Overview of Teaching Strategies

Sofiqul Islam¹* Dr. Seema Pandey²

¹ Research Scholar, Department of Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.

² Research Guide, Department of Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.

Abstract – This study aimed to find out the impact of effective teaching strategies on producing fast and good learning outcomes. This paper focuses on teaching strategy as a generalized plan for a lesson which includes structure, instructional objectives and an outline of planned tactics, necessary to implement the strategies

Keyword – Teaching Strategy, Brainstorming, Demonstration, Games, TWA, CAI

·····X·····X

1.1 INTRODUCTION

In achieving a country's national goals, education is one of the most critical factors. It has been increasingly realized in the present era of science and technology that one needs to be trained not only to become a better human being and a better social being, but also to be a better imaginative and productive being.

Education is a philosophically evolved, psychologically formed and socially oriented social concept. It is no longer about instructions or information sharing, but also the learning of useful skills. Training is as ancient as the human race itself. Parents, teachers, politicians, reformers, religious leaders, social workers and so on. Both of them are equally interested in it. Training has thus been known as the sine qua non in all human societies.

Training is a light that indicates the right way for the human race to rise. Not only does the object of education make a student literate, it adds critical thought, knowledgeability, and self-sufficiency. There is hope for success in every area when there is a desire to improve. It is possible to cultivate imagination, and innovation benefits both students and teachers.

Therefore, education is a living activity and not a training for living in the future. "As the school is a reflection of the larger society outside its walls, in which life can be learned by living, whatever the experience the child has in the school must be real and vital to him as that of home or neighborhood."

1.2 WHAT IS TEACHING?

Teaching is a dynamic process and has several variables involved. A final and detailed definition of teaching, therefore, has been difficult to formulate. Educational specialists and psychologists have sought to describe the essence of teaching. Psychologically, teaching is an interaction between the teacher and the teacher, and it is assumed that the outcome of the interaction will bring about the desired improvements in the learners' actions. Keeping in mind the psychological consequences of educational practices, it is important to design instance content, teaching concepts, processes, models and procedures.

Teaching extends to all methods and operations intended to impart knowledge, skills and comprehension at all levels of education. Broadly and simply put, it allows individuals to understand. So, if the student has not learned in the school setting, then the teacher has not taught. Teaching is, therefore, the standard of formal teacher-student interaction in which the main product is learning. In order to establish learning, an instructor basically directs the behaviours of the learners. Direct or indirect, organised or unstructured, the instruction can be. In the other hand, learning is the mechanism by which behaviour changes as a result of experience. Thus, behavioural changes or changes that arise are the measure of learning. But it must be remembered that not all interactions are educational, as positive or negative behavioural changes can be. In any case, the purpose of teaching is to guarantee learning, and if learning has not taken place, then the objective is not accomplished.

2844

1.3 TEACHING STRATEGY

Teaching strategy is a generalized lesson plan that involves structure, teaching goals and an overview of techniques designed to execute strategies (Stone and Morris, in Issac, 2010). In addition, Issac (2010) describes that teaching tactics are the teacher's actions that he manifests in the classroom, i.e., the creation of teaching techniques, providing sufficient stimulation for timely responses, drilling the learned responses, increasing the responses through additional activities, etc.

To suggest careful preparation to do something, we use the word strategy. It implies some orderly way of doing things when we use the word process. Thus, as synonyms, we use the terms technique and method to denote a set of steps one takes to use some general model used in the classroom. Each of these components derives from a larger and more inclusive paradigm (Orlich, Harder, Callahan, Trevisan, & Brown, 2010:4). In addition, the distinction between the teaching approach and the teaching technique is more detailed:

Teaching Method: (1) it is restricted to the presentation of subject matter; (2) strategic methods; (3) it is a micro approach; (4) teaching as an art; (5) efficient presentation of subject matter; (6) classical human organization theory; (7) essential work.

