

Teaching and Learning Practices in Secondary Education System-A Conceptual Framework

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ABSTRACT

Effective teaching in schools requires flexibility, energy and commitment. Successful teaching also requires that teachers are able to address learner's needs and understand the variations in learner's styles and approaches. Teachers can accomplish these requirements while creating an optimal teaching-learning environment by utilizing a variety of teaching methods and teaching styles. If teachers use a variety of teaching methods and styles, learners are exposed to both familiar and unfamiliar ways of learning that provide both comfort and tension during the process, ultimately giving learners multiple ways to excel. Teaching and learning practices in secondary education urgently need improvement--witness the recommendations of several academic council of government authorities on secondary education. Understanding learning styles and the role of learning styles in the teaching/learning process is a key component in effective teaching. This Paper intended to present the conceptual framework of teaching learning practices in Higher and Secondary education system in India.

Keywords: Conceptual Framework, Effective Teaching Learning, Higher Education System.

1. INTRODUCTION

Effective teaching are always on the prowl for new and exciting teaching strategies that will keep the students motivated and engaged. Teaching not only consists of lectures, assignments given to students, and a final exam. But there are other teaching strategies which can be incorporated with and within the lecture format in order to stimulate, motivate and foster student learning. For effective teaching, it is important to consider the overall structure of the course as well as the physical constraints and time limits that might influence the delivery of the content, before deciding on teaching strategies. More teaching strategies at disposal will provide more flexibility in content delivery. Teaching method comprises the principles and methods used by teachers to enable student learning. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. Suggestions are there to design and selection of teaching methods must take into account not only the nature of the subject matter but also how students learn.

Models of teaching and learning are critical pieces to instructional planning and delivery because they help educators to develop highly tuned and more varied professional repertoires; allow them to reach larger numbers for students more effectively and radically modify or redesign existing methods of teaching and instructional delivery so that emerging or altered instructional techniques may better meet the needs of today's students. Education researchers have applied several learning style models in the last several decades. The most widely-applied model is the VAK system, developed by New Zealand teacher Neil Fleming in 1987, and today, it is very popular in the United States. Its name corresponds to three styles of learning: visual (seeing), auditory (hearing), and kinesthetic (moving). Education researchers Dr. Rita Dunn and Dr. Kenneth Dunn determined that teachers can reach all learning styles through small-group activities in which students collaborate on a topic. Team activities and brainstorming can also aid in teaching diverse learning styles effectively.

Effective teaching requires flexibility, creativity and responsibility in order to provide an instructional environment able to respond to the learner's individual needs. As per Tomlinson, 2001, beyond the experiential evidence that pervasive uniformity in teaching fails many learners, there is reason in both theory and research to support a movement towards an instruction attentive to students' variance manifested in at least three areas: the student's

readiness, interest, and learning profile. One of the ongoing challenges the secondary school teachers are facing is related to matching the teaching strategies with the students' learning styles in order to improve the academic achievement. Numerous teaching strategies such as white board, lecture, cooperative learning, writing assignments, demonstration, field trips, grouping, brainstorming, guest speakers, bulletin boards, debates, panel discussion, crossword puzzles, teaching with cases, team-based learning, team teaching, library research on topics or problems, audio-tutorial lessons, making of posters by students, puppets, use of motion pictures, educational films, videotapes, current events and internet are utilized in the modern classroom for secondary education. Each teaching strategies has their own pros and cons. Also, as per Learner point of view, It is very important for an individual to know his/her learning style. The reason is that one of the most significant issues in learning to learn, or in becoming effective in the process of learning, is an individual's taking the responsibility for his/her own learning. For this purpose, the individual 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 and minimize students academic performance as well as achievement. When the learner takes the responsibility of his/her own learning, she/he attributes meaning to the process of learning. He/She develops an understanding of his/her own form of learning styles and becomes much more satisfied with the environment she/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. Learning style is important for many reasons. However, there are three vital ones. First of all, people's learning styles will vary because everyone is different from one another naturally. Secondly, it offers the opportunity to teach by using a wide range of methods in an effective way. Sticking to just one model unthinkingly will create a monotonous learning environment, so not everyone will enjoy the lesson. In others words, learning and teaching will be just words and not rooted in reality. 3rdly, we can manage many things in education and communication if we really recognize the groups we are called to. Of course, we may not know every detail; however, being aware of our students' learning styles, psychological qualities and motivational differences will help us regulate our lessons appropriately and accordingly to the conditions.

