RESEARCH ARTICLE

ROLE OF TEACHING LEARNING MATERIALS IN QUALITY EDUCATION OF CHILDREN WITH DISABILITIES

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ABSTRACT

In the traditional classroom teaching there is hardly any scope for the children to interact with the teacher, teaching learning materials (TLM) and the teaching-learning environment. So Teaching becomes very monotonous and students have to mostly rely on rote learning. Most often classroom teaching is dominated by the Lecture Method of teacher. Except some essential aids like chalk, duster, blackboard, Teaching learning materials are hardly used in the classroom. When used it may not be context-specific. As part of transforming education, the National Curriculum Framework 2005, advocates an outcomes based quality education approach to teaching learning and aims to bring about a significant shift towards schools and systems that are child-friendly and inclusive. The amended RTE Act, 2012, provides for inclusion of children with disability and ensures that every child in the age group of 6-14 years with special needs irrespective of the kind, category and degree of disability, is provided meaningful and quality education with support of resource room, TLM etc. One TLM will not be beneficial for all, some students can learn better from audio input, some from visual input and some from kinesthetic input. There is urgent need to develop appropriate TLM only after we can make the effective teaching learning process in our classroom.

INTRODUCTION

India is a free nation with a rich variegated history, an extraordinarily complex cultural diversity and a commitment to democratic values and well-being for all. Ever since 1986 when the National Policy on Education was approved by Parliament, efforts to redesign the curriculum have been focused on the creation of a national system of education. As part of transforming education, NCERT launched the National Curriculum Framework (NCF)-2005, which adopts an outcomes based education approach to teaching and learning and aims to bring about a significant shift towards schools and systems that are child-friendly and inclusive, and teaching-learning processes that are more based on a constructivist approach, responsive to each child's needs. The NCF-2005 has resulted in a series of initiatives for renewal of school education curriculum at the State level, revision of textbooks and other teaching-learning materials, changes in pedagogy and leaning assessment procedures. In the traditional classroom teaching there is hardly any scope for the children to interact with the teacher, teaching –learning materials and the teaching-learning environment.

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So Teaching becomes very monotonous and students have to mostly rely on rote learning. Most often classroom teaching is dominated by the Lecture Method of teacher. Except some essential aids like chalk, duster, blackboard, Teaching learning materials are hardly used in the classroom. Learning has shifted from response strengthening to knowledge acquisition to construction of knowledge. In this context, the duty of the teacher is to provide appropriate environment where the child will construct his knowledge by interacting with his physical and social environment. The triangular relationship between teaching, learning and material is always important. One can create a learning-friendly environment only through a balanced handling of these three elements. Learning materials cannot be devised or thought of on their own without linking them with the bigger objective of an education programme. For any education programme- be it formal or informal -learning material is devised in a linking up with the curricular objective.

Understanding teaching learning material and learning styles

Learning is a process of gaining or receiving knowledge of things in the world around us, through sight, sound, smell, taste and touch. Learning takes place in everyone's life all the time from a very early stage in life, and human beings keep on learning all the time. Learning starts from childhood and it is a

continuous and life long process. Through learning an individual gains the skills to cope with life. Learning occurs in the family and the community, in formal and informal settings. The word learning encompasses a wide range of connotations across different spheres of life. Learning takes place in any environment and is wide in scope. The term as defined here is limited to forms of learning in formal and informal settings for adult learners, some of which can be used beyond a prescribed setting. In this connection learning materials become an important tool in facilitating learning. There are different kinds of tools, which facilitate learning. The later part of the paper will cover a description of the different kinds of learning tools for different levels of learners. Allwright (1990) argues that materials should teach students to learn, that they should be resource books for ideas and activities for instruction/learning, and that they should give teachers rationales for what they do. From Allwright's point of view, textbooks are too inflexible to be used directly as instructional material. O'Neill (1990), in contrast, argues that materials may be suitable for students' needs, even if they are not designed specifically for them, that textbooks make it possible for students to review and prepare their lessons, that textbooks are efficient in terms of time and money, and that textbooks can and should allow for adaptation and improvisation. Littlejohn and Windeatt (1989) argue that materials have a hidden curriculum that includes attitudes toward knowledge, attitudes toward teaching and learning, attitudes toward the role and relationship of the teacher and student, and values and attitudes related to gender, society, etc. Materials have an underlying instructional philosophy, approach, method, and content, including both linguistic and cultural information. That is, choices made in writing textbooks are based on beliefs that the writers have about what language is and how it should be taught. Writers may use a certain approach, for example, the aural-oral approach, and they choose certain activities and select the linguistic and cultural information to be included.

