MITIGATION OF LEARNING DIFFICULTIES THROUGH VISUAL LEARNING

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Abstract

This paper deals with the role of visual learning as a strategy to minimize students' learning difficulties. In a classroom, a teacher may find some children who lag behind in their learning. Children with learning difficulties find it difficult to achieve the basic skills of learning such as reading, writing or doing arithmetic calculations.The teacher in a classroom needs to monitor the learning process by considering the most productive way to minimize learning difficulties. Visual learning involves learning through seeing things and acts as a meaningful learning strategy for the classroom that promotes the presentation of information in visual formats such as images, diagrams, and flowcharts.It provides the chance to learn visually and proves to be more effective for the students with learning difficulties. When a teacher teaches with models and visual aids, students may to be able to identify the concept, or recognize its function and try to have its interpretation and to understand its use.

Keywords: Visual Learning, Learning Difficulties, Mitigation, Visual aids.

Introduction

In a classroom, a teacher may find many children who tend to be low performers in academic activities. This might be the result of the prevalence of learning difficulties in children who find it face difficult to acquire the basic academic skills such as reading, writing and arithmetic

The teacher may deal with different categories of learners with varied interests, abilities and capacities including those with learning difficulties. Many strategies may be used by a teacher to ensure the active learning of students. With the passage of time, altered methods and techniques are entered in the field of education and teacher use different kinds of aids to make learning more effective.

Visual aids arouse the interest of learners, reduce the difficulty of learning and help the teachers to explain the concepts easily. Visual learning is one of the learning styles which may prove to be effective important for the students with learning difficulties. Visual aids can be used in classrooms to encourage students' learning process and make it easier and interesting. Visual learning style is the best method for making teaching effective and for the best dissemination of knowledge.

Learning Difficulties

Children with learning difficulties are found in every classroom. They exhibit difficulties in listening, speaking, reading, writing and arithmetic. Children with learning difficulties are those children who in most ways appear to be normal like other children of their age and class, but may have difficulty learning or remembering certain things. They may be able to perform most day-to-day activities, but have difficulties with regard to their educational performance. Some of these problems include: problems in copying and writing, problems in reading, difficulties with numbers and difficulty in concentrating. These are those children who have important ideas, but also unable to express them, who want to read and write, but cannot understand letters and numerals. Generally these children also do not show any problems in seeing or hearing. There is no serious brain damage. Moreover they also get the same opportunity to learn in the class like other children. These children may also be receiving enough environmental or emotional support. Their difficulty in learning is due to problem in that part of the brain, which is involved in processing or understanding information/things that are happening around them. (Chadha, 2004).

Students with learning difficulties have learning problems in school which are not directly related to any specific physical, sensory or intellectual impairment. Instead, the learning difficulties may be due to external factors such as socio-cultural disadvantage, limited opportunities to learn, a lack of support from home, an inappropriate curriculum, or insufficient teaching in the early years. The learning problems these students experience are often further exacerbated by their emotional reactions to lack of success. These students, in the past have been referred to as 'slow learners' and ' low achievers (Westwood, 2008).

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Learning styles

Learning styles are preferred ways of studying and learning such as using pictures or text, working alone or with other people, learning in structured or unstructured situations and so on. According to Curry, an individual's learning style is a distinctive and habitual manner of acquiring knowledge, skill or attitude through study or experience (Bhardwaj & Gupta, 2006).

Learning styles are seen as characteristic cognitive, affective, and psychological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment. The concept of learning styles has been applied to a wide variety of student attributes and differences. Each learning style has its own strengths and weaknesses and therefore a person who sticks to one style is never going to be an ideal learner. Learning styles are divided into three major categories: sensory or perceptual learning style, cognitive learning style, and affective/temperament learning style. Sensory or perceptual learning style lends itself to the physical environment in which we learn, and involves using our senses in order to perceive data. Reid categorized perceptual learning styles into six major types: Visual (visual learners prefer seeing things in writing), Auditory (these learners learn best when they listen), Kinesthetic (these learners prefer active participation), Tactile (these learners prefer hands-on work), and Group (these learners like to participate in group activities), and Individual (these learners learn best when they are alone) (Rezaeinejada, et al. 2015).

