



## Efficacy of Curriculum based Technological support in enhancing Educational Upliftment – A case study

K.Anjana<sup>1</sup> & Subalakshmi .J<sup>2</sup>  
*Special Educators, AIISH*

Date of Submission: 24-11-2022

Date of Acceptance: 08-12-2022

Technology has impacted almost every aspect of life today, and education is no exception. In recent times as the world progresses towards digitalization, technology plays a major role in the learning environment of a child. A child understands the concepts better when an audio visual aid is used to illustrate rather than taught in an abstract manner. Technology helps the special child to be in par with the peers. It facilitates the teaching learning practices to carry out more effectively and efficiently. It helps the child to express his or her thoughts effectively by breaking the barriers in communication.

Use of technology reduces the teaching time as the whole curriculum could be prepared well in advance for the child. The educator could plan a more personalized child centered lesson for the students using smart boards. Technology is a powerful tool that can support and transform education in many ways, from making it easier for teachers to create instructional materials to enabling new ways for children to learn and work together qualitatively. The educators have to make the most of the opportunities provided by technology to change and make education interesting so that effective and efficient education can be delivered.

In this paper, a case study has been taken to assess the effectiveness of adopting technology in teaching learning process in an inclusive set-up. In this study we are evaluating the child's ability to comprehend the concepts taught with and without using technology in the teaching learning process.

**Keywords:** Technology, child centred, teaching learning process, Digitalization.

### I. Introduction

Technology has impacted almost every aspect of life today, and education is no exception. In recent times as the world progresses towards digitalization, technology plays a major role in the learning environment of a child. A child understands the concepts better when an audio visual aid is used

to illustrate rather than taught in an abstract manner. Technology helps the special child to be in par with the peers. It facilitates the teaching learning practices to carry out more effectively and efficiently. It helps the child to express his or her thoughts effectively by breaking the barriers in communication.

### Objectives of the study

The specific objective for the study were as follows

- To see the impact of using technology in imparting quality education for children with special needs.
  - To see the comprehension level in children taught using technology.
  - To check the time needed to plan and teach a particular concept with and without technology.
- The study shows
- The willingness of the parents to try new methods in teaching the child with hearing impairment.

### I. Demographic details

#### a) Background history:

In this study two children with hearing impairment was taken.

- A child with Hearing Impairment studying in first standard was considered for the study. The child had typhoid at the age of 1 year.
- A child with hearing impairment studying preschool of department of special education was considered for the study.

#### Sample:

##### b) Baseline of the child :

➤ The child was brought to All India Institute of Speech and Hearing at the age of 3 in the years. As reported by caregivers the child was finding difficulty in speaking. The child was showing gestures to communicate with her family members. The base line assessment was done for the child using check lists Receptive Expressive Emergent



language skills (REELS). The recent assessment revealed following results:

#### Child -1:

Sl. No.	Speech	Auditory	Provisional diagnosis
1	<b>Scales of early communication skills (SECS)</b> CRLS-2.2.11yrs CELA- 2.2.11yrs	Within the speech spectrum	SLD with Moderate to severe HI

➤ The child was identified with hearing impairment at the age of 2years and 8months. The child was brought to All India Institute of Speech and Hearing at the of 4years. As reported by their parents and grandparents the child was responding to sounds only at the age of 4years. The baseline assessment was done for the child using the checklist Receptive Expressive Emergent language skills (REELS)

#### Child -2

#### Method:

Sl. No.	Speech	Auditory	Provisional diagnosis
1	<b>Scales of early communication skills (SECS)</b> CRLS-2.2.11yrs CELA- 2.2.11yrs	Within the speech spectrum	SLD with Moderate to severe HI

#### Technological teaching learning tools

##### Computer, Smart phones, Tab etc.

The various teaching methods used for teaching the child with hearing impairment as follows

- Computers
- Smart phones
- Tab
- Smart boards

#### Action plan

Same concepts was introduced to the both the children based on the curriculum followed in the mainstream school. In this the concepts was taught to one of child in a traditional method and to the other child using technology. A comparative study was made to assess the comprehension level, the time taken to make the child understand the concept, the duration involved in planning the lesson for the child, the attention span of the child and the interest or involvement of the child towards learning the concept.

Teaching methods were planned for both the traditional and technological way of teaching. In traditional way books, pictures and models were

used. In technological way a smart board or a computer was used.

In the traditional method the concept were first introduced by explaining it to the child verbally using flash cards. Later models were used as reinforcement. The child was then assessed using oral and written questions. While teaching the same concept to the other child using technology more of videos were used. Animated videos were also used. Question with auto corrective was given.

#### The response of the child

When the concepts were taught through traditional way the child's response was normal. The child's involvement while teaching the concept was minimal.



At the same time when the concept was taught using technology the child's respond with excitement and interest. While teaching using technology the child interacts with the teacher by asking various kinds of question. Teaching the child through technology becomes more like interaction section between the child and the teacher. At the later stage the child is made to operate the technology to do the exercise.

### III) Plan of activities

- Concept of plant and its parts were taught to one child using technology and conventional method of teaching for one child along with this peer tutoring, directed activity strategy whereas the other child was taught only in a conventional method.
- The child was also exposed to smart class where in the child was given an activity to manipulate the given task like joining the leaves with plant, colouring the flower , counting the number of fruits and also to explain about the plant by developing a picture based story on plant using smart board.
- The child was also able to evaluate himself through smart interactive board.
- Caregiver of this particular child was also oriented about the impact of technology based teaching and learning.

## II. Results and Discussion:

By the above study we can state that technology based education will increase the level of teaching learning process and enables the learners to access knowledge in a much easier and convenient way. This method will influence the learners to be more interactive and leading to faster learning with qualitative comprehension, as now the teaching learning process is learner driven. This will grab the interest of the children to learn new things interestingly and effectively for their life and contribute to the society as a whole. It can improve the process of teaching and learning and can make the process more fruitful by combining traditional and technology based method.

## III. Conclusion:

Looking at the above results, it can be concluded that there can be significant improvement in children with Hearing Impairment if technology based instruction is combined with conventional method. This approach also helps in full integration of the child in mainstream educational process and the child can be successful in comprehending complex concepts and be at par with their peers.

Another benefit of using this approach at the school level is that the abstract concepts can be made understandable in an easier and effective way compared to teaching them only in conventional method.

### References:

- [1]. <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.573.1307&rep=rep1&type=pdf>
- [2]. <https://www.sciencedirect.com/science/article/abs/pii/S0360131509000682>