of this type of learning. In class, we have children who are not uniform in knowledge and never pay enough attention to those who are not sufficiently mastered the

material and those who are above their average. This difference is often hampered by teacher assessment work and how to transfer knowledge to a group of children with different knowledge. The teacher chooses to keep average to good teaching where children with insufficient knowledge would not get the necessary knowledge. The children with insufficient knowledge can progress smoothly without unpleasant feeling of their ignorance, no-frustration, and humiliation while for the most advanced children teaching will be boring.

With the advent of educational technology in the classroom teacher, education is faced with the challenge that teachers integrate educational technology in their daily work. Numerous studies have shown that a small number of teachers is willing to integrate educational technology in their teaching activities (Becker, 2000; Hermans et al., 2008; Stošić and Stošić 2013; Wang et al., 2004). The reason is that there are two categories of teachers in the understanding of educational technology. Some of them have thorough understanding of modern technical appliances and their operation while others think it is necessary for them to gain additional technical knowledge of the appliances and methods, teaching methods, student-teacher relationship... These two groups represent a group of teachers between older and younger teachers. Older teachers during their study did not have the possibility of training with modern technical appliances, did not have the information technology, educational technology, while the younger generation of teachers possess the knowledge required for the use of educational technology. For a better understanding of educational technology requires a set of computer science, pedagogy, psychology, cybernetics, informatics. The knowledge teachers possess is sufficient for a basic use of education technology. However, educational technology is one big system. First of all, teachers have a basic knowledge of the use of educational technology. It takes far more professional training through a variety of conferences, courses, professional literature, seminars... in order to get a better knowledge in the use of educational technology. The fact is that under use of educational technology, primarily due to poor school equipment necessary resources, insufficient information and knowledge of teachers and the lack of interest and lack of motivation of teachers to use them. Teachers have to be motivated to use the same because the use of educational technology in teaching provides better interaction with students, better reception of information because the students receive knowledge visual, auditory and kinesthetic way. Among other things, an educational technology motivates students to work

independently where the student is more motivated to return to learning and working because modern technical equipment is widely available at any given moment.

The use of teaching materials prepared according to principles of technology of teaching is of vital importance to make individuals gain these qualifications and to make teachers design effectual and interactive teaching environments (Şahin & Yıldırım, 1999). The use of material in education plays important role to make students reach their targets more easily and make programmes be more successful by presenting effective environment for education. This is of great importance for effectual education. Because the element that helps student be qualified during education process is educational programmes. Especially, the use of material during education process is very significant for the success of the educational programmes of technology. "The use of material in education makes perception and learning easier. It arouses interest and brings liveliness to classroom. It shortens learning time. It helps permanence of the knowledge learned by students. It also makes students participate in topics and sparks reading and research. It carries events, facts and creatures with their real aspects to the class".

During process of teaching-learning technology, the selection and preparing of visual material are as important as the use of it .

Concordantly, visual materials should:

➢ Be chosen in accordance with the targets and behaviours of the lesson,

➢ Give students chance for exercise and practice,

➢ Reflect real life by providing up-to-date information and data,

➢ Make topics concretize and line up from easy to difficult,

➢ Be designed according to the development features of students,

➢ Be used to emphasize the important points of topics

One of the technologies used effectively in educational systems is computer-aided education (CAE). According to the studies carried out in this field, computer-aided education (CAE) is more successful than traditional method. It was seen that computer-aided education (CAE) not only increases success but also helps high-level thinking of the students develop, accordingly, students learn better by comprehending rather than memorizing .Therefore, it is important to educate students who make use of technology when carrying out activities. Because of this, the plans and programmes of educational establishment should be worked out and revised.

The use of Technology and its Importance in Education

When technology is thought, state-of-the-art products that consist of high-quality information and technique come to mind. In other words, technology is associated with devices that have many useful properties. Technology is the application of the scientific principles and innovations to solve problems. Technology is an application of science. Computers, satellites and robots are regarded as devices that have emerged to solve problems as a result of the application of science.

Thanks to huge profits earned by producing high-technology commodities based on scientific and technical knowledge, industry has very big financial power to conduct new research and effort which create technical knowledge. Scientific knowledge is used to develop technology and new technology contributes to new innovations. Scientific knowledge and technology contribute to each other inter changeably. It has been a widely-known fact that each teaching method which is applied by educators has positive and negative aspects. The most important thing is that techniques must be chosen in accordance with the topics that will be taught so that better result can be obtained. Recently, it has been possible to have educational programmes that are rich in visual properties and share them with students with the help of computer technology. The most loved educational device by students has been computers so internet and computer-aided education are the most useful educational tools that can be employed in education.

The use of Technology and its Effects on Educational Establishments

The effects of technological developments on educational establishments have been different in relation to qualifications of these establishments. First, differentiation in the content of teaching and in the methods of direct teaching emerges by the use of technology products in education. Obligatory changes in teaching methods also affect the contents of programmes in teacher training schools.

For the school administrations, it is necessary to know the new opportunities of technology products and also legal problems emerged owing to the use of them. New contents such as internet crimes, ethic principles, patent rights, using a trade mark, violation of laws on the net, laws on national and local use of technology arise when educating school administrators . Another result of developments in communication and information technology is that various teaching fields, programmes and departments in higher educational establishments which study the use of technology have been started. This is an important effect of the use of

technology in education. Universities spend lots of money on internet infrastructures, online libraries, online subscribed database, electronic publications, subscription fees. Additionally, higher educational establishments are obliged to provide academic staff with computers, scanners, printers, software, projection devices etc. which are expensive items. Providing academics with these modern and technological devices is an important criterion for Universities. It can be seen that there have been efforts to build cooperation between industry and university. Universities have increasingly been commercialized to contribute to the production of technological devices and to make money. It has been stated that developments and running of universities have been affected seriously by technology. Among the developments and innovations are effectiveness in educational service, shortening time taken to prepare programmes, arranging programmes, presentation, evaluation, outsourcing, increase in the number of people, firms, partners in the service, new university models, virtual universities etc. Another important issue is that academics are sensitive to the principles and rules determined for using computers and internet. Admittance, objection, approval of academic staff are of great importance to use technology in universities. As technology develops fast, the need for it also increases. As a result of the spread of the use of technology in education, it has been a must to determine the attitudes, trends, ideas of students related to technological devices.

Conclusion and Suggestions

The presence of educational technology is growing in the classroom. The new generation of kids come ready to work with these new technologies, which play an important role in children's learning and acquiring various cognitive knowledge so that educational technology must be incorporated into future curricula. The application of educational technology enhances skills and cognitive characteristics. With the help of new technology comes an explosion of learning and receiving new information, especially on mobile devices.

Teachers have been using new technologies in the classroom. However, the development and application of new technologies grows as a measure that is the question of whether teachers are trained to keep up with them. Here we have two problems. Are the teachers have the ability to use educational technology and whether the school is sufficiently equipped with all modern technical means? Numerous studies were carried out, some are still ongoing, but we have to find the right strategies to apply educational technology in teaching.

It is known that technological devices used in educational establishments are not adequate in numbers as desired, mainly computers and internet access. However, the issue is not only shortage of hardware or software materials. Teachers should be trained to make use of these devices and to solve any problems related to the use of them. And also, students' good knowledge of computer and internet skills opens new dimension in their relations with administrators and teachers at school. Increase in investments which will enable the use of technological products more should not be sole target. It should be in accordance with the efforts to realize the targets set for the educational system by society. Otherwise, to support only technology-centred development without taking any variable into consideration could cause more problems instead of solving the existing ones. The use of technology in education, computers and related hardware and software, internet network, packaged software, user statistics should not be evaluated as quality variable alone. Instead, contents of programmes and arrangements should be stressed.

One of the benefits technology provides is that educational programs based on memorizing is given up and preparing programmes based on principles of active learning is adopted. The aim of contemporary and modern education is to train people who are creative, qualified and who produce knowledge. Therefore, teachers should make effort to reach this aim. Importance should be attached to the developing the contents of curriculums and modernizing the programmes of technology education to keep abreast of technological developments and educate individuals who are technology literate. The following points should be of first priority:

- ➢ Updating the programmes of technology education in primary and secondary schools,
- ➢ The use of new educational technologies and electronic online environment,
- ➢ Increasing the number of computers in schools,
- ➢ Training teachers who have up-to-date information and attaching importance to in-service training,
- ➢ Stressing internship practice,
- ➢ Modernizing the equipment in labs,
- ➢ Better foreign language education (especially English),
- ➢ Increasing the number of departments of technology education in universities,
- ➢ Attaching importance to the applied lessons where students of teacher training schools can acquire skills and knowledge for using technological tools,

➤ Organizing in-service trainings for teachers to keep in touch with the latest technological developments in education and effective use of technological tools and devices with the help of qualified academic staff from departments of computer technologies education,

➤ Encouraging faculties related to technology education to be member of the international organizations for technology education such as WOCATE (World Council Of Associations For Technology Education),

➤ ITEA (International Technology Education Association) and to cooperate with them,

➤ Holding international conferences on technology education,

➤ Benefitting from international student exchange programmes,

➤ Cooperation with the national firms that encourage technology to direct technology education for the needs of the country and preparing and arranging educational programmes within this frame.

➤ Technology education lessons should be obligatory in primary schools.

➤ Independent technology education lessons that follow each other should be included in the curriculums of primary, secondary and higher educational establishments.

