

**Research Paper** 

Education

# Learning Styles of Children with Visual Impairment at Secondary Level

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ABSTRACT Learning style is the complex approach in which, and conditions under which, learners most efficiently and most effectively perceive, process, store, and recall what they are attempting to learn. Present study was conducted to find out Learning Style of children with visual impairment at secondary level. The sample consists of 40 secondary school students from Coimbatore district of Tamilnadu state. Learning style inventory for children with visual impairment were used to collect data.

## KEYWORDS : Learning Styles, Children with Visual Impairment, Secondary Level

## Introduction

"Every child has a different learning style and pace. Each child is unique, not only capable of learning but also capable of succeeding." - Robert John Meehan

Learning styles can be defined, classified, and identified in many different ways. The idea of individualized learning styles originated in the 1970s, and has greatly influenced education.

Proponents of the use of learning styles in education recommend that teachers assess the learning styles of their students and adapt their classroom methods to best fit each student's learning style. Although there is ample evidence that individuals express preferences for how they prefer to receive information, few studies have found any validity in using learning styles in education. Many people recognize that each person prefers different learning styles and techniques.

Blind and visually impaired students have a specific learning style. This style stems from the student's unique perception of the world. Sighted students were able to ascertain the surroundings within a second with the help of their vision and do their activity with very little verbal information and almost no tactual information and were also able to understanding the situation, including the interrelation-ships of the different objects in the environment. Instead of visual information a blind or visually impaired student would rely on the auditory cues, verbal communication, or information gained from maneuvering around the environment. By any of these methods they will have difficulty in constructing the entire scene because they do not have information about areas they are not in direct contact with.

The unique perception of the world is best exhibited in the difference between abstract and concrete conceptualization. Sighted people create abstract concepts by putting many characteristics in a group. The blind student has a concrete concept of the world. The objects that are tactually explored and identified will have meaning but a picture of the same object will be difficult to identify. There is also a concrete association between an object and the manner in which it is originally introduced. As with blind students, visually impaired students tend to conceptualize concretely. Since abstract concepts were based on visual information; a student's ability to form these concepts depends on their amount of residual vision. Another consideration in the learning style of blind and visually impaired students is the time required to collect and process information.

## 1.8.0 Need of the Study

Learning is acquiring any skill that enriches our life. It occurs by mean of exploration, sharing and instruction. In other word it is the accumulation of experiences, consequential growth and new understanding of the world around us. A person never stops acquiring new information. Learning is the process where the individual tend to use all the sense organs. Among the senses, the sense of vision places a predominant role in the acquisition of knowledge. If that particular sense is blocked he/she need to depend on the other sense organs, this is a major issue faced by the teacher handling children with visual impairment. The mode of learning preferred by children with visual impairment is not revealed so far. So this is an obstacle for the teacher to transfer the knowledge. Hence an attempt is made in this direction to know the mode of learning preferred by the children with visual impairment to facilitate learning.

## Objectives

## The major objectives of the study are to

- Identify the children with visual impairment enrolled in integrated school at secondary level.
- ✓ Develop the checklist to assess the learning style.
- Assess the learning styles of the children with visual impairment using the developed checklist.

## Hypothesis of the study

- 1. Children with visual impairment are social learners
- There is no significant difference for the Physical Mode of Learning in Children with Visual Impairment at secondary level with respect to Grade.
- There is no significant difference for the Physical Mode of Learning in Children with Visual Impairment at secondary level with respect to Age.

#### Method

The investigator followed explorative survey method for the present study. The learning style inventory for visually impaired was developed and administered to 40 children with visual impairment. The responses of the children were recorded. The data thus collected were analyzed statistically.

## **Hypothesis Testing**

Hypothesis 1: Children with visual impairment are social learners

**Table 1:** Learning Styles of Children with Visual Impairment with Respect to Various Modes.

S.NO	Area	Number	Percentage
1.	Aural	2	5%
2.	Verbal	3	7.5%
3.	Physical	3	7.5%
4.	Logical	2	5%
5.	Social	30	75%

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6.	Solitary	0	-			

With regard to Learning Styles of Children with Visual Impairment 75% of the students were Solitary learners. This indicates that visually impaired students were the ones who enjoy learning in groups or with other people, and aim to work with others as much as possible.



## Figure-1

**Hypothesis 2:** There is no significant difference for the Physical Mode of Learning in Children with Visual Impairment at secondary level with respect to Grade.