Thus from the theoretical point of view, it can be argued that incorporating the learning styles of the students makes learning easier from them and increases their learning efficiency. On the other hand, learner who are not supported by the learning environment may experience problems in the learning process. Learning styles can be considered in different ways in education. A first step is to make learners aware of their learning styles and show them their individual strengths and weaknesses. The knowledge about their learning styles helps students to understand why learning is sometimes difficult for them and is the basis for developing their weakness. Furthermore, students can be supported by matching the teaching styles with the learning styles of the students. Due to the nature of learning styles, providing students with learning and activities that fit their preferred ways of learning seems to have high potential to make learning easier for them. However the matching approach aims at a short-term goal, namely to make learning as easy as possible at the time students are learning.

The research on learning styles shows that individuals have another learning style besides the dominant one. In other words, an individual has one or more than one learning styles. When the individual has more than one learning styles, the levels of using it can change. Learning styles gives opportunities to recognize individual and the differences between them. For this reason, a teaching style is required to devise learning approaches that take cognitive, affective and psychological factor into account. Learning styles 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. It is important that individuals receive education in areas suitable 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.

Thus, it is evident that students have specific learning style preferences, and these preferences may be different between male and female students. Understanding a student's learning style preference is an important consideration when designing classroom instruction. To address this concern, faculty members should understand student's learning style preferences and design should be made accordingly. Based on the results of a meta-analysis of 42 experimental studies, Dunn et. al. (1995) claim that students who are taught by an approach compatible with their learning do better than those whose learning styles are not matched to teaching approaches. In a similar vein, Griggs and Dunn(1996) claim that students who learn from an approach compatible with their preferred learning style experience greater academic and have a more positive attitude towards learning.

It is very much clear from the above discussion that learning styles has a great role and influence on the learning of the students. Also, if the teaching strategy can be taken as per the need of the learning style of the students, it may certainly contribute to the better learning among the students. So, such type of research work, which the researcher is going to undertake may be of great importance for the education field.

2. LEARNING STYLES: A CONCEPTUAL FRAMEWORK

Learning styles are based upon 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 relative stable indicator of how they perceive, interact with, and learn. Learning styles are influenced by many factors such as individual experience, different intelligences and personality factor such as a preference for learning alone or in a group. The present study is embedded on the VAK [Visual (V), Auditory (A) or Kinesthetic (K)] theory originally developed by Neil Flemings (2001). Based on this theory, several scholars have developed learning style inventories which can be applied in research and classroom setup including Barsch, J. and which categorizes learners based on their sensory perceptions. One family of learning style models that has gained popularity recently has been those which have emphasized sensory modalities as a means of providing stimuli to the learner, known as VAK (Coffield, Moseley, Hall, & Ecclestone, 2004). This model comprises of three sub modes: Visual (V), Auditory (A) and Kinesthetic (K). one of the most common modes of exchanging information in today's modern society is speech, and it is attributed as auditory in the VAK model through the reception of this information by the ear. Other group of learners may show a preference for visual learning (V) a group, which have not been particularly well covered by the methods of teaching in the high schools (Galasinski, 2000). Lastly, a group of learners within this model are the learners who prefer to experience their learning via multiple sense, including touch, hearing, smell, taste etc., which are described by the literature as kinesthetic learners (K) and as such, want concrete, multisensory experiences in their learning (Fleming, 1995). According to Kolb, most language and creative students are mainly auditory (Kolb D. A., 1984).