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RESEARCH ARTICLE

EFFECT OF ACTIVITY BASED INSTRUCTIONS IN IMPROVING WRITING SKILLS AMONG CHILDREN WITH PROFOUND HEARING LOSS AT PRE-PRIMARY LEVEL

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ABSTRACT

Assessment and evaluation are key aspects of teaching and instruction, which serve to promote learning through better planning. Writing as an integral component of literacy, deals with convention and purpose – essentials that need to be incorporated in children to develop them into quality writers. writing evaluation has been catered on holistic grounds for much of the time however, for novice and challenged writers some analytical criterion has been proposed in literature. The present study was designed to find out the impact of Activity based instructions in improving the prewriting skills among children with profound hearing loss at pre-primary level. The present study will address the impact of activity-based instructions by using Auditory, visual and Motor activities. Learning effectiveness was evaluated by comparing its results with traditional methods. The hypothesis was raised and field validated questionnaire was used as data collection instrument. The study was conducted in five sessions by using activity-based instruction. The pre and post test results appears to be a favorable progress in learning. Significance difference was found in the mean scores in achievements in literacy skills between pre and posttests. The main scores of post test scores are higher than the pretest. The activity-based instructions are more effective than the conventional method. It was recommended that teachers should use this method effectively at preschool level.

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INTRODUCTION

Writing is a mean of communication; it can also be a tool for reasoning and learning, (Bangert-Drowns, R. L., Hurley, M. N., and Wilkinson, B. 2004; de la Paz and Felton, 2010; Nuckles, M., Hubner, S., and Renkl, A. 2009). Writing being an integral component of literacy development has been identified as a challenge for the novice writers. The elements of writing as in reading are dependent upon purposive efforts conducted during instruction process. The art of writing comes natural to many as they tend to get involved in more reading experiences.

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According to Sturm and Koppenhaver (2000), writing composition may involve a complex thinking process that must integrate multiple components including the topic or theme, i.e. choice of words, organization, purpose, audience, clarity, sequence, cohesion and transcription. Writing competence on the other hand relies heavily on coordinates that include vocabulary, knowledge of syntactical structures, planning, composing, reviewing and revising a written product. According to DSM-5 (American Psychiatric Association, 2013, pp. 66-74) the diagnostic criteria for "impairment in written expression" entails sub skills involved in spelling, grammar, punctuation and written composition. These sub skills include spelling accuracy, grammar and punctuation and clarity in organization of a written expression. Typical writing development has been addressed through certain theories and philosophies as it has been considered as a complex phenomenon.

Graham and Harris (2011) have summed up these theories as having cognitive and motivation basis. One category of such theories deal with the mental operations while the other talks about motivational resources. Students with disabilities are identified to suffer more challenges than their peers owing to different mental operations leading to sensory and/or motor deficits. The researchers have further identified a link between disabilities and writing development, i.e., about 19 of every 20 students with disabilities fail to acquire writings skills required for school success (ibid.). Deafness is a sensory disability which hinders language development and at times it is referred to as a disability of language itself. The limited language casts its effect on reading development because of the missing element of "phonological processing". The same is held responsible for a poorer writing skill in deaf students. According to Mather, Wendling, and Roberts (2009), poorer phonological awareness hinders a person to guess the order of sounds and poses difficulties in identifying and remembering orthographic forms of words. Researchers and scholars have long been working to find a crucial linkage that could serve as a bridge to neutralize the effects of hearing loss on writing competencies. Andrews, Shaw and Lomas, (2011) have reported that students who are deaf typically find reading and writing challenging. Many of them have found reasons in the cognitive domains, while others have raised elements in the process of writing itself.

Berninger (2009) postulated a significant link between memories in general and working memory is particular while during writing that may cause a fault Malik and Naseer ud Din 3 especially for deaf writers. He has referred to problems with spelling, grammatical structures, morphological awareness, organizing information and translating thoughts in a written product. Literature has generously reflected upon measures that can improve reading and writing. Referring to writing itself, certain evaluation paradigms have been developed in past that could readily quantify a written sample on a given scale and may also comment on the missing links. Such analytical tools have identified many elements about good written products to the benefit of teachers and instructors investing in writing skill development. On a similar construct however, McCardle, P. (2002), has discussed "Inside-Out" and "Outside-In" skills as a pre-requisite for literacy development which have been reported to be predominantly effected in deaf children. Moores (1978) pointed out the deaf students lag significantly behind their peers with hearing issues in aspect of convention of writing. However, Mayer (2007) and Watson (2002) have identified severe language deficiencies as a factor contributing towards a poorer use of higher forms of language, including cohesion and coordination. Owing to the difficulties and delays in the writing process, Marschark, Lang, and Albertini, (2006) reported a gap in terms of writing skill levels among hearing and deaf peers by quantifying that a 17–18-year-old deaf student write at par with hearing peer who are 8-10 years old. Literature in general is indicative of a similar perspective about writing skills of deaf and talk about a lack of cohesion among sentences, higher syntactical errors, lexical variations and elaboration of content (Devilliars 1991; Maxwell and Falick, 1992). On the vocabulary fronts of language, research reflects upon a severe delay in terms of lexical items development, use of markers and spellings (Paul 2001; Marschark, Lang and Albertini, 2002). In light of the valuable information about written deficiencies of the deaf, linguists have established tools and protocols through which such challenges could be intervened.

The solution regarding these struggling writers and respective evaluation strategies of their written content could be traced back in models proposed by Berninger, Vaughn, Abbot, Begay, Coleman, Crutin, Hawkins, and Graham, (2002) and Saddler (2006). In an undaunted fashion, researchers have identified challenges for deaf writers in terms of grammar, spellings, punctuation at one hand (lower order skills), while generating ideas, sequencing and revising of the content (higher order skills) as on the other. Looking back the timeline, Yoshinaga- Itano and Synder (1985), while working on the writings of the deaf children, have proposed a five-point criterion through the use of which inadequacies could be witnessed in the writings of deaf students. The list includes of items include (1) number of sentences and words used in composition, (2) complexity of syntactic form, (3) analysis of error and their categorization, (4) quantitative use of parts of speech and (5) quantitative analysis of types of transformational grammar. Much Writing Skills Development among Students with Deafness at Elementary Level 4 earlier, however, Powers and Wilgus (1983) proposed a scheme based on syntactic domains for assessing the writings of deaf children. The key concerns highlighted were a repetitive usage of a single pattern, use of variety of simple patterns, and deficiencies in terms of usage of adverbial/gerundial phrase or compound and complex sentences. Heefer and Shaw (1996) worked upon six-dimensional syntactical criteria including ideas and content development, organization, voice, word choice, fluency and convention. On the qualitative sides, however, research signifies elements that reflect upon the quality aspects of a written product. Elements, e.g., ideas and content, voice, word choice, introduction, character, opening, ending, linkages across paragraphs, and originality, contribute to the qualitative aspects of a writing sample. Harris and Graham (1992) offered more specific suggestions for analysing the message quality including introduction to main character statement of time and stay, description of locale, actions of linked reactions.

Children with Hearing Impairment lacking writing skills due to with various reasons like poor memory academy curriculum. They also need to improve reading ability to become self-reliant and independent. As the activity-based instructions is appeals to those who enjoy learning through doing and gives fun to motivate the students, this activity-based instruction has been selected be an important technique to develop writing skills among the children with hearing impairment. Further this technique may be helpful in teaching other concepts like reading. Thus, it is very important to teach pre writing skills to children with and those without hearing impairment. Writing is the most sophisticated and complex achievement of the language system. In the sequence of language development, writing is typically the last to be learned although the early literacy approach encourages children to write even before they learn to read. Through writing, we integrate previous learning and experiences in listening, Speaking and reading. Proficiency in written language required and adequate basis of oral language skills, as well as many their competencies. The writer must be able to keep one idea in mind while formulating the idea into words and sentences, and the writer must be skilled in planning the correct graphic form for each letter and word while manipulating the writing instrument. The writer must also possess sufficient visual and motor memory to integrate complex eye-hand relationships.Mainly, there are five stages of writing process any stage can be skipped and returned it later.

These are; Prewriting, Drafting, Revising, Editing and Publishing. Learning the writing process is important for the student as if enables students to express their thoughts. Writing is not automatically acquiring, but has to taught. For the children with Hearing Impairment learning to write becomes more difficult as they learn language and writing at same time. Sometimes writing is also used to develop language. Therefore, development of writing skills should start early being very early at the preschool. Each activity is designed to have a component of literacy. The writing programme need to be more differentiated, aims clearly defined as a activity vary to the needs of children. The writing programme should provide materials, experience activity to learning to write as well as for writing to learn. In Traditional Method of teaching the instructor is viewed as the pivot in the classroom, responsible for all actions and guaranteeing that all class room message goes through him or the deductive strategy for instructing. Conventional technique is content focus. In this, instructor remains more dynamic, more subjective and less affective (Singh (2004).Conventional techniques are concerned with the review of true information and mainly disregard higher levels of rational outcomes (Rao, 2001). Traditional teaching strategy works against the normal working of human mind (Weber, 2006). Students are involved in repetitive learning. Instructor forces the students to repeat the material that has been told to them. Corporal punishment, hatred of the teachers and frightening role of commanding teacher is noticeable generally in our classrooms. During the long conventional teaching periods, interests and consideration of learners can't be looked after (Cangelosi, 2003).

Conventional strategy is an instructor focused technique. In the conventional technique, a lot of tension is laid on the educating of course book by utilizing the technique, which is alike, an adjustment of the Grammar-interpretation strategy. Traditional teaching strategies are defined as being teacher-arranged, in a speech style and are firm. Lessons are typically educated by the teacher presenting skills utilizing a blackboard joined by a verbal clarification or lecture. According to reformers, traditional instructor-centred techniques concentrated on repetition learning. Traditional teaching strategies tend greatly toward class address book knowledge through repetition and retention of actualities, equivalences and formulas. Recitation as a general rule comprises repeating without tending what the book or teacher has communicated. "The teachers are ignorant of the current investigations in the field of dialect educating. The part of instructor inside the class is dictator with the minimum contribution of the learners." (Behlol, 2009, pp.2-3).