Teaching strategy: (1) it becomes strategies as we attempt to accomplish those goals by some method; (2) strategy is simply a mixture of various methods; (3) for E.g. It is never possible to use the method of lecture or textbook or question response separately; (4) it is a macro approach; (5) it considers teaching as science; (6) its aim is to build a conducive learning environment; (7) it is based on modern organizational theories; (8) (pre-determined goals become strategy); (8) student and teacher actions and their reciprocal relationship.

1.3.1 Teaching Strategy in Curriculum Development

Taba produced a curriculum of Grades 1 through 8 social studies structured around teaching-learning units (Taba, 1971 in Lunenbur, 2011:2). A curriculum model has emerged in the process, which is applicable to all forms of curricula and can be used in many different types of school environments and levels: primary, middle, and high school. The model involves an organisation of five mutually interactive elements and relationships: goals, material, learning experiences, teaching methods, and evaluative measures to reflect a teaching and learning framework.

1.3.2 Design of Teaching Strategies

In essence, performing a teaching operation is a network or series of decisions made by the teacher to correlate the priority elements of his work and to re-build the best solution with regard to the educational situation. To combine methods, processes, strategies, means and modes of organization that lead to an optimum use of the ability of the qualified subjects, the one who instructs must find a logical and acceptable formula (Neacşu, 1990:219-220). The teaching technique is to choose the processes for training in relation to the trained subject. The teaching technique is well-known to be the primary instrument in the design of instruction (Ştefan, 2003; Reiser & Dempsey, 2011; & Regeluth, 2013).

The teaching approach leads to a didactic approach to teaching and learning, integrating and optimally arranging the participants' processes, means and ways of grouping (Cerghit, 2006). Integrated into the organizational frameworks, these components are based on a holistic vision and are structured to ensure successful and innovative information learning and to streamline the training process. The definition of "strategy" is used both at the macro, intermediate and micro stages, the latter being specifically related to teaching pedagogy, philosophy of training and practice. Adopting a plan includes adopting a guideline for action and associating it with the use of certain methods and means, a certain global way of organizational learning and learning conditions. It should, obviously, be pointed out that, according to the priorities, the level of the community we work with, the material covered, etc., we actually follow mixed and combined strategies.

It is known that every teacher has great freedom to design their work, draw diagrams, graphs, value tables or simply mental schemes that can help improve their ability to determine and use combined approaches, tools and other training resources effectively (lurea, Neacsu, Safta & Suditu, 2011; Keegan, 2013. In addition, experience has shown that each teaching activity is unique through

1.3.3 Features of Teaching Strategies

As described before, teaching strategies imply a way to handle a teaching situation. It is important to emphasize their essential features:

(1) without the rigidity of a law, they have a normative character; they are the training component of complex circumstances, marked by versatility and internal elasticity. You should "adjusted" and adapt the general teaching method outlined by instructional techniques to the training

events and conditions. The strategies mainly bear the footprint of the teaching style, imagination and personality of the trainer;

- (2) they have a structuring and modeling role to connect the learning situations where learners are placed and to activate their psychological learning mechanisms;
- (3) the strategic components (methods, means and organizational forms of the job) shape a framework, establishing the connection A teaching strategy can be broken down into a series of tasks, steps, rules of behavior specific to different teaching sequences so that each decision indicates the transition to the next sequence by taking advantage of the knowledge obtained in the previous step;
- (4) they do not recognize either the methodological system chosen or the basic teaching method because the teaching strategy is directed at th (lonescu & Radu, 2001:184-185).

1.3.4 Kinds of Teaching Strategies

There are many kinds of teaching strategies that can be applied in the language teaching process. Wehrli (2003) explained the teaching strategies as follow.

Brainstorming

Brainstorming is a method in which judgment is delayed until a maximum number of ideas has been generated to produce several ideas/options. Almaghrawy also explains brainstorming in Al-khatib (2012: 31) as a community innovation platform for general ideas.