Learning styles may be defined in multiple ways, depending upon one's perspective. Here are a few definitions of learning styles. Brown (2000) defines learning styles as the manner in which individuals perceive and process information in learning situations. He argues that learning style preference is one aspect of learning style, and refers to the choice of one learning situation or condition over another. Learning styles are individual differences in learning. An individual's learning style "is the way he or she concentrates on, processes, internalizes, and remembers new and difficult academic information or skills". Individuals approach learning differently due to differences in their learning styles. A person's approach to learning is a relatively stable indicator of how they perceive, interact with, and respond to the learning environment. In other words, learners should be the center of instruction and learning. The curriculum is a statement of the goals of learning, the methods of learning, etc. The role of teachers is to help learners to learn. Teachers have to follow the curriculum and provide, make, or choose materials. They may adapt, supplement, and elaborate on those materials and also monitor the progress and needs of the students and finally evaluate students. Materials include textbooks, video and audio tapes, computer software, and visual aids. They influence the content and the procedures of learning. The choice of deductive vs inductive learning, the role of memorization, the use of creativity and problem solving, production vs. reception, and

the order in which materials are presented are all influenced by the materials. Technology, such as OHP, slides, video and audio tape recorders, video cameras, and computers, supports instruction/learning. Understanding learning styles and the role of learning styles in the teaching/learning process is a key component in effective teaching. According to Sarasin, "teaching cannot be successful without a knowledge of learning styles and a commitment to matching them with teaching styles and strategies". Utilizing learning style theory in the classroom is extremely beneficial at all educational levels for a variety of reasons. Some research has found a relationship between occupational preferences and learning style type. In addition, student's learning styles have been shown to be affected by their educational experiences, particularly at the postsecondary level. Individuals pursuing careers in information technology (IT) typically encounter a professional work environment that exploits extensive problem solving which draws upon their abilities with a kinesthetic learning style. Therefore knowledge of learning styles is useful in designing classroom activities that support the development of this learning style.

General learning styles

The original VAK concepts were first developed by psychologists and teaching (of children) specialists such as Fernald, Keller, Orton, Gillingham, Stillman and Montessori, starting in the 1920's. VAK theory is now a favourite of the accelerated learning community because its principles and benefits extend to all types of learning and development, far beyond its early applications. The Visual-Auditory-Kinesthetic learning styles model or 'inventory', usually abbreviated to VAK, provides a simple way to explain and understand your own learning style (and learning styles of others). The VAK learning styles model provides a very easy and quick reference inventory by which to assess people's preferred learning styles, and then most importantly, to design learning methods and experiences that match people's preferences:

- **Visual** learning style involves the use of seen or observed things, including pictures, diagrams, demonstrations, displays, handouts, films, flip-chart, etc.
- **Auditory** learning style involves the transfer of information through listening: to the spoken word, of self or others, of sounds and noises.
- **Kinesthetic** learning involves physical experience - touching, feeling, holding, doing, practical hands-on experiences.

The definitions of these learning styles are as follows:

Visual: Visual learners think in pictures and learn best in visual images. They depend on the instructor's or facilitator's non-verbal cues such as body language to help with understanding. Sometimes, visual learners favour sitting in the front of the classroom. They also take descriptive notes over the material being presented (Ldpride, n.d.).

Auditory: These individuals discover information through listening and interpreting information by the means of pitch, emphasis and speed. These individuals gain knowledge from

reading out loud in the classroom and may not have a full understanding of information that is written (Ldpride,n.d.).

Kinesthetic learner

Individuals that are kinesthetic learn best with and active "hands-on" approach. These learners favour interaction with the physical world. Most of the time kinesthetic learners have a difficult time staying on target and can become unfocused effortlessly (Ldpride,n.d.).

Previous studies concerning visual, auditory, and kinesthetic learning styles

According to Dunn and Dunn (1978), only 20-30% of school age children appear to be auditory learners, 40% are visual learners, and 30-40% are tactile/kinesthetic or visual/tactile learners. Barbe and Milone (1981) stated that for grade school children the most frequent modality strengths are visual (30%) or mixed (30%), followed by auditory (25%), and then by kinesthetic (15%). Price, Dunn, and Sanders (1980) found that very young children are the most tactile/kinesthetic, that there is a gradual development of visual strengths through the elementary grades, and that only in fifth or sixth grade can most youngsters learn and retain information through the auditory sense. Carbo (1983), investigating the perceptual styles of readers, found that good readers prefer to learn through their visual and auditory senses, while poor readers have a stronger preference for tactile and kinesthetic learning.

Previous studies into the learning styles of EFL students have generally reported that they favor Kinesthetic and Tactile styles, and disfavor Group styles. Reid (1987) reports that Chinese university students (N = 90) studying in the USA favored Kinesthetic and Tactile styles, and disfavored Group styles. Melton (1990) found that Chinese (PRC) university students (N = 331) favored Kinesthetic, Tactile and Individual styles, and disfavored Group styles. Jones (1997) states that his Chinese (Taiwan) university students (N = 81) favored Kinesthetic and Tactile styles, and disfavored Individual styles. Two empirical studies that investigated non-Chinese EFL students based on Reid's typology are Rossi-Le (1995) and Hyland (1993). Rossi-Le surveyed adult L2 immigrants in the US. They favored Kinesthetic and Tactile styles and did not disfavor any styles. Hyland's Japanese learners favored Auditory and Tactile styles, and disfavored Visual and Group styles (1993). Hyland also reports that senior students favored kinesthetic styles. Peacock (2001) has examined the learning style preferences of EFL and ESL student s. The results of these studies show that students prefer kinesthetic learning styles above others, whereas the teaching methods mostly suit auditory learners. Studies have also been done on Iranian EFL students' learning styles. The most recent research is conducted by Riazi and Riasati (2007). In their study on l earning style preferences of Iranian EFL learners, they found that these students preferred to be actively engaged in class activities. They tended to have interactions with other students in the class. Kassaian (2007) investigated the effect of two types of teaching methods on the retention of unfamiliar words. Sixty-six university students having either auditory or visual learning styles participated in teaching method environments which were either visual or aural. Data analyses indicated that: 1) the subjects with visual style of learning retained vocabulary items