Activity based instruction is the form of learning,the learner is actively young aged in a task the focus is on making the abstract to concrete learning. It can be teacher-driven, which direction form and instructor-or learner-driven with the learner having with freedom to explore. With younger children there will be definitely we lost of the recognizable physical activity-perhaps physically manipulating coins to learn money, are moving the hands on a paper clock to learn to time. with older children there will still be active problem-solving curing – even if it is with pen and paper more than blocks and counters. Even students in tertiary study can experience active learning. (Francis Harris, 2007 May 07). The purpose of the study is to examine which of activity instruction or conventional method is a better practice to be followed in pre writing skills to children with hearing impairment or in other words to the activity-based instruction is more effective than the traditional

way in teaching pre writing skills to children with hearing impairment.Pre writing skill is a complex task and so it was chosen for the study. The researcher would like to compare the differences in the experimental group.

Review of Literature: Karchmer and Mitchell (2003) reported that 75% of all children who are deaf or hard of hearing receive their education in local public schools. A common goal of professionals working with children who are deaf or hard of hearing is to give children age and developmentally appropriate skills in order for them to be equivalent to their hearing peers. Having equivalent writing abilities is no exception. A study by Anita, Reed and Kreimeyer, which looked at the writing of children who are deaf or hard of hearing in public schools, reported that these students score within the low-average range when tested on contextual conventions, contextual language, and story construction. The study also indicated that although approximately half of the students scored in the below- average range, 17 % scored above-average and 32% scored average (2005). In a literature review of a study conducted by Conway (1985), Williams (2004) looked at the purpose of writing for children who are deaf or hard of hearing. For seven months he observed and collected writing samples of children five to six years of age who were enrolled in a self-contained auditory-oral kindergarten program. Conway suggested that writing is a meaningful activity for children who are deaf, and also fulfils individual as well as sociocultural purposes alike those of hearing children (Williams, 2004). In other words, writing in itself is a social process that represents a means to communicate a message to someone else and this applies to all children (Dorn, Soffos, 2001).

The study by rule and Stewart (2002), researchers found that fine motor activities benefit all kindergartners. In this quasi-experimental study, 186 kindergartners were divided into experimental and control groups. Again, the assignment was not random or matched, but based on voluntary teacher participation. The researchers used a pre-test and post-test to assess participants' fine motor skills through a penny posting test. after receiving a treatment of 50 unique activities embedded into daily curriculum to promote fine motor development spread across a 6-month period of time. The fine motor activities were inspired by Montessori's emphasis on "practical life" materials including tweezers, tongs, and spoons to handle objects (Rule and Stewart, 2002, p. 10). The authors also reported there was no significant difference in performance by gender. In an experimental study, Bara and Gentaz (2011) found a link between visual -motor skills, perceptual skills, and handwriting. The 23-study included 38 typically developing native French-speaking kindergarteners who were divided in to two training groups. Groups were created by matching children on various measures including: 1) letter recognition, 2) phoneme identification, and 3) hand-eye coordination as determined by scores on screenings conducted by the researchers. One group received visual training for five letters and the other group received visual-haptic training. Training involving visual-haptic (visual perceptual and tactile perceptual) activities increased the letter recognition and global handwriting quality of the participants vs. those who only received visual training after five training sessions. It should be noted that both groups' scores on letter recognition, letter handwriting, letter copying, and global quality of handwriting increased significantly on assessments after training.

The researchers indicated that utilizing visual-haptic exercises, including feeling physical letter shapes, increased the participants' abilities in letter recognition and global handwriting quality. The authors noted that "the representation of letters in the brain is not only visual but includes a motor component" (Bara and Gentaz, 2011, p. 756). In a correlational study by MacDonald et al. (2016), preschool children's visual motor integration skills (tracing, copying, imitating a building with blocks, folding a paper with specific instructions, etc.) assessed in the fall were found to have a small correlation with executive function skills later in the school year. The study was conducted with 92 children ages 3 through 5. All participants were administered 21 a pre-test and post-test that assessed visual-motor integration and executive function skills, once in the fall and again in the spring of their school year. A small correlation was found between fall time visual motor integration skills and spring time executive function skills, suggesting that visual motor integration skills provide "the foundation for the development of executive function skills" (MacDonald et al., 2016, p. 404). However, the authors noted that in this study, visual motor integration skills assessed in the fall of the school year did not have a statistically significant correlation with the change in executive function over the year (.10 effect size).

Objectives of the Study

The objectives of the study were

⌡ To study the difference between pre and post-test achievement of mean scores of pre writing skills among children with profound hearing loss in experimental group taught through activity-based instruction

⌡ To find out the pre-test and post-test achievement mean scores of pre writing skills among thechildren with profound hearing loss with reference to motor activity.

⌡ To find out the pre-test and post-test achievement mean scores of pre writing skills among children with hearing impairment with reference to visual activity

⌡ To find out the pre-test and post-test achievement mean scores of pre writing skills. among children with profound hearing loss with reference to the auditory activity.

RESEARCH METHODOLOGY

The study was adapted quasi experimental one group pre and posttest design. The purposive sampling technique is used to collect the data and the sample consists 30 hearing Impaired children with profound hearing loss from various centers of Hyderabad and Ranga Reddy Districts.

Tool Development: Besides a thorough review of literature, an observation was conducted before any formal attempt on tool development was made. The population consists of Children with hearing Impairment studying in preschool from Hyderabad and Ranga Reddy Districts. The sample for the study was drawn from various centers located at Hyderabad and Ranga Reddy Districts. The chronological age of the subject ranges from 8-12 years. The total sample size was 30 (Girls + Boys) sample from preschool stage children. The children with profound hearing loss were included for the study.

A Total of 30 students with profound hearing loss between age range of 3-6years were assessed using the writing skills assessment tool for identifying the writing abilities. A self-designed tool was prepared to teach pre writing skills to the single experimental group the researcher used to teach improving writing skills through three activities i.e (Motor, visual and Auditory) for developing motor activities used the real object clay , paper , balloon , spoon , thread , beads , stone , jug and flash cards ,for developing visual activities used the real objects flower , banana , apple , brinjal , ball , paper ,pencil and shapes of triangle , circle with appropriate amplification in suitable environment To develop auditory activities the researcher used the real objects of model of Alphabets, crayons, red, blue, green copy, book etc.

Procedure: The tool was administrated to the selected profound hearing loss Boys and Girls in accelerated learning camp for the deaf, Hyderabad. The investigator personally met the student and explain about the nature and purpose of the study. The conducted pre-test and post-test evaluation for each sample. Before intervention researcher conducted a pre-test on pre writing skills and scoring was recorded. the subjects in the experimental group were taught through three skills for motor, visual and auditory activities to improve pre writing skills. For the present study task analysis check list was used for the assessment and recording the achievement for pre and post-tests of students related to pre writing motor activities Like;

1)Take clay and do round shape 2) press the balloon in your hand leaves it 3) take paper and made shape 4) put the beads in the thread 5) with the help of fingers take the stone and put it in other jug,and for Visual activities like 1)Join the dots 2)Draw the picture 3) Draw the state line 4)Draw the triangular 5) Draw the circular and for Auditory activities;1)Listen the alphabets and show 2)listen the word and show the difference 3)listen word and do action4) Tracing the word 5) Join the dot and complete the picture. The researcher conducted the single experimental group intervention for teaching through motor visual and auditory activities to improve pre writing skills. the sample was collected from the government special school for the deaf.

Intervention: The five sessions made for each activity, the duration of one session was 30 min for each experimental group. in 30 min the teaching was about 20 minutes for each experimental group. In intervention process out of 30 minutes for teaching session was about 20 minutes and remaining 5-10 minutes allotted time for evaluation activity. After evaluation of the test papers marks were taken as a score.

Analysis of the data: Data was analyzed by using descriptive statistics used calculate Mean and SDs for pre- and post-scores. Inferential Statistics used to Test hypothesis paired t-test was used to compare the pre- and post-scores on the performance.

Scoring criteria: Following is the tabulation of data which was considered while making inferences and conclusion. Table 1, 2 and 3 below reflect the findings about the Pre writing skills.

Objective – I: Pre writing skills in experimental group taught through Activity-based

Table 1.

	N	Mean	SD	T value -7.56 P< 0.01 df=29
Total Pre test	30	14.63	2.27	
Total Post test	30	20.87	1.68	

⌡ Mean and SDS for pre and post score son performance of students by using activity-based learning scores were computed. The findings of this study indicates that post-test mean scores are higher than the pre-test mean scores and t - value indicates that there is a significant difference at 0.01 level

Objective -II: Pre-Writingskills with reference to Motor Activity

Table 2

	N	Mean	SD	T value 3.17 P< 0.05 df=29
Pre test	30	4.00	.87	
Post test	30	4.70	1.06	

Table -2 shows that Mean and SDS for pre and post test scores were significantly different and t values indicated the difference between pre and post scores at significant at 0.01 level of significance indicating that intervention is effective.

Objective – III: prewriting skills with reference to visual perception

Table 3.

	N	Mean	SD	T value -10.42 P< 0.01df=29
Pre test	30	6.53	1.33	
Post test	30	8.57	0.77	

Table -3 shows that Mean scores obtained by the sample in the pre-test is6.53 and SD post-test mean score is 8.57. the calculated t – value is significant at 0.01 level. Hence pre and post-test mean scores of pre writing skills among children with hearing impairment with reference to visualperception is significance.