In addition, in Al-khatib (2012: 31), Sayed suggested some brainstorming for the students. These are: (a) helping students solve problems; (b) helping students to learn from and build on other people's ideas through development; and (c) assisting students' solidarity and developing relationships between them and assessing others' views.

Furthermore, brainstorming has several benefits: (a) actively involving students at higher levels of thinking; (b) promoting peer learning and building synergies; (c) promoting logical thinking; and (d) helping to achieve consensus among groups.

On the other hand, brainstorming has certain limitations. (a) requiring discipline for learners; (b) may not be successful with large groups; and (c) may contribute to group thinking.

Case-based Small-group Discussion

Tiny groups of 5-10 solve case-based tasks in this teaching strategy, sharing points of view when

operating through a problem-solving mechanism. Srinivasan, Wilkes, Stevenson, Nguyen, and Slavin (2007) clarified in this teaching strategy process that the group, with some advance planning, focuses on innovative problem solving. Discovery is facilitated in a format in which both students and facilitators share responsibility for cardinal learning points coming to a close.

Small-group discussion on a case-based basis has some advantages. They can (a) engage participants actively and encourage peer group learning; (b) allow participants to discuss pre-existing information and expand on what they know; (c) facilitate the exchange of ideas and recognition of common concerns; and (d) promote the development of critical thinking skills;

Case-based small-group debate, on the other hand, has certain drawbacks. (a) it can potentially degenerate into off-task or social conversations; (b) it can be a challenge for everyone to be involved, especially in larger groups; and (c) it can be challenging for participants because they have substantially different levels of knowledge and skills.

Demonstration

Demonstration involves carrying out an exercise so that learners can see how it is performed to better prepare learners for the transition of theory to practical practice. In addition, the teacher's presentation technique requires teaching learners how to do something (Adekoya and Olatoye, 2011).

The benefit of demonstration is to (a) assist individuals who learn well by modeling others; (b) encourage self-confidence; (c) provide opportunities for focused questions and answers; and (d) allow focus to be concentrated on specific information rather than general theories.

The limitations of Demonstration: (a) is of limited benefit to individuals who do not learn best from watching others; (b) may not be suitable for the different learning rates of the participants; and (c) involves professional knowledge from the demonstrator if highly technical tasks are involved;.

► Games

As a motivator and incentive for implementation of concepts, games are used to introduce competitiveness, engagement, exercises, and input into the learning process. The carefully organized use of classroom games (e.g. to practice such verbs, tenses, questions, locatives, etc.) brings some interest to a classroom (Brown, 2000: 146).

The benefits of the games: (a) includes learners actively; (b) can add or regenerate motivation; (c) fosters team learning and collaborative skills; (d)

creates a challenge that can lead to trust in the knowledge and expression of the material; (e) provides input; and (f) can create a "fun" learning atmosphere.

The limitations of Games: (a) can create feelings of in-group/out-group; (b) can demotivate students who are not competitive by nature; (c) can create feelings of inadequacy in those who are not as skilled or strong; and (d) can discourage innovation if the format is very rigid and the emphasis is strongly on winning.

► Independent Study

Independent research is a training method aimed at enhancing and promoting other teaching practices. Using resource materials, learning practice is normally performed entirely by the individual learner (or community of learners). Using computer/webbased technology, it can be completed. Alberta Learning (2002: 73) also describes independent study as an individualized learning experience that enables students to choose a focus on the subject, identify issues or questions, collect and evaluate data, apply skills, and develop a product to demonstrate what has been learned.

The benefits of independent research: (a) encourages independent learning abilities; (b) enables learners to succeed at their own pace; and (c) increases other learning experiences.

The limitations of independent research: (a) may be detached from immediate goals; and (b) it may be difficult to identify/access suitable materials.

