

Teaching the Visually Impaired: Methods in the Government School for Visually Impaired at Thiruvananthapuram

Ms. Bhavanamol.R¹, Dr. Umajyothi.V²

¹Ph.D. Scholar, Department of Economics, Govt.College for Women, University of Kerala, Thiruvananthapuram, Kerala.

²Associate Professor and Head, Department of Economics, Govt.College for Women, University of Kerala, Thiruvananthapuram, Kerala.

ABSTRACT

Teaching and understanding are unequivocally two sides of a same coin. Teaching methods have pivotal role in imparting knowledge to students. This is an empirical study which intends to understand the teaching methods practised in Govt.school for the Visually impaired in Thiruvananthapuram district. It investigates the nature of experience obtained by visually impaired students in the school by practising those teaching methods. Both quantitative and qualitative methods were adopted. Key informant interview and survey method were employed in the study. It has been found that tactile teaching method, assistive technology-based method etc. are the prominent methods followed in the school.

Key Informant Interview, survey method, tactile teaching method, assistive technology- based method.

Introduction

“By education, I mean an all-round drawing of the best in child and man in body, mind and spirit”- Mahatma Gandhi

Education aims for evolving a child into a man with aspiration, vision, knowledge, rationality and benevolence. Education system is recognised as indispensable factor of human development and future. Teaching and learning are the pivotal components of education system. Teaching is considered as an art in which by adopting appropriate teaching methods, a teacher strives to present a particular content of a subject and makes the students getting understood about what is taught.

Major components of teaching are content, communication and feedback. The term teaching method is quite synonymous to Pedagogy. Because pedagogy is the study of methods of teaching. It is specifically about how a teacher conveys or imparts information or knowledge to the students as effectively as possible by using appropriate techniques and aid materials. Teaching methods basically refer to the scientific way a teacher adopts for presenting a subject matter to serve the purpose of learning and understanding as fruitful as possible. In fact, teaching methods determine the extent of understanding for a learner.

Broadly teaching methods can be categorized into two. They are non-participatory methods and participatory methods. Non-participatory methods are also known as teacher centered methods. In this category of teaching methods, teacher is the supreme authority of knowledge and information. Students are the passive recipients of what the teacher teaches. There is lack of student's involvement in expressing

their idea and asking queries. Teacher-centered methods are also known as deductive teaching methods or expository teaching methods. Major methods belonging to this category are lecture method, demonstration method etc. Another category is Participatory methods. It is also known as learner centered methods. Here dissemination of knowledge is done by students also. In this category of interactive teaching methods, instructor is both a teacher and student and is done at the same time. Major methods belong to this are discussion method, question answer method, project method, problem solving method etc.

Smith (1963) defines “teaching is a system of actions involving an agent, an end in view, and a situation including two sets of factors those over which the agent has no control (class size, size of classroom, physical characteristics of pupil, etc.) and those that he can modify (ways of asking questions almost instruction and way of structuring information or ideas gleaned).” This definition implies that a teacher can modify methods of teaching in accordance with the physical characteristics of pupil. Adaptation of methods by considering pupils’ physical characteristics is one of the pertinent techniques adopted by teachers who are teaching in special school.

Teaching is a skill and it provides insights and knowledge to students. The teaching methods adopted by teachers who are teaching in school for the visually impaired determine whether students are getting understood what they are being taught. In fact, teaching methods are the integral element of education system. It is imperfect and improper to adopt general school teaching methods in special school. Methods adapted to the conditions of visually impaired students are useful in this context. In schools for the visually impaired, students’ sense of sight has been dysfunctional. But other sense of organs will be very strong and utilizing what they own is the major strategy of teaching visually impaired students. Children with visual impairment may be disadvantageous in concept learning because they depend on their other senses rather than their eyesight in concept acquisition (Rahi and Cable,2003).

Background of the study

Census 2011 reveals that the percentage of disabled to the total population has increased from 2.13% in 2001 to 2.21% in 2011. It is identified that 19% of disabled persons have disability in seeing. Disability among children belong to the age category of 0-6 years is a grave concern. 1.24% of the total children belonging to this age category are disabled. Of the total disabled children 30% of them have disability in seeing. There are legal and constitutional provisions in Indian for ensuring social, economic and educational development and inclusion of disabled. Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act 1995 was implemented for mainstreaming disabled by providing equal opportunities. But it was replaced by Rights of Persons with Disabilities (RPwD) Act 2016. Rights of Persons with Disabilities (RPwD) act 2016 embodies the rights and legal provisions of disabled people of our country. This statute emboldens people with disabilities to argue for their rights and challenge what they are denied. India is a signatory to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). Main aim of enacting RPwD act was to accomplish the obligations of UNCRPD. Visual impairment is one of the significant disability categories which underlines in the document of RPwD act 2016.