Objective -IV: prewriting skills with reference to Auditory activity.

Table 4

	N	Mean	SD	T value -7.56 P< 0.01 df=29
Pre test	30	4.10	1.32	
Post test	30	7.60	1.33	

The above table 4 Shows that the combined mean score of students on the auditory skill was 4.10 which increased up to 7.60 and the SD 1.32 to 1.33. The increase the mean and decrease in SD, reveals the achievement scores of auditory skills of children with hearing impairment at pre-primary level is significant at 0.01 level.

Findings of the study

The following findings were drawn by the study

⌡ There was a significant difference inpre and post-test achievement of mean scores of pre writing skills among children with profound hearing loss in experimental group taught through Activity-based instruction.

⌡ There was asignificant differencein pre writing skills among the children with profound hearing loss taught through auditory activity.

⌡ There was significant differencein prewriting skills among the children with profound hearing loss with reference to motor activity.

⌡ There was a significant difference pre writing skill among children with hearing impairment with reference to visual perception

DISCUSSION

Development of pre writing skill in children with hearing loss is a complex task, the findings of the study reveal that activity-based instruction is more effective than the conventional method of teaching. The results in table 1 shows that there was no significant difference in the pre-test means scores and post-test mean scores of experimental groups on developing pre writing skills. The results of table -2 shows that there was a significant difference between pre and post scores in developing pre writing skills with reference to motor activity.

The findings of the study support that earlier study findings in Stewart (2002), the fine motor activities were inspired by Montessori's in developing pre writing skills. The results of table 3 shows that development of pre writing skills with reference to visual perception in developing pre writing skills among children with hearing impairment significance. The results of table 4 shows that the development of prewriting skills with reference to Auditory activity in developing pre writing skills in preschool learners reveals the achievement scores of auditory skills of children with hearing impairment at pre-primary level is significant. The findings of the study reveals that the findings of the Bara and Gentaz (2011) found a link between visual -motor skills, perceptual skills, and handwriting.

CONCLUSION

Activity based instruction is more effective in development of pre writing skills in children with profound hearing loss at pre-primary level.

Recommendations

The findings of the study would be beneficial teacher, and other professionals working in the area of hearing-impaired children to educate them. (b)The teachers, principals or learners and professionals would employee whole world.(c)Method for teaching writing to children hearing impairment in the various settings, where special education is offered. On the basis of the research conducted by the investigator, the following suggestions are made for further study

⌡ Similar studies can be conducted between the hearing aidusers and cochlear implants children with hearing impairment for Activity based instructions.

⌡ Similar study may be conducted in at primary level for developing writing skills.

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IMPROVING TEACHER QUALITY TO FACE GLOBAL CHALLENGES

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Abstract

Research shows that teachers are the single most important factor in student learning in schools. Students who have access to highly qualified teachers achieve at a higher rate, regardless of other factors .Teachers to be highly qualified must be well prepared, especially in improving the quality of education facing global challenges. For this purpose, we need teacher education reform that aligns teacher preparation with the demands of an emerging information society and an increasingly interdependent world .One concern focused on the quality of students who plan to enter the teaching profession. Generally, teacher profession is not attractive both for the prospective students and for the qualified experienced teachers, because of the low of teachers' welfare. As the result, the good potential students prefer to enter the other profession than enter the teaching profession, while the qualified experienced teacher, draw away from teaching profession and then enter the other profession that ensure better welfare whenever they have the opportunity for doing that. For the teaching profession to be attractive there is a need to improve teachers welfare by increasing their salary and providing good work condition that support them to carry out their task professionally. The second issue is program reform, which led to the development of standards of teacher preparation in various fields, and changes the curriculum itself. Teacher's quality, knowledge of technology, curriculum are the important challenges faced by teacher education in the context of globalization.

Key Words*: Teacher Quality, Professionalism, Education, Globalization, Technology*

Introduction

Globalization has brought a great effect to human life not only in economic issues, but also in political, social, and cultural issues. Its effect can be positive, or negative, depends on the quality of human resources. Indeed, human resources with low quality will fail, whether the only human resources with high quality standard will succeed in facing global challenges. Now is the moment when globalization will give rises to two possible alternatives for everyone and every nation. The globalization may be as a threat or maybe as an opportunity. To be successful in facing global challenges, everyone or every nation must have great efforts to change the threat to be opportunity. These efforts must be supported by the improvement of human resources.

To produce human resources with high quality, we need education with high quality too. In fact, according to the demand of facing global challenges, we need to improve the quality of education and develop education standards that contain global and international issues. According to the Guidelines for Global and International Studies Education (United States, 2002), among these issues are: what should all our students be expected to know and understand about the world? What skills and attitudes will our students need to confront future problems, which most assuredly will be global in scope? How are the global and international dimensions of learning being addressed by the new academic standards? What do scholars from the international relations discipline and experienced practitioners of global education believe students should know, and how can these insight best be incorporated into the existing standards? What global and international education guidelines are appropriate for pre collegiate education? How schools implement these guidelines when confronted with so many other problems?

The answers of the questions stated above present an array of diverse approaches, contents, skills, methods, and values. We need to develop a high quality education system in which every student can be provided access to the educational components that are essential to such system .These are such components are as follows:

- ❖ A qualified and inspiring teacher in the classroom
- ❖ A rigorous curriculum that will prepare all students for success in postsecondary education, work, and society.
- ❖ Current textbooks, technology, and instructional materials aligned with learning expectations.
- ❖ Adequate learning support services.
- ❖ Qualified school or campus administrators, to maintain an educational culture that is inviting and safe, and that places a high value on student achievement and teaching excellence, and
- ❖ A physical learning environment that is safe, well equipped, and well maintained.
- ❖ All the components stated above should be provided to every students enrolled in public education, from preschool to university level.

A Strive towards Professionalism

For education to improve, all the teachers must have a global perspective, well prepared and provided with on-going professional development and appropriate support. All teachers have

to fulfil the standards of professional teacher. For this purpose, we need standards with international scope and how to achieve these standards.

Based on the standard of the International Society for Technology in Education (ISTE), the National Council for Accreditation of Teacher Education (NCAT), the Association of Educational Communication and Technology (AECT), there are some characteristics of professional teachers. Among of these characteristics are as follows:

- ❖ In general, the competent teacher should have, and continually develop ,the knowledge and skills in learning technologies to be able to appropriately and responsibly use tools, resources, processes, and systems to retrieve, assess and evaluate information from various media.

- ❖ The competent teacher should use that knowledge and skills to assist learners in solving problems, communicating clearly, making informed decisions, and in constructing new knowledge, products, or systems in diverse, engaged learning environments.

- ❖ Particularly, the professional teachers should have mastery about basic computer/technology operations and concept, be able to apply technology in instruction, apply concepts and skills in making decisions concerning the social, ethical, and human issues related to computer and technology.

- ❖ The professional teacher should understand the changes in information technologies, their effects on workplace and society, their potential to address lifelong learning and workplace needs, and the consequences of misuse.

- ❖ Furthermore the professional teacher should be able to use telecommunications and information-access resources to support instruction.

There are some effective strategies can be implemented:

- • Improve the Curriculum of The Teacher Education by Competency Based, Broad Based, Life Skills, and Technology Based. The Competency-Based Curriculum represents an approach to instruction which emphasizes the application of knowledge in a manner which may be observed or measured. Competency-Based Curriculum guides focus on a comprehensive view of each course of study which is delineated into its essential components, a listing of the most important objectives to be mastered, and the competencies which every student should be able to demonstrate after instruction is completed. Competency-Based lessons require students to engage

in activities designed to apply learning with an increased emphasis on higher order thinking skills. Students are evaluated not only on knowledge, but primarily on their ability to perform tasks associated with the knowledge acquired.

- Likewise an education in life skills is designed to help children and young people to learn the skills they need to deal with the likely demands and challenges of modern life, help children develop a broad range of personal, social, cognitive and environmental skills.

- Furthermore the philosophy underlying the organization of the curriculum is to provide students with the broad base of knowledge and skill which will not only allow them to compete successfully for high quality entry level positions, but will also provide the basis for lifelong success.

- The technology base is more concerned with giving a broad overview of the various technologies available, the functions they can perform and their advantages and constraints. In addition to studying the current capability of a technology, students should be given some insight into how that technology might develop in the future.

- Prepare New Teachers to Use and Integrate Technology. This can be done by integrate technology applications into pre-service teacher assignment and activities. We mean by technologies especially learning and teaching technologies are those methods and practices used to learn and to facilitate learning. It is the way we learn and the way we teach. It includes the tools we use and instructional design we apply. Technology in learning refers to both tools (the hardware, software, networks, etc.) and the processes (the methods and strategies used for instructions, the design of our educational organizations, learning management systems, etc.)

According to Gradler (2002), 'a growing challenge in education is establishing and implementing strategies to develop the skills and knowledge necessary for teachers to effectively use technology as instructional tools. The extent to which teachers are prepared to infuse technology into curricula and instruction is a major contextual factor'.

The problems may appear in this case are: what strategies are effective for preparing new teachers to integrate technology, and what can school leaders do to enable teachers to make effective use of technology.

Research findings cried out by Abbot& Faris (2000) indicate that effective strategies for preparing new teachers to use and integrate technology are: demonstrate infusion of

technology into instructional practices, require that college faculty use technology in their courses as learning and teaching tool. Preserves elementary teachers learn technology integration strategies by working with and observing practicing teachers and students while they use technology.