1.3.5 Principles of Effective Teaching Strategy

Devlin and Samarawickrema (2010: 113-114) proposed ten principles of effective teaching strategy. They are:

- (1) Teaching and curriculum design need to be focused on meeting students' future needs, implying the development in students of generic capabilities such as critical thinking, teamwork and communication skills, amongst others;
- (2) Students must have a thorough understanding of fundamental concepts even if that means less content is covered;
- (3) The relevance of what is taught must be established by using real-life, current and/or local examples and by relating theory to practice;
- (4) Student beliefs must be challenged to deal with misconceptions;

- (5) A variety of learning tasks that engage students, including student discussion, need to occur in order that meaningful learning takes place;
- (6) Genuine, empathetic relationships with individual students should be established so that interaction can take place;
- (7) Teachers should motivate students through displaying their own enthusiasm, encouraging students and providing interesting, enjoyable and active classes;
- (8) Curriculum design should ensure that aims, concepts, learning activities and assessment are consistent with achieving learning outcomes related to future student needs;
- (9) Each lesson must be thoroughly planned but flexible so that necessary adaptations may be made based on feedback during the class; and
- (10) Assessment must be consistent with the desired learning outcomes and should, therefore, be authentic tasks for the discipline or profession.

1.4 SOME TEACHING LEARNING METHODS

Instructivist Vs. Explorative Teaching

Successful classroom instruction is the product of multiple techniques. In general, it is a common misconception that learning by experimentation is often the best way to learn, especially in science classrooms. There is, however, a strong controversy in science education over 'Instruction Vs Experimentation.' Cognitive psychologists such as Bruner and Piaget emphasised experimentation, while teaching proponents argued that I much of what children, instructors and scientists know about science has been learned, not discovered; ii) teacher-centered approaches have been very effective for mechanisms that are usually more difficult for students to explore on their own and iii) discovery learning does not require errors (Adel son, 2004).

With various analytical viewpoints, contrasting influences from different experimental works, experimental opinions and stakeholder input in the process, the debate will continue. The truth remains that for the teachers and the pupils, no one solution will act as the one for all panacea. The choice of a teaching approach is determined by the essence of the subject matter, the age and skill level of the students, the time available, physical

and human capital and, above all, the educational purpose.

A very short overview of the features of the sum of the most popular teaching techniques, emphasising the argument (Kidlike, 2016). It shows that some of these approaches are specifically arranged and shaped according to the tradition of positivist thought, behaviourism, and the theory of information processing, although some of them are fully versatile and totally constructivist-style. Methods were originally categorised into objectivist teaching in the former grouping and later referred to as explicit teaching (Coles, 2001; Della Paz and Graham, 2002;Gerstein*et al.*, 1986) or strategies in theletter category can be grouped under constructivism. (Kazoo*et al.*, 2001)

Direct Instruction:

Direct training under objectivist educational methods is one of the core instructional strategies. Direct instruction has been described as a 'structured, carefully sequenced and scripted model of instruction' by the National Institute for Direct Instruction, USA. The goal of direct instruction is to "do more in less time" by closely monitoring the features of curriculum design and teaching delivery methods to accelerate student learning. Three main components are used in the configuration and delivery of the programmer; I software me design, ii) curriculum organisation and iii) instructor student instruction. Programmed architecture relates to I thorough review of content that is extended to mores, ii) direct communication iii) explicit instructional structure IV) capability series and v) arrangement of track. Instruction organisation tasks include I instructional classification using versatile capability grouping (ii) pre-specified instructional time and (iii) continuous monitoring.

Teacher student preparation requires I active involvement of students offering sufficient space for students to respond and receive input, ii) unison reaction iii) signals by providing signs iv) timing v) mastery instruction vi) correction of errors and motives (March and Martello, 2004).

A standard direct instruction lesson involves clear and careful sequence guidance provided by the instructor (model) along with regular opportunities for students to exercise their abilities with input provided by the teacher (guided practise) and then over time on their own (independent practise) (distributed practice).