The way learners receive information, based on the VAK theory, has been divided into three categories, sometimes referred to as modalities: *visual*—sights, pictures, diagrams, symbols; *auditory*— sounds, words; *kinesthetic*—taste, touch, and smell. An extensive body of research has established that most people learn most effectively with one of the three modalities and tend to miss or ignore information presented in either of the other two. There are thus visual, auditory, and kinesthetic learners, although there are some learners who tend to use a combination of both visual and auditory senses and have been termed as tactile learners (Doyran, 2000). Visual learners remember best what they see: pictures, diagrams, flow charts, time lines, films, demonstrations. If something is simply said to them they will probably forget it, common occurrences in language teaching contexts. Auditory learners remember much of what they hear and more of what they hear and then say. They get a lot out of discussion, prefer verbal explanation to visual demonstration, and learn effectively by explaining things to others (Doyran, 2000). Visual learners prefer to learn by reading books, seeing words, or looking at some teaching tools. They prefer to look at the written words on the blackboard than to only listen to the teacher. Therefore they like the teacher to write more than to talk more in classroom. The PowerPoint presentation is suitable to these learners because it presents words, and pictures or charts. This type of learners will feel comfortable when teacher use the translation-grammar teaching approach in language teaching. Auditory learners also referred to as verbal learners, prefer to learn by listening. For them, they may enjoy to have interactions with others by talking. They may dislike reading books. So in formal instruction settings, they would rather listen more than see more. A few teaching approaches may suit them, such as the oral approach, the situational approach, the audio-lingual approach, and communicative approach. Tactile learners and kinesthetic learners are similar (Doyran, 2000). The former prefer to learn by feeling or touching something with their hands while the later like movement. Learners of these two kinds will feel comfortable when teacher use the total physical response approach. According to Sternberg (1997), learning will be more effective if it is tailored around the learning style approaches by the learners. The instructor/teacher should therefore establish the learning style preference of his/her learners in order to design an effective instruction. Doyran (2000) puts this in the context of language [English] teaching, arguing that the English class should take into account the visual, auditory and kinesthetic learner by designing instructional methods that involve these modalities in a typical class. Only then, can we believe that each learner has been reached at his/her learning point of need. Based on the VAK theory, instructors should ensure that activities are designed and carried out in ways that offer each learner the chance to engage in manner that suits them best. Since the students' needs in a typical classroom are much diverse, the English teacher will have to employ different instructional methods which help each of the individual learners interact with the content in a manner that he/she understands it well. For example, the teacher should utilize lecture and recorded conversation methods to cater for the auditory learner; flip charts and PowerPoint presentations to meet the visual learner and writing/note taking and dramatization to meet the kinesthetic learner. By doing this, the learners will be met at their point of learning: they will discover their preferred learning styles and strategies, strengths and weaknesses in learning contexts and leverage on those opportunities for better academic achievement and ultimately acquire life-long learning attitude. Fig.1.1 represents the conceptual framework of Learning Styles and their corresponding teaching strategies for effective outcomes.

It is very important for an individual to know his/her learning style. The reason is that one of the most significant issues in learning to learn, or in becoming effective in the process of learning, is an individual's taking the responsibility for his/her own learning. For this purpose, the individual 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 and minimize students academic performance as well as achievement.

When the learner takes the responsibility of his/her own learning, she/he attributes meaning to the process of learning. He/She develops an understanding of his/her own form of learning styles and becomes much more satisfied with the environment she/he interacts with. Every opportunity for learning is a chance for him/her.