In order to integrate new technologies into the curriculum, teachers will have to select appropriate software, construct new lesson plans, resolve a number of logistical problems, and develop appropriate methods of assessing student work.

Select the Teacher Based on Professional Competency and Professional Responsibility. In order to ensure the high quality of education, the Government should select the teacher based on professional competency and professional responsibility. In this case, it should be taken into account that not all of the teachers who have **professional competency** have also **professional responsibility**. They are as follows.

- ❖ To their subject;
- ❖ To their students;
- ❖ To the institution of which she is a part;
- ❖ To their profession; and
- ❖ To the community at large.

The greatest problem in teaching is how to create, sustain, and motivate good teachers throughout their careers. Recruiting and preparing high quality teachers must remain a priority for policymaker.

Provide Enough Expenditure to Provide Technological Learning Tools and Equipment. When a school or district decides to implement education technology into the curriculum, one of its overriding goals must be to create plans and policies for all members of the learning community to have equitable access and use. Appropriate funding and professional development represent the key means of supporting equitable access and use of technology to ensure technology literacy and to support meaningful learning for all students.

Education technology consists of a wide range of hardware, software, and technical equipment used in schools to promote learning. Computers, CD-ROMs, the internet, e-mail, television monitors, video equipment, and satellite systems for distance learning are some of the education technologies that schools are using.

The education Technology is categorized into **four** basic uses:

- ❖ Tutorial

- ❖ Exploratory
- ❖ Application
- ❖ Communication

- ➢ Tutorial use includes expository learning, demonstration, and practice. Examples are drill-and-practice software, tutoring systems, instructional television, computer-assisted instruction, and intelligent computer- assisted instruction.

- ➢ Exploration applications may promote discovery or guided discovery approaches to helping students learn information, knowledge, facts, concepts, or procedures. Examples are CD-ROM encyclopedias, micro worlds, hypermedia stacks, network search tools, and microcomputer-based laboratories

- ➢ Application uses help students in the educational process by providing them with tools to facilitate writing tasks, analysis of data, and other uses. Examples are word processing and spread sheet software, database management programs, graphic software, desktop publishing systems, hypermedia, network search tools, and videotape recording and editing equipment

- ➢ Communication uses are those that allow students and teachers to send and receive messages and information to one another through networks or other technologies. Examples are interactive distance learning through satellite systems, computer and modem, cable links, and e-mail

All Teachers must be well provided with On-going Professional Development and Appropriate support. If we are to improve education, we must avoid the tendency to rely on simple generalizations and dichotomies. We need to attend to pre-service and in-service issues in improving teacher quality. We need to be discerning in the kinds of professional development that we support.

Teacher quality is not solely determined by a credential or degree, and we should think of it as a characteristic that evolves throughout a teacher's career, rather than as a static achievement. Teacher quality is an attribute that grows or diminishes based on conditions in which a teacher works, personal motivation, and opportunities for growth and development.

In order to make effective use of educational technology, not only new teachers but all of the teacher should have to master a variety of powerful tools, redesign their lesson plans around technology-enhanced resources, solve the logistical problem of how to teach a class full of students with a smaller number of computers, and take on a complex new role in the

technologically transformed classroom. All teachers should recognize that they will never stop learning.

Enhance Teacher Welfare. To do the task as teachers professionally, need full concentration and inspire by the teacher. Indeed, for the teachers to be able to concentrate and to be inspiring teachers in their professional tasks, their welfare should be reasonably fulfilled.

Quality teachers can be attracted, and retained by the promoting of an atmosphere of positive support for education, providing improved training and professional development, increasing teacher salaries, and installing outstanding facilities. Furthermore, special efforts must be made to attract to these schools qualified teachers who have the disposition and passion to persist in challenging environments and these teachers must receive the support necessary to enable them to improve their effectiveness.

In order to attract individuals to the profession and retain them, teacher salaries should be attractive for both new and experienced teachers and salary schedules should offer opportunities for increased compensation without leaving the classroom. In addition, we must create a school culture in which teachers assume leadership roles in school decision-making, collaboration occur on a regular basis, professional development is on-going, and new teachers are supported. Investment in the professional development of the teachers should not be lost by incentives and practices that draw most experienced teachers away from the classroom.

Conclusion

Global challenges that influence all areas of human life in the world are the conditions that are naturally going on as the consequence of the rapid development of science and technology. It is impossible to be avoided but have to be faced by using resources with high quality especially human resources. To face the global challenges successfully, we need the qualified human resources that can only be produced through authentic educational program and authentic educational process with high quality.

Teachers' quality is the keyword for ensuring the quality of education that indicated by the quality of output and outcome. Without qualified competent teachers, it is impossible to build a high quality education. On the other hand, qualified competent teacher will not able to carry out their task professionally without the proper conditions that support their task. Hence, in one hand we need to continually improve teachers' quality, and on the other hand we need to provide a proper condition to support teachers in their professional tasks.

Recommendations

- ❖ To provide a high quality education, the Government should be committed to ensuring that every student has the opportunity to learn from a qualified and inspiring teacher.

- ❖ To provide a high quality education, there is a need to develop a professional culture that respects teaching and learning, professional staff are supported in their effort to continually improve their effectiveness in promoting student learning, school sites are well maintained, school leaders build and maintain effective partnerships with parents, community groups, and local business, and instructional material are current and aligned with the academic content standards.

- ❖ The Government should provide grand funding to develop the quality of human resource by providing enough expenditure for education development.

- ❖ Teacher education should be reformed. Mere planning and launching schemes is not necessary what we need is a revolution in teaching in India.

- ❖ Government should carry out quality inspections and should grant permissions to only those institutions which practice quality. It should endorse good quality management practices.

- ❖ The Government should promote recognition that becoming a qualified and professional teacher is a long term, and developmental process.

- ❖ The Government should pay enough attention to teacher's welfare to attract the good potential students to enter the teacher profession through the institution of teacher education, and retain the qualified experienced teacher for schools.

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Improving Teacher Qualityto Face Global Challenges

Mrs J.Aruna

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Abstract

Research shows that teachers are the single most important factor in student learning in schools. Students who have access to highly qualified teachers achieve at a higher rate, regardless of other factors. Teachers to be highly qualified must be well prepared, especially in improving the quality of education facing global challenges. For this purpose, we need teacher education reform that aligns teacher preparation with the demands of an emerging information society and an increasingly interdependent world .One concern focused on the quality of students who plan to enter the teaching profession. Generally, teacher profession is not attractive both for the prospective students and for the qualified experienced teachers, because of the low of teachers' welfare. As the result, the good potential students prefer to enter the other profession than enter the teaching profession, while the qualified experienced teacher, draw away from teaching profession and then enter the other profession that ensure better welfare whenever they have the opportunity for doing that. For the teaching profession to be attractive there is a need to improve teachers welfare by increasing their salary and providing good work condition that support them to carry out their task professionally. The second issue is program reform, which led to the development of standards of teacher preparation in various fields, and changes the curriculum itself. Teacher's quality, knowledge of technology, curriculum are the important challenges faced by teacher education in the context of globalization.

Key Words: Teacher Quality, Professionalism, Education, Globalization, Technology

Introduction

Globalization has brought a great effect to human life not only in economic issues, but also in political, social, and cultural issues. Its effect can be positive, or negative, depends on the quality of human resources. Indeed, human resources with low quality will fail, whether the only human resources with high quality standard will succeed in facing global challenges. Now is the moment when globalization will give rises to two possible alternatives for everyone and every nation. The globalization may be as a threat or maybe as an opportunity. To be successful in facing global challenges, everyone or every nation must have great efforts to change the threat to be opportunity. These efforts must be supported by the improvement of human resources.

To produce human resources with high quality, we need education with high quality too. In fact, according to the demand of facing global challenges, we need to improve the quality of education and develop education standards that contain global and international issues. According to the Guidelines for Global and International Studies Education (United States, 2002), among these issues are: what should all our students be expected to know and understand about the world? What skills and attitudes will our students need to confront future problems, which most assuredly will be global in scope? How are the global and international dimensions of learning being addressed by the new academic standards? What do scholars from the international relations discipline and experienced practitioners of global education believe students should know, and how can these insight best be incorporated into the existing standards? What global and international education guidelines are appropriate for precollegiate education? How schools implement these guidelines when confronted with so many other problems?

The answers of the questions stated above present an array of diverse approaches, contents, skills, methods, and values. We need to develop a high quality education system in which every student can be provided access to the educational components that are essential to such system .These are such components are as follows:

*   A qualified and inspiring teacher in the classroom
*   A rigorous curriculum that will prepare all students for success in postsecondary education, work, and society.
*   Current textbooks, technology, and instructional materials aligned with learning expectations.
*   Adequate learning support services.
*   Qualified school or campus administrators, to maintain an educational culture that is inviting and safe, and that places a high value on student achievement and teaching excellence, and
*   A physical learning environment that is safe, well equipped, and well maintained.
*   All the components stated above should be provided to every students enrolled in public education, from preschool to university level.

A Strive towards Professionalism

For education to improve, all the teachers must have a global perspective, well prepared and provided with on-goingprofessional development and appropriate support. All teachers have to fulfil the standards of professional teacher. For this purpose, we need standards with international scope and how to achieve these standards.

Based on the standard of the International Society for Technology in Education (ISTE), the National Council for Accreditation of Teacher Education (NCAT), the Association of Educational Communication and Technology (AECT),there are some characteristics of professional teachers. Among of these characteristics are as follows:

- In general, the competent teacher should have, and continually develop,the knowledge and skills in learning technologies to be able to appropriately and responsibly use tools, resources, processes, and systems to retrieve, assess and evaluate information from various media.