A variety of experiments have been undertaken to assess the feasibility of direct guidance. Some reports have shown that direct instruction has created a higher degree of student success and problem-solving capacity relative to other styles. However, some others argued that, relative to other less conventional approaches, direct instruction was

Sofiqul Islam¹* Dr. Seema Pandey²

successful where only student achievement is considered (Adams 1996).

Gagne's Nine Events Of Instruction:

The learning hierarchies of Gagne claim that successful learning from a precisely constructed instructional method is better done. "When supported by a well-designed training system, learning is most effective and it is complete when the learning system contains well-structured and sequential lessons, objective learning activities and evaluation" (Rowdier, 2006).

The teaching principle of Gagne is a synthesis of behavioralism and evidence Principles of manufacturing. His recommendation was that intellectual abilities evolve 'structurally, linearly and sequentially' in stages. If the foundational capabilities are thoroughly attained, higher order talents cannot be accomplished. Learning activities can be organised as follows: identification of stimuli, generation of responses, follow-up of processes, vocabulary use, discrimination, idea creation, application of rules and problem solving. Gagne's reported learning outcomes include:

(a) intellectual ability, (b) cognitive techniques, (c) verbal (rote learning) knowledge, motor skills and attitude.

i) acquiring attention, ii) reminding learners of the target, iii) inducing memory of previous learning, iv) introducing stimuli, v) providing learning instructions, vi) eliciting results, vii) providing input, viii) reviewing performance, and ix) optimising retention and transition are the nine educational activities of Gagne.

It is to be remembered that the order is not absolute and relies on the instructional organisation.

Table 1.3: Gagne's Nine Events of Instruction

1. Gain attention	Present a good problem, a new situation or a novel idea to gain students' attention. (Use John Keller's ARCS (Attention, Relevance, Confidence & Satisfaction) Model)		
2. Informing learner of the objective	In some manner or other, the learner should know the kind of performance that will be used as an indication that learning has, in fact, been accomplished. Objectives are to be communicated effectively to the learner (use words, even pictures, if Appropriate).		
3. Stimulate recall of prerequisites	The previously acquired capabilities must be highly accessible to the learner. This must be ensured by having learners recall previously acquired capabilities just before the new learning Takes place.		

www.ignited.in

4. Presenting the stimulus material	Stimuli that are to be displayed are those involved in the performance that reflects the learning. For example, if learning a concrete concept is the objective of the lesson, the concept's physical characteristics are to be	1. 2.
	emphasized. This can be done by enlarging the differences and similarities among examples. And non-examples of the concept to be identified.	
5. Providing learning guidance	The amount of hinting or promoting will vary with the kind of learner and the difficulty of the task/the lesson objective.	3.
6. Eliciting performance	Having learners show that they can carry out the task. This is Usually done informally.	4.
7. Providing feedback	Once the correct performance has been exhibited by the Learner,	Infor indiv

and transfer understanding and to assure the transfer of learning. Source: Applying from constructivist and Objectivist Learning Theories in the Design of a Web-Based Course: Implications for Practice (Mahan Mowlem, 2001).

should

learner's performance.

learner's performance.

the

correctness/appropriateness of the

At this level the teacher gathers

formal and convincing Evidence

(valid and reliable) regarding the

Varieties of new tasks are to be

assigned to enhance the Learner's

be

feedback

of

degree

there

concerning

Constructivism:

8. Assessing

performance

9. Enhancing

retention

Constructivism is a learning theory founded on the idea that information is developed on the basis of mental activity by the knower. The term came from the Latin word 'Constructed'-meaning to organise or form (Tamar, 2011). Constructivism is based on the idea that we construct our own interpretation of the world we exist in by drawing on our experiences. Therefore, learning is a method of modifying our conceptual modules in order to fit new experiences.