Visual Learning

Visual learning is a type of learning style in which students prefer to use images, graphics, colors and maps to communicate ideas and thoughts. Visual learning helps the students to retain information more effectively than any other method. Various studies report that 75% of all information processed by the brain is derived from visual formats. Furthermore, visual information is mapped better in students' minds (Williams, 2009).

Visual learners can easily visualize objects, have a great sense of balance and alignment, are very color-oriented and can effortlessly envision imagery. They learn best by color-coding their notes, making to-do lists and using concept maps to organize their thoughts. Visual learners must see information in order to learn it. These learners are likely to have a photographic memory and may use color, tone and brightness to recall information. In class, visual learners will benefit from seeing diagrams drawn out, for example, on a chalkboard and in slideshows.

Learners understand information better in the classroom when they see it. Visual information is presented in different formats, such as images, flowcharts, diagrams, video, simulations, graphs, cartoons, colouring books, slide shows / Power point decks, posters, movies, games, and flashcards. Teacher can use the above mentioned formats to display large amounts information in ways that are easy to understand and help reveal relationships and patterns. Visual learning also helps students to minimize learning difficulties whereby the learner comes better to understand and retain information better by associating ideas, words and concepts with images. Visual information is presented through various interactive visual tools, such as information and communication technologies (Ghulam, et al. 2015).

Mitigation of learning difficulties through visual learning

Visual learning as a mode of learning can be used to mitigate learning difficulties where students rely on graphic aids to remember and learn material. Flash Cards are an often used to remember important facts, figures, and other information. A flash card is the perfect medium for a visual learner because it presents the effects of an ideas or concept in a clear and precise image. Whether a flash card contains text, pictures, or a combination of the two, it is an ideal format for visual learners. Picture books can also be used which should have lit of illustrations and pictures to make reading interesting for the child. Since the children with learning difficulties are behind their expected level of reading, reading books should match with the child's pace of reading. A Box of Letters can also be effectively used by these children which should be a box containing alphabets/letters . Children can from different words, learn the information of the different alphabets or just learn to read different letters. Thus, the child can dismantle and reassemble an unknown or a new word. Also reference charts with alphabets/or numbers can be hung on the wall both at home and at school. This will help all the children, especially those with reading difficulties. Visual charts include materials like reference charts, tables, graphs, maps, colourful charts, coloured chalks, slates, dictionaries, work books, work sheets, newspapers, picture boards and globes. Since children with learning difficulties depend on a lot of visual aids, the use of such materials becomes important to help these children learn different concepts (Chadha, 2001).

There are certain activities that can be followed to help students with learning difficulties. *Action cards* can be used which comprise some pictures to encourage action words and short sentences. *Say What See Cards* can comprise pictures, which the child can first explain and describe. The child can then be asked to write them.   *Sequential cards* can also be used, the child can be asked to put the cards in an order so that they make a story. The child can then be asked to write the story.   *Classification of objects* can also be done as an activity. The child can be exposed to a random list of animals and fruits.   For example, cat, apple, dog, mango and the child can then be asked to sort them into right categories. *Picture matching and word matching cards* can be used too in the classroom to enhance the writing skills of

these learners. The child can be shown cards with pictures and words and ask to match the picture with the word that best describes it. The child can then be asked to spell the words from memory and write them (Rao, 2014).

A variety of charts and graphs are available to assist the students those who have learning difficulties. Various types of charts are there that is, pie charts, line charts, bar charts, flow charts and organizational charts. The key information from the presentation or further information of the presentation may be given in printed form on sheets of papers. These are called handouts. They are generally used when the topic is too complex to understand just by speaking (Singh, 2005).