- The competent teacher should use that knowledge and skills to assist learners in solving problems, communicating clearly, making informed decisions, and in constructing new knowledge, products, or systems in diverse, engaged learning environments.

- Particularly, the professional teachers should have mastery about basic computer/ technology operations and concept, be able to apply technology in instruction, apply concepts and skills in making decisions concerning the social, ethical, and human issues related to computer and technology.

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Recommendations

- To provide a high quality education, the Government should be committed to ensuring that every student has the opportunity to learn from a qualified and inspiring teacher.

- To provide a high quality education, there is a need to develop a professional culture that respects teaching and learning, professional staff are supported in their effort to continually improve their effectiveness in promoting student learning, school sites are well maintained, school leaders build and maintain effective partnerships with parents, community groups, and local business, and instructional material are current and aligned with the academic content standards.

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EMERGING ISSUES IN TEACHER EDUCATION

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Preparing Teachers for Inclusive Education

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Abstract

Inclusive education stands for improvement of schools in all dimensions to address the educational needs of all children. Recommendations to send children with disabilities to mainstream schools were first made in the Sargent Report in 1944, and again in 1964 by the Kothari Commission. Despite this, the change has been slow, with segregation in special schools dominating the scene until recently. There is no need of reinforcing the fact that teacher education remains a very weak link with respect to equipping teachers to be prepared for an inclusive classroom environment. As a result teacher education programs have made attempts to incorporate inclusive education as part of their curricula The teacher education diplomas and degrees offer "Education of children with special needs" as an optional subject, in order to prepare teachers to identify and diagnose disability. The challenges and prospects in India are elucidated in the present paper. .

Introduction

There are an estimated 25 million children out of school in India many of whom are marginalized by factors such as poverty, gender, disability, caste, religion etc. Therefore undoubtedly the idea of inclusive education is certainly highly relevant to our current condition, where differences in religion, faith, gender, ethnicity and ability are often seen as a threat rather than a source of richness and diversity. Inclusive education stands for improvement of schools in all dimensions to address the educational needs of all children.

Inclusive education (IE) is a new approach towards educating the children with disability and learning difficulties with that of normal ones within the same roof. It seeks to address the learning needs of all children with a specific focus on those who are vulnerable to marginalization and exclusion. It implies all learners – with or without disabilities being able to learn together through access to common pre-school provisions, schools and community educational setting with an appropriate network of support services. This is possible only in flexible education system that assimilates the needs of diverse range of learners and adapts itself to meet these needs. Inclusion is not an experiment to be tested but a value to be followed. All the children whether they are disabled or not have the right to education as they are the future citizens of the country. In the prevailing Indian situation resources are insufficient even to provide quality mainstream schools for common children, it is unethical and impracticable to put children with special needs to test or to prove anything in a research study to live and learn in the mainstream of school and community. The principle of inclusive education was adopted at the "World Conference on Special Needs Education: Access and Quality" (Salamanca, Spain 1994) and was restated at the World Education Forum (Dakar, Senegal 2000).

The 1995 Persons with Disability Act (PDA) states that disabled children should be educated in integrated settings where possible, although it seems that the lack of implementation may be due to there being no enforcement agency for this legislation. Despite the promotion of inclusive education, govt. documents focus on inclusive education as being about including children with disabilities in the education system, but not specifically the mainstream 2005a). However, inclusion in the education system is not the same as inclusion in the mainstream. It is however arguable that special education is in fact regarded as superior in India due to its preferred status and that it is inclusion in the mainstream that is currently seen as the resource – constrained inferior alternative. However the limited coverage of mainly urban-based, impairment specific special schools in India may result in the exclusion of children with disabilities who do not fit the categories of their institutions or who live in rural areas. Inclusive education may be the only way of facilitating educational access for these children.

A focus on physical access to school, rather than access to curriculum and equal treatment once in the classroom is an additional barrier to inclusion, possibly resulting in dropout. too argues that government policy focus on resources and physical access (e.g. distribution of aids and appliances), or infrastructure such as ramps in schools, and the notion of social justice through equal distribution of benefit, seems to be more about inputs, not processes like pedagogy, curriculum or attitudes. It is this focus which results in selection of the relatively few-"Easy to accommodate children" with mild or moderate disabilities that do not need too much specialist assistance. This apparently selective inclusion, with children being 'prepared' in order to be 'ready' for the mainstream (NIEPA, 2003) seems to give inclusive education an exclusive favour, although this may be because homogeneity in the classroom can be perceived as an essential prerequisite to enable good teaching. This appears to directly contradict the understanding of inclusive education as a concept which is all about embracing diversity in the classroom. Despite islands of govt. programme success, disability budgets remain under used (Thomas, 2005), and reserved jobs unfilled. These are sure signs of sporadic implementation of inclusive education, as is the persistently low percentage of children with disabilities being in school

Inclusive Education in Developing Countries

Inclusive education is defined by UNESCO as a process of addressing and responding to the diverse needs of all learners by increasing participation in learning and reducing exclusion within and from education. This means that all children have the right to a quality education that caters, to the extent possible, to their individual needs. Some countries have been successful in promoting inclusive education practices and policies that remove barriers and create conditions which enable all children to learn. However, in poorer developing countries, the process of creating an inclusive system is more difficult. Factors such as lack of available funding, administrative and policy level support, and trained personnel pose challenges that can slow down progress. As a result of these difficulties, some countries may choose to begin the process by first focusing on one group of children with the long-term goal of eventually including all excluded groups

Ministry of Human Resource Development (MHRD) Action Plan:

An outline of MHRD action plan is presented below: National Policy for Persons with disabilities

• To complement and supplement IEDC and SarvaShikshaAbhiyan programmes in the movement from integration to inclusion.

• Enrolment and retention of all children with disabilities in the mainstream education system. (Free and compulsory education from 0 to 14 under draft Bill/free education 0 to 18 years under PWD Act).

• Providing need based educational and other support in mainstream schools to children in order to develop their learning and abilities, through appropriate curricula, organizational arrangements, teaching strategies, resource and partnership with their communities.

• Support higher and vocational education through proper implementation of the existing reservation quota in all educational institutions and creation of barrier free learning environments.

• Disability focused research and interventions in universities and educational institutions.

• Review implementation of existing programmes, provisions to identify factors leading to success or failure of the drive towards enrolment and retention of children with disabilities in mainstream educational settings. Address administrative issues arising out of review.

• Generating awareness in the general community, activists and persons working in the field of education and more specifically among parents and children that the disabled have full rights to appropriate education in mainstream schools and that it is the duty of those involved in administration at every level including schools to ensure that they have access to education.

• Ensure enrolment and intervention for all children with special needs in the age group 0-6 years in Early Childhood Care and Education Programs.

• Facilitate free and compulsory elementary education for children with special needs in the age group 6-14 (extendable to 18 yrs.) in mainstream education settings currently under the SarvaShikshaAbhiyan (SSA) (SSA is a governmental program shared by both union and state governments for achieving universal elementary education in India by 2010) .

• Facilities for transition of young persons with disability wishing to pursue secondary education.

•Ensuring physical access of children and youth with disabilities in schools and educational institutions by enforcing the requirement for provisions of universal design in buildings and provide support in transportation.

• Development of national norms for Inclusive Education, to set standards of implementation, training, monitoring and evaluation for the program.

• Provide inputs in all pre-service and in-service training for mainstream and special education teachers to enable them to work with children with disability in an inclusive education system.

• Appropriate Resource Services support through appointment of special educators, rehab professionals, provision of resource rooms etc., to support mainstream schoolteachers in the classrooms.

• Put in place an effective communication and delivery system for specific delivery of TLM, aids and appliances, hardware/software.

• Participation in sports, co-curricular activities, to promote all round ability development.

• Ensuring physical access for young persons with disabilities (18 plus age group) in all colleges and educational institutions by enforcing the requirement for provisions of universal design in buildings and provide support in transportation.

Teacher Education Programmes

There is no need of reinforcing the fact that teacher education remains a very weak link with respect to equipping teachers to be prepared for an inclusive classroom environment. The teacher education diplomas and degrees offer "Education of children with special needs" as an optional subject, in order to prepare teachers to identify and diagnose disability. However it gives them a holistic perspective with respect to dealing with diversity or challenge negative attitudes. This reinforces the 'difference' of children with disabilities who, some believe, can only be taught by teachers qualified specifically for them. Although, it is ultimately teacher treatment of students in the classroom, rather than the training per se, that would reinforce this difference. Interestingly, distrust in both the special and mainstream education systems leads some parents to keep children with disabilities at home for fear of their abuse or neglect in the classroom; which may then be interpreted by teachers as a lack of community interest in education for their children, as demonstrated in the PROBE Report (PROBE,1999). There is evidence to suggest that many teachers do not feel equipped to teach children with disabilities and complain that they need more time to instruct these students. Many government programmes have included a teacher training component in an attempt to instigate institutional change. However, a 'special needs' focus and a lack of training for management, combined with didactic training methodology do little to alter the classroom. The poor quality educational provision in many schools is reflected in the fact that many govt. job reservations for adults with disabilities remain unfilled. It is more likely to be directly related to the fact that very few children with disabilities get to, or stay in, school that there is a lack qualified, let alone confident candidates.