It can be traced back to the roots of constructivism. Via training with his followers, Socrates helped them to create definitions on their own rather than passing on knowledge. Immanuel Kant believed that their view of the universe is influenced by the way learners interpret stimuli from their surroundings. John Dewey claimed that education should take into consideration the previous ideas and desires of students. Jean Piaget suggested that through assimilation and accommodation, children develop their own ideas. Lev Vygotsky emphasised the significance of experiences in learning between human, interpersonal and cultural variables.

The Basic Principles (Maybe, 2006) of Constructivism:

- Information is deliberately constructed, not automatically acquired from outside, by the learner.
- With current information about the phenomenon, learners come to the learning condition. Some of them linger in the shortmemory, and others term are well established in the long-term memory and are profoundly rooted.
- Learners have opinions of their own on things in the universe.
- In their ideas, there are also parallels and typical trends.

mation is systematically constructed by individuals through a sequence of internal analytical phases or phases, according to cognitive constructivist theory, and learning is a continuous effort or adaptation to the world through assimilation & accommodation. Awareness is a consequence of social interaction, according to Dewey (1933) (authentic task in meaningful, reasonable settings), and comprehension is generated by 'assembling' knowledge from different sources relevant to the problem at hand. Slaving (1994) and Duffy & Jonahed (1992) show that there are strong origins in the history of education in the constructivist classroom teaching movement. The constructivist approach has a long-lasting tradition in the theory and practise of education, according to Duet (1994). It is an information theory that is focused on philosophy, psychology, cybernetics, genetics, ecology, natural sciences. sociolinguistics, and education (Stein, 1994, Bethel & Dock, 2004). Heylighen (1997) argues that it has its origins in the synthesis of rationalism and empiricism by Kant, where it is noted, and that the subject has no clear access to direct truth that can only build knowledge through the organising of encounters using simple built-in cognitive concepts. Vygotsky also clarified how social and cultural contexts lead to a general perception of artefacts and events, embracing Piaget's perspective of how individuals construct private understanding of truth by problem solving with others. Furthermore, truth is no longer empirical, because information is simply co-constructed and transmitted to people as they are "interact with one another and with the cultural artifacts, such as pictures, texts, discourse and gestures."

Constructivism is a learning perspective focused on the conviction that knowledge is not a thing. The instructor at the front of the students sitting passively on their desks will clearly offer that. Instead, awareness is developed by learners through an involved, mental phase of development. Learning, to a considerable degree, depends on what we learned already. When we adapt and compare to or with old ideas, new ideas emerge.

Important learning happens by rethinking old concepts and coupling them with fresh assumptions about new ideas that clash with our old ideas. Constructivist classrooms are so organised that learners are absorbed in old interactions in which they can participate in exploration into sense creation, creativity, invention making connections & personal reflection. Teachers need to learn how individuals create awareness and meaning using their own interactions, previous knowledge and expectations, as well as their physical and interpersonal contexts. The purpose is to create a democratic atmosphere in the classroom that offers realistic experiences for independent learning (Gray, 1997).

Constructivism is a change between rote learning to learning on the basis of perceptions and learner truth. Constructivism is a social psychology outgrowth. Constructivism means that, regardless of their own context & interpretation, students study and should not merely memories or carry in other interpretations of truth. They come to know what they really know with some experience, thoughts and comprehension. Researchers demonstrate that constructivist methodology facilitates constructive meaningful learning, supports analytical thought and mapping of ideas, which is helpful in achieving beneficial education objectives. The focus on the individual's position, on the significance of building meaning & understanding, are the very elements that make the theory desirable to educators. Researchers need to be mindful of the role of previous experience in the learning of students, realizing that learners are not blank slates waiting for knowledge to be filled. Alternatively, students carry with them a wealth of prior insight, past encounters and the still learned material, which they use in creating new understandings. Teachers will plan teaching that goes beyond rote learning to substantive learning that is more likely to contribute to stronger, longerlasting understandings by approaching learning as an engaging phase, taking the previous experience of students into account, building on preconceptions, conflict. and eliciting cognitive Established awareness helps to refresh the view of the successful learner within the teaching-learning phase of new learning. Prior awareness has been found to have a huge effect on how people make sense of education (Jones, 2002).