The provision of educational services to visually impaired people in India have been progressing over the period. The trajectory of progress can be shown by two phases, the pre-independence (1887-1947) and the post-independence (1948 onwards). During the Pre-independence period, European Christian missionaries who brought the tradition of special schools to India were prominent (Advani,1987). The inception of first school for visually impaired people was done in Amritsar in 1887 by a Christian missionary, Annie Sharp.

In the post-independence era, there was a shift from mere institutional care in special schools to an emphasis on the overall development of visually impaired students (Singh,1989). This focused on the role of education in making visually impaired people socially useful and economically productive members of society(*ibid.*). There are 16 schools for the visually impaired in Kerala. Four of them are Government schools which situated in Thiruvananthapuram, Kottayam, Thrissur and Kasargod districts of Kerala.

Significance of the study

In line with the fundamental aim of education, synchronization of learning requirements with teaching methods is considered as the significant aspect. The construct learning can be defined as the process of eliciting knowledge and information through adequate and proper way of teaching. Since Methods of teaching can be considered as the important component of education system, it is quite relevant to get an understanding pertaining to the teaching methods adopted in schools.

Research Objectives

This study aims to find out

1. The teaching methods followed in Government school for the visually impaired in Thiruvananthapuram district of Kerala.
2. The nature of experience of the visually impaired students of this school derived from these teaching methods.

Research Methodology

The study adopted the blend of both quantitative and qualitative methods. Key Informant Interview (KII) technique, a qualitative research method is used for eliciting information about teaching methods adopted in the school. All teachers were brought under this in-depth interview. Interview guide was used to conduct the interview. Survey method, a quantitative research method is adopted for understanding the effectiveness of teaching methods. Interview schedule is the data gathering instrument. Students from classes 1 to 7 are studying in this school. All students were interviewed.

Findings and Interpretations

The major findings of the study are shown below.

Objective 1 -The teaching methods followed in Govt.school for visually impaired in Trivandrum district of Kerala.

Earlier the Government school for the visually impaired in Thiruvananthapuram district was a deaf and blind school. This deaf and blind school was inaugurated by the then Governor of Kerala Rama Rao on June 3rd, 1957. In 1989, it was separated into Government school for the visually impaired and Govt. Deaf and Dumb school. This is the only Government school in Kerala where the greatest number of visually impaired students have been studying. Students from 1st Std to 7th Std have been studying in this school. Total number of students is 43 and number of teachers is 13. This school has hostel facility. This school has been following general school syllabus of Kerala education board. Malayalam, EVS, Mathematics, English, Hindi, Science and Social Science are the major subjects which being taught in the school. In addition to these, IT, Physical Education, Craft, Music, Instrumental Music and Braille subjects are being offered.

Non-academic activities followed in the school is quite distinctive. A radio club namely Louis Braille children's radio club spearheaded by students themselves has been functioning in the school. This club is advantageous to perform cultural activities in Akashvani-AIR Thiruvananthapuram station's programmes for children such as *Balalokam* and *Reshmi* since students are very energetic and vigorous to keep their club active and unique. There is a platform called *Sargavela* for students to perform their cultural activities. Every wednesday 3pm, teachers and students come together for conducting knowledge-oriented and cultural activities.

A braille press has been functioning in this school. Perkins Brailier, a braille typewriter has been used here by the Brailist. Braille script text books, study materials and additional notes have been provided by this press. An audio recording studio namely Karnamritham has been functioning here. Students from different colleges have volunteered to read text books of various classes under Kerala Education Board. The recorded audio materials have been circulated through a telegram channel all over Kerala at free of cost. Majority of the teachers who have been teaching in this school are highly qualified since they have diploma in special education. Tactile teaching method is the prominent teaching method adopted in this school. Students with visual impairment use Braille alphabets consisting various codes invented by Louis Braille for writing and reading. Finger sensitivity and Finger coordination are essential for visually impaired students. Because they glean information through their touching and hearing sense. Craft subject is compulsory for all standard students. Finger coordination activities such as building blocks for lower primary students and bead work, clay work and paper work for upper primary students are taken up. It makes students efficient to understand what they are writing and reading through the sense of touch.