they had learned visually better than the items they had learned aurally, but the subjects with aural style of learning did not show better retention for items they had learned aurally, 2) all the subjects retained visually presented item s better than aurally presented items in the immediate and delayed tests. In their research, Kia, Alipour, and Ghaderi (2001) found that among students in Payame Noor University in Iran, those with visual learning style have the greatest academic achievement.

Applications of learning styles in the classroom

Various researchers have attempted to provide ways in which learning styles can take effect in the classroom. Two such scholars are Dr. Rita Dunn and Dr. Kenneth Dunn (1978). Dunn and Dunn write that "learners are affected by their:

- Immediate environment (sound, light, temperature, and design).
- Own emotionality (motivation, pe rsistence, responsibility, and need for structure or flexibility).
- Sociologi cal needs (self, pair, peers, team, adult, or varied).
- Physical needs (perceptual strengths, intake, time, and mobility)" (Dunn & Dunn, 1978).

They claim that not only can students identify their preferred learning styles, but that students also score higher on tests, have better attitudes, and are more efficient if they are taught in ways to which they can more easily relate. Therefore, it is to the educator's advantage to teach and test students in their preferred styles (Dunn & Dunn, 1978).

Significance of learning styles

One of the most significant issues in learning to learn is an individual's taking the responsibility for his/her own learning. The individuals should know what their own learning styles are and what characteristics this style has and they should thereby behave according to this style. In this way, the individual can acquire the constantly changing and increasing amount of information without need for the assistance of others. When the learner takes the responsibility of his/her own learning, s/he attributes meaning to the process of learning. S/he develops an understanding of his/her own form of learning style and becomes much more satisfied with the environment s/he interacts with. Every opportunity for learning is a chance for him/her. It is in the learner's hand to use different ways and develop the learning styles to some extent (Coffield, 2004).

The advantages of identifying learning styles

Learning style has an important place in the lives of individuals. When the individual knows his/her learning style, s/he will integrate it in the process of learning so s/he will learn more easily and fast and will be successful. Another advantage of the identification of the own learning style by the student is that it will help the student to become an effective problem solver. The more successful the individual is at solving the problems s/he faces, the more control s/he will take over his/her own life (Biggs, 2001). It is important that individuals receive education in areas suit able for their learning styles. A person educated in an area having no relationship to his/her learning style may lack confidence and s/he may be less

successful; s/he may as a result become frustrated. Knowledge of learning style also provides information to the student as to why s/he has learnt in a different way than others. It helps to control the process of learning. It is vital because one of the most important signals in learning is to learn to be autonomous, that is, for the individual to take responsibility for his/her own learning. Because of this, s/he should know what learning style is.

Visual, auditory, kinesthetic learning styles among students with disabilities

The Sarva Shiksha Abhiyan (SSA) seeks to ensure that every child in the age group of 6-14 years with special needs, irrespective of the kind, category and degree of disability, is provided meaningful and quality education. The RTE Act, 2009 was amended in 2012 and the RTE Amendment Act, 2009 which came into force with effect from 1 August 2012, provides for inclusion of children with disability as contained in the Persons with Disabilities Act 2005 and the National Trust Act under the purview of RTE Act and providing them free and compulsory education. Further, the RTE Act also provides to parents of children with severe and profound disabilities the right to opt for home based education. The Act has been instrumental, to a large extent, in changing public perceptions about the abilities of children with special needs (CWSN). Under the SSA, the focus of the education programme for children with special needs has been on mainstreaming children with special needs (CWSN) in regular schools and supporting their participation in the schooling process. The main components of the interventions for children with special needs include (i) identification, functional and formal assessment, appropriate educational placement, preparation of Individualized Educational Plan, provision of aids and appliances, teacher training, appointment of resource teachers and therapists, establishing resource rooms to provide specialized support to children with disabilities. A major challenge in education of child with disability education is to ensure that as far as possible, every child with special needs is mainstreamed and provided the needed resource support. In pursuance of this objective and with the view to enriching academic assistance to CWSN, the National Council of Educational Research and Training (NCERT) has developed exemplar materials on inclusive pedagogy and practices and

advocates that only after establishment of resource centre at each schools with state of art teaching learning material quality education to students with disabilities may be provided along with enhancing the skills of regular teachers on handling CWSN and using TLM in a mainstream classroom so that teachers could extend need-based academic support to CWSN.

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