Constructivism's method is a view of learning founded on the assumption that Information is not a thing that can provide students at their desks with a supply provided by the teacher at the front of the classroom. Instead, learners gain awareness through an active conceptual phase of growth. Depending to what new ideas emerge, learning is an effective way to adapt and compare to our old ideas (Audrey Gray, 1997). The learning environment in the classroom must provide children with rich interactions and opportunities to develop awareness in depth and in ways that make sense of their current knowledge, based on their previous experiences (Cox-Peterson & Olson 2000).

Computer Assisted Instruction:

Since the introduction of technologies, numerous changes have been introduced into instructional architecture. One of them is Computer-Assisted Guidance (CAI).CAI, also referred to as computerbased instruction (CBI), signifies the use of computers to "mediate the flow of information in the instruction process and the complementary means" (Rush by, 1909; Slue 2000). The Article Notes (1993)

"Programming a computer to handle the types of exercises that the teacher traditionally gives to the black board, a textbook or a worksheet" The main uses of CAI or CBI are to assist in—

Drill and exercise

- (Exercises designed to increase fluency refresh a skill or a body of knowledge).
- Tutorial (used for remediation, enrichment etc.).
- Educational Game (may be used as substitute for worksheets or exercises).
- Problem management (sometimes focus on specific content and sometimes designed to promote general problem solving abilities).
- Emulation, simulation (Mimic of physical objects or phenomena, processes, procedures and situations).

As a studying and training psychology, both objectivism and constructivism should be used with CAI, as seen in the table below.

Table 1.4: CAI System and Properties of Each System

CAI system	Property	Learner	Explanation	Application
Simulation	Constructivism oriented	Expert seers	Participatory, Active	Controllable experiment
Tutoring system	Objectivism oriented	Novice users	Passive, Sequential	Basic fact or concept
Hypermedia system	Constructivism oriented	Intermediate users	Active, Nonlinear	Dictionary or Manual Searching, DB Application
Drill and practice	Objectivism oriented	Novice users	Passive, Sequential	Memorization
Information system	Constructivism oriented	Expert users	Active Creative	Discussion or Survey
Distance learning	Both Constructivism and Objectivism	Intermediate users	Linear or Nonlinear	Available to the various types of contents

Source: Applied from The Selection of Learning Theories and Representation Techniques in Computer Aided Instruction (Kim and Lim, 2002).

Table 1.5: Opposite sides of Objectivism and **Constructivism in Different Perspective in CAI** System

	Objectivism	Constructivism		
Knowledge	Static, Structured	Dynamic,		
_	Math or Physics	Unstructured		
		Humane Studies		
		or Sociology		
Reality	Predictable,	Not predictable,		
	Manageable,	Complex, Chaos		
	Regular			
Properties	Truth or knowledge	Truth or		
	is absolute	knowledge is		
	One that cannot	something		
	change.	meaningful and		
		adaptable to		
		anyone		
Keywords Understanding,		Creation,		
	Consistency,	Construction,		
	memorization	Application		

Source: Applied from The Selection of Learning Theories and Representation Techniques in Computer Aided Instruction Kim and Lim, 2002.

The early work of Gouache & Crick (1974) advocates computer-assisted teaching, and one of its eleven guidelines for servicing remedial students efficiently is to accommodate individual variations and enable students to learn their own speed. They did not support any clear approach, but asserted that lectures are not ideal for remedial students, according to Gouache & Crick. Typically, developmental students do not have the abilities of reading & listening to excel in conventional teaching. By being successful learners, by experiencing and doing, instead of hearing, they understand best. Computer-assisted teaching includes watching and performing the virtual tutorials & other multimedia as students use them. It is planned to complement the teacher but not substitute him. In conventional classes, students undergo preparation, but the computer affects how they learn outside the classroom. Drill & practice programme directs students through drills designed to create precision and speed, ensuring prior guidance has been given to the students (Kulak & Kulak, 1991; Louse, 2008).