Braille codes for malayalam, english and hindi are being taught to students and text books transcribed into braille for each subject are provided from the school. Storytelling and action song methods are adopted for teaching lower primary students. Embossed maps and tactile globes have been used for teaching EVS and social science. Braille, a tactile writing system has been taught. Tools used for it are braille slate and stylus. Akshi, magnetic two-dimensional device to learn English has also been used. Mathematics is taught by using different tools. Geometry set with tactile markings and tactile clipboard are used for understanding geometric concepts. Spur wheel is used for drawing different shapes. Taylor's mathematical frame and types(pegs) are used for doing arithmetic algebra. Embossed maps, Akshi, tactile geometry set, Taylor's frame etc. are known assistive materials used for teaching visually impaired students of this school. So assistive technology-based methods are another core practice.

As part of physical education, sound localisation activities for sharpening their hearing sense and yoga are practised. Physical education teacher instructs to do different physical activities for giving self-confidence to do things independently and for solving posture deformatives such as kyphosis, lordosis and scoliosis. Main aim of teaching computer (IT) is to Familiarise them key board, understand short cut keys and learn typing. LINUX-Ubuntu software suggested by Kerala Infrastructure and Technology for Education (KITE) has been following. Students have been taught computer by using ORCA screen reading software. There are certain innovative initiatives and activities taken up by teachers of this school. One is composing poems from text books and post in YouTube channel. It is very helpful for students especially those who belong to lower primary classes. Another innovative initiative taken by a teacher of this school is Aksharanadam. It is an audio library founded in 2017 and it aims to make a collection of audial materials of newspapers and books including multi-lingual fictions, study notes for competitive exams, subject specific books for higher studies etc. It is very beneficial for not only the students of this school, but also for other visually impaired people.

Objective 2: The nature of experience received by the visually impaired students of this school by following these teaching methods.

The number of students belonging to different classes is 4,9,4,4,4,9 and 9 for 1st std,2nd std,3rd std,4th std,5th std,6th std and 7th std respectively. Out of 43, 28 students are hostellers. The number of students belonging to the low vision category is 12 and blind category is 31. All the students strongly agreed that they like their school and happy there. All of them participate in cultural programmes conducted in the school. Majority of the students are very eager to attend IT class and highly interested to know how to use computer.48% of students have been in the stage of writing and reading of braille alphabets. Students of 3rd and 4th classes are in the elementary stage of learning braille and 1st and 2nd classes students have been in the stage of Familiarising dots and how to punch braille codes. They opined that physical education period offers energy by doing various physical activities and get opportunity to enter sport room and use various sporting materials. Music and instrumental music periods are very interesting for them since they get opportunity to use various instruments such as tabala, mridangam, dagga etc. Majority of them stated that they are able to follow what they have been taught in school.

Conclusion

Since India aims for a holistic development, the necessity of considering marginalized segment of population particularly disabled is very pertinent. Indian constitution itself exhorts for mainstreaming those people socially, economically and educationally. Major constituents of education system such as teaching and learning are very specially addressed in the case of visullay impaired children in order to understand how the process of teaching is directed to serve the purpose of learning for them. Educational development of visually impaired children is a must. Because it helps them to acquire daily life skills and equip them to live independently. It has been an attempt to contextualise this aspect with respect to methods of teaching.

Educational Implications

The present study emphasises the significance of adopting teaching methods which should be adaptable and appropriate to the physical, mental, and intellectual conditions of students. It points out the teaching methods followed for teaching visually impaired students and the nature of experience the students receive by following these methods. Petrie and Gill (1993) stated that what devices, tools and technologies would be appropriate for meeting learning needs of the student must be determined based on personal needs of the student. The study further indicates that if the methods followed in the school for visually impaired are not appropriate to their physical condition, their attempt for being literate and educated would remain an unreachable dream.

References

1. Advani, L. (1987). *Blind in perspective*. Handout at National Conference on Centenary of Services to the Blind. Delhi: All India Confederation of the Blind and Christoffel Blindenmission.
2. Census of India 2011, Government of India, New Delhi.
3. Disabled Persons in India: A Statistical Profile 2016, Social Statistics Division, Ministry of Statistics and Programme Implementation.
4. Petrie, Helen., & Gill, John. (1993). Current Research on Graphical User Interfaces for Visually Disabled Computer Users. *European Journal of Special Needs Education*,8(2),153-156.

5. Rahi, Jugnoo Sangeeta., & Cable, Noriko. (2003). Severe Visual Impairment and Blindness in Children in the UK. *The Lancet*,362(9393),1359-65.
6. Rights of Persons with Disabilities Act, 2016.
7. Singh, T.B. (1989). Education of Blind and Visually Impaired Children in India. *Journal of Visual Impairment and Blindness*,83(20-26).
8. Smith, B.O. (1963). A Conceptual Analysis of Instructional Behavior. *Journal of Teacher Education*,14(3),294-298.