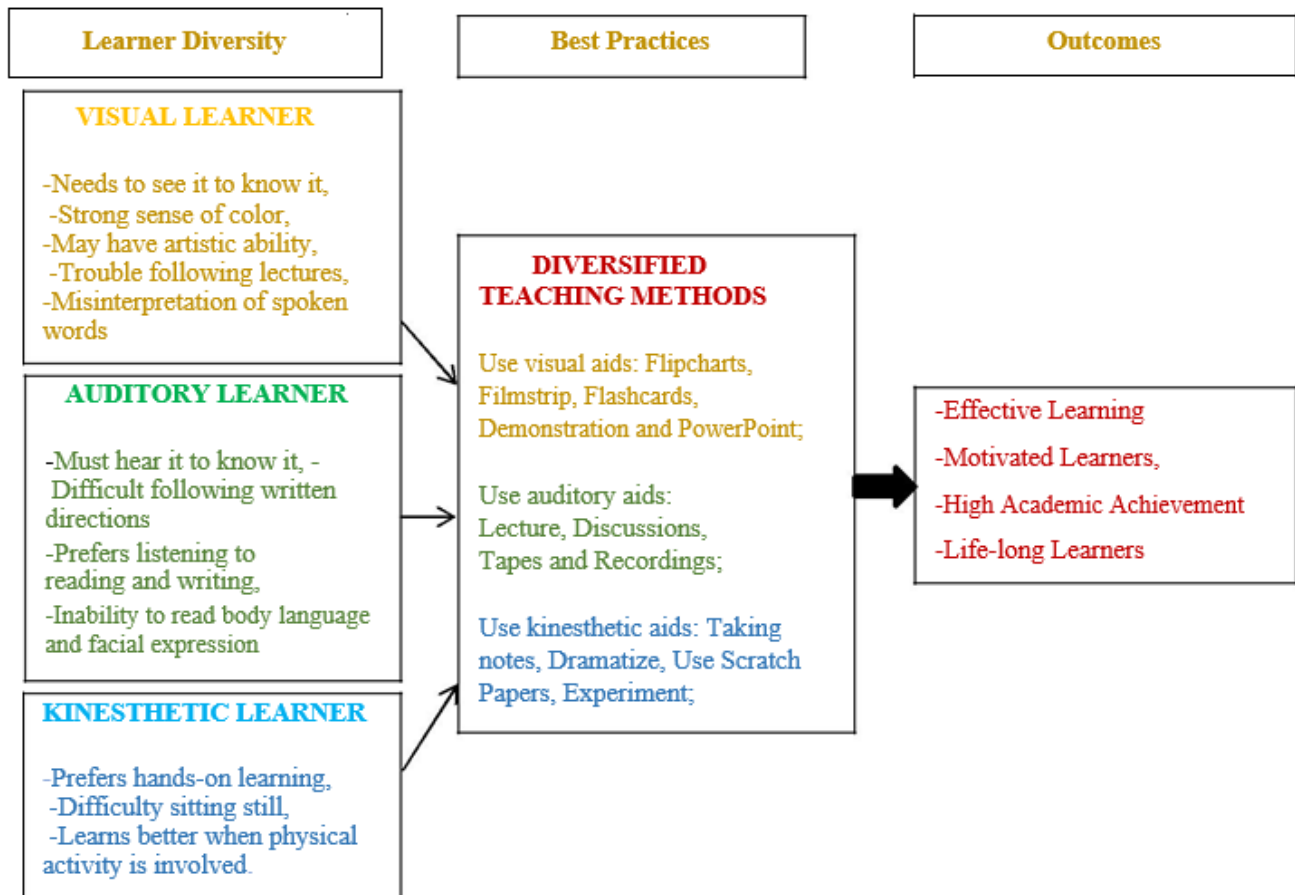


Fig.1: A Conceptual Framework of Teaching Strategies and Learning Styles

3. TEACHING STYLES AND STRETEGIES: A CONCEPTUAL FRAMEWORK

Teaching Strategies are primarily descriptions of the learning objective oriented activities and flow of information between teachers and students. Which instructional method is “right” for a particular lesson depends on many things, and among them are the developmental level of the students, the subject-matter content, the objective of the lesson, and material resources. Teaching styles focus on teachers and their distinct approach to teaching. Differences in teaching styles may also impact on areas such as classroom arrangements, the organization and assessment of activities, teacher interactions with students and pedagogical approaches. Any teacher has experienced meeting students with different learning styles. Three common learning styles are visual, auditory, and kinesthetic. Recognizing these differences and striving to incorporate approaches that are multisensory [i.e. visual (sight), auditory (hearing), tactile (touch) and kinesthetic (movement)] can promote greater interest, enthusiasm, and more thorough learning. By use of multisensory teaching approach may help students to learn through more than one of the senses.

Students have learning differences in one or more areas of reading, writing, listening comprehension, and expressive language. Multisensory instruction can facilitate students’ ability to learn and recall information by combining explicit instruction and multisensory strategies. Multisensory teaching is simultaneously visual, auditory, and kinesthetic-tactile to enhance memory and learning. Links are consistently made between the visual (what we see), auditory (what we hear), and kinesthetic (what we feel) pathways in learning. These teaching techniques and strategies stimulate learning by engaging students on multiple levels. Some researchers theorize that many students have an area of sensory learning strength, sometimes called a learning style. This research suggests that when students are taught using techniques consistent with their learning styles, they learn more easily, faster, and can retain and apply concepts

more readily to future learning. Most students, with a disability or not, enjoy the engaging variety that multisensory techniques can offer (Logsdon 2009).