CAI still has some strengths and drawbacks, as many other techniques.

Major Benefits: i) Useful for teaching abstract content; ii) Delivering digital demonstrations to improve learners' encouragement.

Limitations: i) There will be expensive machinery and applications, (ii) Production requires time and money, (iii) Unsophisticated execution restricts its benefits Despite the restrictions, numerous studies have proposed that the use of conjunction. It is able to deliver productive learning results with the lecture process.

REFERENCES

- 1. Adekoya, Y. M. & Olatoye R. A. (2011). Effect of Demonstration, Peer-Tutoring, and Lecture Teaching Strategies on Senior Secondary School Students' Achievement in an Aspect of Agricultural Science. The Pacific Journal of Science and Technology, 12, pp. 320-332.
- 2. Adelson D. (2004) Rehabilitation & ongoing support after pediatric TAI. Journal of head Trauma rehabilitation.
- 3. Al-khatib, B. A. (2012). The Effect of Using Brainstorming Strategy in Developing Creative Problem Solving Skills among Female Students in Princess Alia University College. American International Journal of Contemporary Research, 2, pp. 29-38.
- Brown, H. D. (2000). Teaching by 4. Principles: An Interactive Approach to Language Pedagogy. New York: Longman.
- Cerghit, I. (2006). Metode de învățământ. 5. laşi: Editura Polirom.
- 6. Devlin, Marcia and Samarawickrema, Gayani. (2010). The criteria of effective teaching in a changing higher education context. Higher Education Research & Development, 29: 2, pp. 111 - 124. DOI: 10.1080/07294360903244398.
- 7. lurea, C., Neacsu, I., Safta, C. G., & Suditu, M. (2011). The Study of the Relation between the Teaching Methods and the Learning Styles. The Impact upon Students' Academic Conduct. Procedia-Social and Behavioral Sciences, 11, pp. 256-260.
- 8. Ionescu, M., & Radu, I. (2001). Didactica modernă. Cluj-Napoca: Editura Dacia.
- 9. Issac, Jerin C. (2010). Methods and Strategies of Teaching: an overview. Pondicherry University Press
- 10. Keegan, D. (2013). Theoretical Principles of Distance Education. London: Routledge.
- Lunenburg Fred C. (2011). Curriculum 11. Development: Inductive Models. Sam Houston State University. Schooling Volume 2, Number 1.
- 12. Neacşu, I. (1990). Instruire şi învățare. București: Editura Științifică.

- Orlich D.C., Harder R.J., Callahan R.C., Trevisan M.S., Brown A.H., (2010). Teaching Strategies: A Guide to Effective Instruction, Ninth Edition. Wadsworth, Cengage Learning
- 14. Regeluth, C. M. (2013). Instructional-design Theories and Models: A New Paradigm of Instructional Theory. London: Routledge.
- 15. Reiser, R. A., & Dempsey, J. V. (2011). Trends and issues in instructional design and technology. Pearson.
- 16. Srinivasan, Wilkes, Stevenson, Nguyen, and Slavin. (2007). Comparing Problem-Based Learning with Case-Based Learning: Effects of a Major Curricular Shift at Two Institutions. Academic Medicine, 82, pp. 74-82.
- 17. Ştefan, M. (2003). Teoria situaţiilor educative. Bucureşti : Editura Aramis.
- Wehrli, G., Nyquist, J.G. (2003). Creating an Educational Curriculum for Learners at Any Level. AABB Conference.

Corresponding Author

Sofiqul Islam*

Research Scholar, Department of Education, Sri Satya Sai University of Technology & Medical Sciences, Sehore, M.P.