Pre requisites for inclusion:

Inclusion is a complex issue. The curriculum is a powerful tool (Swann, 1988) .There are three pre requisites for inclusion:

a)   The preparation of the child

b)   The preparation of the receiving schools,

c)   The preparation of parents, but it could not be achieved without,
d)   The preparation of the teachers.

a.   **The preparation of the child:** Some children with special needs may require some prior training before they are placed in a regular school. Special educators made available for the purpose can provide such training and thereafter CWSN may be admitted in mainstream schools. States of Andhra Pradesh and Uttar Pradesh have conducted exclusive residential bridge course for CWSN to prepare them for regular schools but in rest of the states it is not yet to be done..

b.   **The preparation of receiving schools:** Some mainstream secondary schools may be selected and developed as "Model Inclusive School" on priority basis. First of all barrier-free access to CWSN are made in all such institutions. Effort should be taken to provide disabled-friendly facilities in these schools. Development of innovative designs to provide an enabling environment for CWSN should also be made in these schools as a part of preparation programme

c.   **The preparation of parents:** It has been seen that the parents/guardians of CWSN generally face problems, both social and psychological resulting into marginalisation and exclusion of CWSN in mainstream schools. Hence, it is important to undertake widespread awareness among the people especially parents of CWSN. They should be counsel so that they may prepare themselves to send his/her ward to mainstream schools. The preparation of the child: Some children with special needs may require some prior training before they are placed in a regular school. Special educators made available for the purpose can provide such training and thereafter CWSN may be admitted in mainstream schools. States of Andhra Pradesh and Uttar Pradesh have conducted exclusive residential bridge course for CWSN to prepare them for regular schools but in rest of the states it is not yet to be done..

d. **The preparation of teachers:** In India teacher training in special education is imparted through both face-to-face and distance mode.

Prospects of Inclusive Education

Inclusive education is a developmental approach seeking to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalization and exclusion. An increasing number of publications, policy papers, workshops etc. have supported the ideology of inclusion. Some organizations and people, however, doubt whether the ordinary classroom can provide quality education for disabled children. This debate has been on, ever since people began to voice their reservation against old segregated institutions and in turn raised their concern for equality of disabled children. These concerns must be taken seriously and dispelled by showing examples of positive experiences, which clearly demonstrate that inclusive education most definitely addresses quality issues in education. The major goal of inclusive education is the Flagship goal. Recognizing the right to education, the Flagship seeks to unite all EFA partners in their efforts to provide access to quality education for every child, youth and adult with a disability. The Flagship has been formed by an alliance of diverse organizations, including global disability organizations, international developmental agencies, intergovernmental agencies, and experts in the field of special and inclusive education. In order to reach this goal, the flagship will:

• Have the full participation of persons with disabilities and families in the design of all Flagship activities.
• Promote the full participation of persons with disabilities and families in the development of policies and guidelines related to the education of persons with disabilities at local, national, regional and global levels.
• Seek to ensure that all governmental entities, donors and NGOs endorse the universal right to education for all children, youth and adults with a disability.

- Act as a catalyst to fully incorporate the Flagship goal into national plans of action and regional policies.
- Seek to ensure that the EFA monitoring process includes specific quantitative and qualitative statistics and indicators related to persons with disabilities and documentation of resources allocated to the implementation of EFA for these individuals.
- Identify and disseminate effective practices and stimulate research and studies related to the Flagship goal to include such areas as:
  - Quality teacher education
  - Curriculum and pedagogy
  - School organization including adequate accessible facilities
  - Aids and appropriate materials many countries have developed programs, which promote equality of opportunity by allocating specific funds to areas of social and economic need. If inclusion is to be successful, the following parameters need to be taken care of:

• Encouragement provided by the community for including children with disabilities in local schools
• Readiness of the general education system to accept responsibility for education of children with disabilities
• Willingness of parents of children with disabilities to send their wards to local schools
• General classroom teachers to be equipped to manage the education of children with disabilities
• Enrolment rate of children with disabilities at least on par with that of nondisabled children.
• Retention of children with disabilities in schools.
• Availability of support from peer group to children with disabilities and vice-versa in teaching learning processes.
• Comparable achievement of children with disabilities in curricular and co-curricular activities at par with their capabilities.
• Availability of specialist teacher support, if possible to the regular classroom teachers.

Thus, we as teachers, parents, teacher-educators etc., have to facilitate the implementation of inclusive education not only as a program but also as an ideology- an ideology based on the principles of human rights approach wherein stress is laid on giving importance to the individual and respecting his/her potentiality in the teaching learning process.

An Inclusive Teacher Preparation Model
One of the greatest barriers to achieving this goal is the preparation teachers receive at the preservice level. Several researchers have noted the lack of professional training in inclusive techniques and practices for general and special education teachers. If teacher education programs are to prepare educators to be successful in the classrooms of the future they must reconceptualize and redesign their approach to preservice preparation of teachers.

Techniques and Strategies for Inclusive Education
Several researchers (Baker and Zigmond, 1990; Schumm and Vaughn, 1995; Giancreco, Dennis, Cloninger, Edelman, and Schattman, 1993) have noted the lack of professional training in inclusive techniques and practices for general and special education teachers. A tremendous amount of money is spent on inservice training to give teachers instructional skills to teach students with diverse needs. These resources could be directed elsewhere if teachers could emerge from their preservice training already possessing those skills. Preservice preparation should address appropriate accommodations in curriculum, instructional activities and evaluation procedures, the modification of materials, and the effective identification, development and utilization of resources. In addition, the preservice program should prepare teachers to use various types of instructional arrangements such as multi-level teaching, cooperative learning and peer tutoring. The third component of an inclusive teacher preparation model relates to Collaborative Experiences. The two previous components apply primarily to the classroom. This component relates to the fieldbased experiences of the prospective teacher.

To Prepare Teachers for Inclusive Educational Settings

1) Instruction in the components of collaborative teaching;
2) Instruction in teaching strategies for inclusive settings;
3) Practicum experiences in inclusive settings;
4) Modelling of collaborative teaching by university professors;
5) Collaboration with practicing teachers regarding needed skills and experiences
6) Utilization of experts and specialists on inclusive practices via distance learning;
7) The development of web-based courses;
8) The development of a support network for new teachers in inclusive setting

Three Essential Components for Capacity Building in Inclusive Education

1. Increase Awareness and Attitudinal Change through Advocacy
2. Create a Future of Trained Professionals: Pre-Service Training
3. Build on Existing Human Resources: In-Service Training and Professional Development

And also there should be a, criteria for selection of teachers.

- Have positive attitudes towards children with disabilities
- Hold good qualifications and pedagogical performance records
- Demonstrate good collaboration and communication skills
- Have good skills as a trainer and facilitator
- Have a sound professional reputation
- Possess good counselling skills.

Conclusion

Preparing teachers at the preservice level to teach in inclusive settings is essential if our schools are to truly teach all students in inclusive, collaborative, and diverse settings. To accomplish that we must start designing and building an atmosphere of collaboration and inclusiveness at the preservicelevel, as well as practices that demonstrate to prospective teachers the possibilities and promise of an inclusive world,

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CONTENTS

The Importance of Educational Technology in teaching

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Abstract

Today, more than ever, the role of educational technology in teaching is of great importance because of the use of information and communication technologies. With the help of various applications for distance education, the Internet, teachers, and students themselves, they see the advantage of educational technology. The question is whether schools and teachers themselves are ready for the use of technology in education and whether they are aware of its benefits? In this paper, I try to give an overview of the importance and use of educational technology in the classroom.

Keywords: Educational technology, Technology and learning, School, Teachers, The impact of technology on learning.

Introduction

Educational technology is a systematic and organized process of applying modern technology to improve the quality of education (efficiency, optimal, true, etc.). It is a systematic way of conceptualizing the execution and evaluation of the educational process, i. e. learning and teaching and help with the application of modern educational teaching techniques. It includes instructional materials, methods and organization of work and relationships, i.e. the behavior of all participants in the educational process. The term "teaching resources" is commonly used, although they are not synonymous (Pedagoški leksikon, 1996). The word technology is derived from the Greek word "techno" which means the willingness, skills, knowledge of the way, rule, skill, tools and "logos" which means science, word, learning, mental state. There is no single term for educational technology. Different countries use different terms and synonyms as educational technology, educational equipment, AV resources, the technology of teaching...

Terminological differences mostly occur on the grounds of the approach to the technical characteristics and the use of modern appliances, and not their actual application in teaching i.e. their actual pedagogical application. For this reason, there are different opinions among teachers in the field of social and technical sciences. Therefore, the application of educational technology requires knowledge from several areas: pedagogy, psychology, didactics, computer sciences, informatics... Because of this diversity, there are also different perceptions of educational technology, where

every author defines the concept of educational technology, according to their needs. Educational technology is still not being applied sufficiently, mostly for reasons of lack of school equipment necessary resources and insufficient qualification of teachers for the implementation of these funds.

Educational technology has three domains of use: Educational technology has three domains of use:

- Technology as a tutor (computer gives instructions and guides the user),
- Technology as a teaching tool and
- Technology as a learning tool.

A number of authors (Clements and Sarama, 2003; Glaubke 2007; Dynarski et al. 2007) suggest that we should focus on five areas of software programs that have the potential to strongly influence children's learning experience:

Ø   The educational value of the program,
Ø   Its ability to engage children in learning,
Ø   Ease of use,
Ø   Interactivity between the child and programs,
Ø   The possibility that a software program monitors the progress of the child.
Ø   Without unpleasant feeling of their ignorance, no frustration, and humiliation while for the most advanced children teaching will be boring.

The fast-paced development of technology is seen in every field and it eases our lives. It is a must to integrate developments in information and communication technology with educational programmes to keep abreast of contemporary education level.In today's changing and developing world, individuals are not expected to obtain knowledge from a sole source but they are encouraged to find ways to reach knowledge, use it when problems are encountered and create solutions by using information.