Fortunately, instructors who wish to address a wide variety of learning styles need not make drastic changes in their instructional approach. It is impossible for instructors to do all that in a course and still cover the syllabus. They can make extensive use of some of the recommended approaches, particularly those involving opportunities for student activity during class. The idea, however, is not to adopt all the techniques at once but rather to pick several that look feasible and try them on an occasional basis. In this way a teaching style that is both effective for students and comfortable for the instructor will evolve naturally, with a potentially dramatic effect on the quality of learning that subsequently occurs. In all classrooms, there will be students with multiple learning styles and students with a variety of major, minor and negative learning styles. An effective means of accommodating these learning styles is for teachers to change their own styles and strategies and provide a variety of activities to meet the needs of different learning styles. Then all students will have at least some activities that appeal to them based on their learning styles, and they are more likely to be successful in these activities.

4. SIGNIFICANCE OF THE PROBLEM

Teaching Educational Sciences to secondary teachers is a complex and multifaceted process. On the one hand, the emphasis should be placed on developing teaching skills. In order to provide an effective instruction, secondary school teachers should take into account the individual differences concerning learning (i.e. learning styles and learning needs) and design appropriate teaching strategies to increase the chances of academic achievement for each student. On the other hand, having in view that these students become in-service teachers, the instructional process which accommodates different learning styles will lead to a development in differentiated instructional approaches for these students, which might have a positive impact on selecting differentiated teaching strategies. It is believed that reflection on their own learning style would help teachers appreciate individual differences related to learning and therefore differentiate their instruction strategies in order to reevaluate these differences (Sloan, Daane, & Giesen, 2004; Tripp & Moore, 2007). In the last decades, a considerable amount of research has been focused on investigating the relationship among teaching strategies, learning styles and academic achievement in higher education (Akdemir & Koszalka, 2008; Arthurs, 2007; Bidabadi & Yamat, 2010; Can, 2009; Contessa, Ciardiello, & Perlman, 2005; Kiguwa, & Silva, 2007; Kolb & Kolb, 2005; Naimie, Siraj, Piaw, Shagholi, & Abuzaid, 2010). More specific, some studies have found that congruence between teaching strategies and learning styles enhances students' academic achievement (Beck, 2001; Felder & Brent, 2005; Rogers, 2009) and assures positive attitudes toward the course contents (Fox & Bartholomae, 1999).

In contrast, other studies revealed the fact that the mismatch between teaching strategies and learning styles has a negative impact on academic achievement and course attendance (Felder & Henriques, 1995). The students may become bored and absent, they may do poorly on tests and get discouraged regarding courses (Naimie et al., 2010). Empirical studies concerning primary and pre-school pre-service teachers, though limited, are mainly focused on identifying students' learning styles (Birenbaum & Rosenau, 2006; Metallidou & Platsidou, 2008; Sloan, Daane, & Giesen, 2004; Tripp & Moore, 2007; You & Jia, 2008). Other studies are also exploring the relationship between learning styles and attitudes towards some academic courses (Peker & Mirasyedoglu, 2008; Sloan, Daane, & Giesen, 2002). To best of researcher knowledge, there is currently a lack of research aiming to accommodate selected teaching strategies with learning styles for secondary-school teachers. In order to overcome these issues, the aim of the intended research is to determine the effectiveness of selected teaching strategies in relation to the learning styles of secondary school students. To make the research study more effective, subject of English has been selected for secondary school students and selected teaching strategies i.e. Direct Method and communicative approach has been tested to significantly enhance learning of English grammar at secondary school level.

5. CONCLUSION

The authors have successfully presented the theoretical and conceptual framework of teaching and learning strategies in higher and secondary education scenario. Teaching Strategies are primarily descriptions of the learning objective oriented activities and flow of information between teachers and students. In the present investigation the researcher intends to examine the effect of teacher as well as learner centered strategies of teaching on the learning style of secondary school students. As teaching and learning strategies are most important for effective teaching learning environment. Hence, the further studies can be explored to study the Effectiveness of Selected Teaching Strategies in Relation to the Learning Styles of Secondary School Students.

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