 Table 2:
 Showing Mean, SD and t-test of the Physical Mode of Learning in Children with Visual Impairment with Respect to Grade

6 <sup>th</sup> -7 <sup>th</sup> 22.7 20 3.83 38 2.37 *	Grade	Mean	No	SD	df	't' value	Sig.
38 2.37	6 <sup>th</sup> -7 <sup>th</sup>	22.7	20	3.83	20	2.27	×
8 <sup>th</sup> -9 <sup>th</sup> 25.05 20 2.01	8 <sup>th</sup> -9 <sup>th</sup>	25.05	20	2.01	38	2.37	Î

#### \* Significant at 5% level

The above table reflects that the co-related t-value is 2.37 with df 38 for the Physical mode of Learning in Children with Visual Impairment at secondary level is significant at 5% level. It indicates that the physical mode of learning styles of both the groups with visual impairment differs significantly. The result revealed that both the groups were at different level in physical mode of learning. The reason might be higher the class higher the chance for exploration for the children with visual impairment. Hence the null hypothesis stated as **"there is a no significant difference in the mean score of the Learning style of Children with Visual Impairment in Physical Mode with respect to Grade"** is rejected.



#### Figure-2

**Hypothesis 3:** There is no significant difference for the Physical Mode of Learning in Children with Visual Impairment at secondary level with respect to Age.

 Table 3:
 Showing Mean, SD and t-test of the Physical Mode of Learning in Children with Visual Impairment with Respect to Age

Age	Mean	No	SD	df	't' value	Sia.
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Up to 13 years	22.7	19	3.88	20	2.40	×
Above 13 years	25.1	21	1.85	20	2.40	

#### \* Significant at 5% level

The above table 4.22.0 shows that the co-related t-value is 2.40 with df 38 for the Physical mode of Learning in Children with Visual Impairment at secondary level is significant at 5% level. It indicates that the physical mode of learning styles of students with visual impairment belonging to the age group of 10-13 years and above 13 years differs significantly. The result revealed that both students with visual impairment belonging to the age group of 10-13 years and above 13 years were at the different level in physical mode of learning. This may be due to the level of maturity which would have shaped them to adhere to the physical mode of learning. Hence the null hypothesis stated as **"there is a no significant difference in the mean score of the Learning Style of Children with Visual Impairment in Physical Mode with respect to Age"** is rejected.



#### Figure 3

#### Summary of the findings:

- With respect to Learning Styles of Children with Visual Impairment 75% of the students were Solitary learner, 7.5% of the students were Physical and Verbal learner and only 5% of the students were Aural and Logical learner.
- There is a significant difference for the Physical Mode of Learning in Children with Visual Impairment at secondary level with respect to Grade.
- 3. There is a significant difference for the Physical Mode of Learning in Children with Visual Impairment at secondary level with respect to Age.

#### **Recommendations:**

Based on the finding of the study the following recommendations were listed  $% \left( {{{\left[ {{{\rm{s}}} \right]}}_{{\rm{s}}}}_{{\rm{s}}}} \right)$ 

- The parents and the teachers need to be sensitized in terms of assessment for preference of learning styles among children with visual impairment.
- The teacher should try to adapt the unique learning styles of children with visual impairment in their method of teaching.
- Appropriate exposure and opportunity should be provided to the children with visual impairment based on their innate learning styles.
- Sensitize the parent's regarding the learning styles of children with visual impairment.
- The attitude of the society towards the learning preference of children with visual impairment need to be changed.
- The school curriculum can be adapted based on the learning styles to meet the learning need of the children with visual impairment.
- The strategy and the environment of the children with visual impairment can be modified based on their unique learning styles.
- The aids and equipment used by the children with visual impairment can also be modified based on their learning styles.
- While framing the IEP the learning styles of the children with visual impairment must be considered.
- Researchers can develop a specific learning styles inventory to enhance the performance of children with visual impairment.

## Suggestions:

## The following were the suggestions for further research

- Learning styles of Student with Visual Impairment at Higher education can be carried out.
- The present study recommends to conduct a further research on Learning Styles of Children with Visual Impairment at Secondary Level in Inclusive Education.
- The study may be carried on the learning styles of student with deaf blind at secondary level.
- A comparative study on the learning styles of children with visual impairment and sighted can carry out.
- The present study recommends that further study can be conducted in analyzing the impact of parental influence among the children with visual impairment in selecting their mode of learning.
- The present study recommends to conduct a further re-5 search on Learning Styles of Children with Visual Impairment enrolled at Secondary Level in Special Schools.

#### Conclusion

The idea of learning styles usually refers to a preferred way of learning. It implies that each individual has a natural inclination toward learning and, that preference can be identified to help that person to learn more effectively. These research accomplishments had been under taken with the aim of drawing out the Learning Styles of children with visual impairment at Secondary Level in Integrated Education. The result revealed that most of the visually impaired students are social learners and there is a positive impact in the Learning Styles of children with visual impairment in integrated education at Secondary level which created a very big landmark in their higher educational preference.



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