The importance of Educational Technology in Teaching

Since computers are still not widely used in many schools, the teaching process is dominated by traditional methods form of work where the teacher had enough interaction with students. Failure to thrive at their own pace and insufficient activity of students was one of the drawbacks of this type of learning. In class, we have children who are not uniform in knowledge and never pay enough attention to those who are not sufficiently mastered the material and those who are above their average. This difference is often hampered by teacher assessment work and how to transfer knowledge to a group of children with different knowledge. The teacher chooses to keep average to good teaching where children with insufficient knowledge would not

get the necessary knowledge. The children with insufficient knowledge can progress smoothly without unpleasant feeling of their ignorance, no-frustration, and humiliation while for the most advanced children teaching will be boring.

With the advent of educational technology in the classroom teacher, education is faced with the challenge that teachers integrate educational technology in their daily work. Numerous studies have shown that a small number of teachers is willing to integrate educational technology in their teaching activities (Becker, 2000; Hermans et al., 2008; Stoši and Stoši 2013; Wang et al., 2004). The reason is that there are two categories of teachers in the understanding of educational technology. Some of them have thorough understanding of modern technical appliances and their operation while others think it is necessary for them to gain additional technical knowledge of the appliances and methods, teaching methods, student-teacher relationship... These two groups represent a group of teachers between older and younger teachers. Older teachers during their study did not have the possibility of training with modern technical appliances, did not have the information technology, educational technology, while the younger generation of teachers possess the knowledge required for the use of educational technology. For a better understanding of educational technology requires a set of computer science, pedagogy, psychology, cybernetics, informatics. The knowledge teachers possess is sufficient for a basic use of education technology. However, educational technology is one big system. First of all, teachers have a basic knowledge of the use of educational technology. It takes far more professional training through a variety of conferences, courses, professional literature, seminars... in order to get a better knowledge in the use of educational technology. The fact is that under use of educational technology, primarily due to poor school equipment necessary resources, insufficient information and knowledge of teachers and the lack of interest and lack of motivation of teachers to use them. Teachers have to be motivated to use the same because the use of educational technology in teaching provides better interaction with students, better reception of information because the students receive knowledge visual, auditory and kinesthetic way. Among other things, an educational technology motivates students to work independently where the student is more motivated to return to learning and working because modern technical equipment is widely available at any given moment.

The use of teaching materials prepared according to principles of technology of teaching is of vital importance to make individuals gain these qualifications and to make teachers design effectual and interactive teaching environments (^ahin&Y1ld1r1m, 1999). The use of material in education plays important role to make students reach their targets more easily and make programmes be more successful by presenting effective environment for education. This is of great importance for effectual education. Because the element that helps student be

qualified during education process is educational programmes. Especially, the use of material during education process is very significant for the success of the educational programmes of technology. "The use of material in education makes perception and learning easier. It arouses interest and brings liveliness to classroom. It shortens learning time. It helps permanence of the knowledge learned by students. It also makes students participate in topics and sparks reading and research. It carries events, facts and creatures with their real aspects to the class".

During process of teaching-learning technology, the selection and preparing of visual material are as important as the use of it .

Concordantly, visual materials should:

Ø   Be chosen in accordance with the targets and behaviours of the lesson,
Ø   Give students chance for exercise and practice,
Ø   Reflect real life by providing up-to-date information and data,
Ø   Make topics concretize and line up from easy to difficult,
Ø   Be designed according to the development features of students,
Ø   Be used to emphasize the important points of topics

One of the technologies used effectively in educational systems is computer-aided education (CAE). According to the studies carried out in this field, computer-aided education (CAE) is more successful than traditional method.It was seen that computer-aided education (CAE) not only increases success but also helps high-level thinking of the students develop, accordingly, students learn better by comprehending rather than memorizing .Therefore, it is important to educate students who make use of technology when carrying out activities. Because of this, the plans and programmes ofeducational establishment shouldbe worked out and revised.

The use of Technology and its Importance in Education

When technology is thought, state-of-the-art products that consist of high-quality information and technique come to mind. In other words, technology is associated with devices that have many useful properties. Technology is the application of the scientific principles and innovations to solve problems. Technology is an application of science. Computers, satellites and robots are regarded as devices that have emerged to solve problems as a result of the application of science.

Thanks to huge profits earned by producing high-technology commodities based on scientific and technical knowledge, industry has very big financial power to conduct new research and effort which create technical knowledge. Scientific knowledge is used to develop technology and new technology contributes to new innovations. Scientific knowledge and technology contribute to each other interchangeably. It has

been a widely-known fact that each teaching method which is applied by educators has positive and negative aspects. The most important thing is that techniques must be chosen in accordance with the topics that will be taught so that better result can be obtained. Recently, it has been possible to have educational programmes that are rich in visual properties and share them with students with the help of computer technology. The most loved educational device by students has been computers so internet and computer-aided education are the most useful educational tools that can be employed in education.

The use of Technology and its Effects on Educational Establishments

The effects of technological developments on educational establishments have been different in relation to qualifications of these establishments. First, differentiation in the content of teaching and in the methods of direct teaching emerges by the use of technology products in education. Obligatory changes in teaching methods also affect the contents of programmes in teacher training schools.

For the school administrations, it is necessary to know the new opportunities of technology products and also legal problems emerged owing to the use of them. New contents such as internet crimes, ethic principles, patent rights, using a trade mark, violation of laws on the net, laws on national and local use of technology arise when educating school administrators .

Another result of developments in communication and information technology is that various teaching fields, programmes and departments in higher educational establishments which study the use of technology have been started. This is an important effect of the use of technology in education.Universities spend lots of money on internet infrastructures, online libraries, online subscribed database, electronic publications,subscriptionfees. Additionally, higher educationalestablishments are obliged to provide academic staff with computers, scanners, printers, software,projection devices etc. which are expensive items. Providing academics with these modern and technological devices is an important criterion for Universities.It can be seen that there have been efforts to build cooperation between industry and university. Universities have increasingly been commercialized to contribute to the production of technological devices and to make money. It has been stated that developments and running of universities have been affected seriously by technology. Among the developments and innovations are effectiveness in educational service, shortening time taken to prepare programmes, arranging programmes, presentation, evaluation, outsourcing, increase in the number of people, firms, partners in the service, new university models, virtual universities etc. Another important issue is that academics are sensitive to the principles and rules determined for using computers and internet. Admittance, objection, approval of academic staff are of

great importance to use technology in universities.As technology develops fast, the need for it also increases. As a result of the spread of the use of technology in education, it has been a must to determine the attitudes, trends, ideas of students related to technological devices.

Conclusion and Suggestions

The presence of educational technology is growing in the classroom. The new generation of kids come ready to work with these new technologies, which play an important role in children's learning and acquiring various cognitive knowledge so that educational technology must be incorporated into future curricula. The application of educational technology enhances skills and cognitive characteristics. With the help of new technology comes an explosion of learning and receiving new information, especially on mobile devices.

Teachers have been using new technologies in the classroom. However, the development and application of new technologies grows as a measure that is the question of whether teachers are trained to keep up with them. Here we have two problems. Are the teachers have the ability to use educational technology and whether the school is sufficiently equipped with all modern technical means? Numerous studies were carried out, some are still ongoing, but we have to find the right strategies to apply educational technology in teaching.

It is known that technological devices used in educational establishments are not adequate in numbers as desired, mainly computers and internet access. However, the issue is not only shortage of hardware or software materials. Teachers should be trained to make use of these devices and to solve any problems related to the use of them. And also, students' good knowledge of computer and internet skills opens new dimension in their relations with administrators and teachers at school. Increase in investments which will enable the use of technological products more should not be sole target. It should be in accordance with the efforts to realize the targets set for the educational system by society. Otherwise, to support only technology-centred development without taking any variable into consideration could cause more problems instead of solving the existing ones. The use of technology in education, computers and related hardware and software, internet network, packaged software, user statistics should not be evaluated as quality variable alone. Instead, contents of programmes and arrangements should be stressed.

One of the benefits technology provides is that educational programs based on memorizing is given up and preparing programmes based on principles of active learning is adopted. The aim of contemporary and modern education is to train people who are creative, qualified and who produce knowledge. Therefore, teachers should

make effort to reach this aim. Importance should be attached to the developing the contents of curriculums and modernizing the programmes of technology education to keep abreast of technological developments and educate individuals who are technology literate. The following points should be of first priority:

Ø   Updating the programmes of technology education in primary and secondary schools,

Ø   The use of new educational technologies and electronic online environment,

Ø   Increasing the number of computers in schools,

Ø   Training teachers who have up-to-date information and attaching importance to in-service training,

Ø   Stressing internship practice,

Ø   Modernizing the equipment in labs,

Ø   Better foreign language education (especially English),

Ø   Increasing the number of departments of technology education in universities,

Ø   Attaching importance to the applied lessons where students of teacher training schools can acquire skills and knowledge for using technological tools,

Ø   Organizing in-service trainings for teachers to keep in touch with the latest technological developments in education and effective use of technological tools and devices with the help of qualified academic staff from departments of computer technologies education,

Ø   Encouraging faculties related to technology education to be member of the international organizations for technology education such as WOCATE (World Council Of Associations For Technology Education),

Ø   ITEA (International Technology Education Association) and to cooperate with them,

Ø   Holding international conferences on technology education,

Ø   Benefitting from international student exchange programmes,

Ø   Cooperation with the national firms that encourage technology to direct technology education for the needs of the country and preparing and arranging educational programmes within thisframe.

Ø   Technology education lessons should be obligatory in primary schools.

∅   Independent technology education lessons that follow each other should be included in the curriculums of primary, secondary and higher educational establishments.

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