In this digital era, it is essential for teachers to integrate technology into the classroom. Integrating technology into the classroom begin when a teacher prepare lessons that use technology in meaningful and relevant ways. Technological aids should support the curriculum rather than dominate it. All calligraphy and illustration must be large adequate to be seen easily by the students farthest from the aids. Colours, when used, should provide clear contrast and easily be visible (Chorley, 1966). .

Implications

Awareness about learning difficulties is very much essential for teachers so that they can take steps for the minimization of difficulties in learning the school subjects. Visual learning helps to improve the academic skills of learners to a great extent. Teachers need to adopt visual learning strategies in the classroom for the benefit of all learners, especially for those children with learning difficulties.

Teachers can work to implement many visual learning strategies in their classrooms to help the children with learning difficulties. It is vital for teachers to work to implement different kinds of visual techniques into their classroom which would provide the students with many opportunities for learning. Teachers should be exposed to the use of various teaching resources such as images, flowcharts, diagrams, graphs, cartoons, colouring books, slide shows, posters, movies, games, and flashcards. The learning problems can be minimized through visual representations such as pictures, diagrams, charts, handouts etc in the learning process. Video representations too may help to overcome the problems faced by the children. The use of videos, images, flashcards and other such visual aids may help such learners immensely in visualization.

There is need for teachers in the field to have a forum for meeting periodically to assess the effectiveness of their teaching using the methods of instructional and educational technology as applicable to the organization of the content of the school syllabuses at the high school level. Moreover, the Ministry of Education should appeal to non-governmental organizations, the private sectors, individuals and industries to assist in supplementing and substituting obsolete educational materials and teaching learning aids like visual materials and software packages.

Conclusion

It is highly essential that school teachers need to adopt innovative methods of teaching to meet the needs of all categories of learners. Learning difficulties require special teaching strategy apart from normal classroom teaching. Visual learning is one of the effective methods that can be used to mitigate the learning difficulties of the students. It focuses on learning through reading and watching rather than listening. There are different ways to learn through visuals. Teachers can incorporate visual learning into their classroom and thereby allow students to actively participate in the learning process. The curriculum should be designed such a way that there are options to engage in activity based learning through the use of visual learning aids.

References

1) Bhardwaj, J. & Gupta, R. (2006). Learning Styles. *The Primary Teacher*, 31(3-4), 75.

2) Chadha, A. (2001). *A guide to Educating Children with Learning Disabilities*, New Delhi: Vikas Publishing House Pvt. Ltd.

3) Chadha, A. (2004). *Teaching Manual for Teachers to teach Children with Learning Difficulties (*Module-1), New Delhi: Vikas Publishing House Pvt. Ltd.

4) Chorley, R.J. (1966). *Models in Geography*, London: Methuen.

5) Ghulam, et al. (2015). Impact of Visual Aids in Enhancing the Learning Process Case Research: District Dera Ghazi Khan, *Journal of Education and Practice,* 6(19), 1-9.

6) Rao, A.A. (2014). *Learning Disabilities*, New Delhi: Neelkamal Publications.

7) Rezaeinejada,M., Azizifara,A., Gowharya,G. (2015).The study of learning styles and its relationship with educational achievement among Iranian high school students *Procedia - Social and Behavioral Sciences,* 199, 218 – 224.

8) Singh, Y.K. (2005). *Instructional Technology in Education,* New Delhi : Darya ganj   publications.

9) Westwood, P. (2008). *What Teachers need to Know about Learning Difficulties,* ACER Press: Australian Council for Educational Research Ltd.

10) Williams, (2009). Visual Learning, Retrieved from Theory.http://www, aweoregon.org/research theory.html.

11) Kouyoumdjian, H. (2007). Learning Through Visuals, Retrieved from https://www.psychologytoday.com/us/blog/get-psyched/201207/learning-through-visuals

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