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Development of Modern Teaching Modules for The Students of Rajasthan

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ABSTRACT
The impact of these modern teaching modules on student achievement is assessed through a comprehensive evaluation of academic performance, including standardized test scores and overall grades. The use of various forms of modern technology in the classroom emphasizes the development of students' life skills and moral sensibilities. This is referred to as a modern teaching system. In Rajasthan, a modern educational system makes learning more engaging. The teaching profession in schools is currently being revalued in light of technology. Various advantages of modern technology are offered in terms of school learning. Currently, technology has improved education by making it more appropriate for students and teachers. Different types of learning activities through modern technology enhance the education system in Rajasthan. The research focuses on the design and implementation of innovative teaching modules tailored to the specific context of secondary education in Rajasthan. These modules incorporate multimedia elements, interactive learning strategies, and technology integration to engage students and enhance their understanding of various subjects. Additionally, the study explores the perceptions of both students and teachers regarding the effectiveness and usability of these modules. The findings aim to provide insights into the potential benefits of modern teaching methods in improving academic outcomes and fostering a positive learning environment in secondary schools in Rajasthan. The implications of the study could inform educational policies, curriculum development, and teaching practices to better align with the needs and expectations of students in the modern educational landscape.

Keywords: Modern technology, educational system, learning activity, teaching

INTRODUCTION
Modern teaching system refers to the application of different types of advanced technology that emphasize the life skills of students, and develop their sense regarding morality. Modern teaching system creates a learning process more attractive for the students in Rajasthan. Nowadays, technology has become a new revaluation in the teaching profession at school. Modern technology provides different types of benefits regarding the learning process at school. At present, modern technology has not only made education more suitable but also made it more interesting to attract students. In Rajasthan, modern technology helps to improve education through the use of digital whiteboards, augmented and virtual simulations, and different types of games that are related to learning. Rajasthan provides different types of innovative programs for students to be involved in primary education through the implementation of modern technology.

This paradigm shift has placed a strong emphasis on the development and implementation of innovative teaching modules that are aligned with the needs and aspirations of students [1].

Education has undergone noticeable changes as a result of modernity. In today's competitive environment, students' academic accomplishment and general performance are crucial. The total accomplishment of pupils is influenced by a variety of circumstances, yet independent thought is challenging in traditional schooling. As a consequence, from being teacher-oriented to becoming student-oriented, education has advanced significantly. Rather than having students memorize material in order to pass an exam, a student-centered education system requires innovative teaching methods that actively center on the learner's thinking [2]. Every generation offers the goals that influence education in its age a new shape.

The teaching-learning process has to be upgraded in order to produce people that are well-rounded and equipped. In the classroom, instructors and students engage in an essential activity called the teaching-learning process. As part of the teaching-learning process, information and skills are transferred from the one imparting the knowledge to the person receiving the information and abilities. Many teaching techniques are used in the contemporary classroom. The teacher's philosophy is to provide a setting that is favorable to learning. A teacher has to use a good approach in order for instruction to be successful. To be effective, one must bring out the best in kids, not strive for perfection or provide a flawless performance.

Classroom interactions in certain areas may change, when appropriate, toward competency-based learning and education in order to close the gap between the status of learning outcomes today and what is really required.

To accomplish this, experiential learning has to be implemented at every level. Each topic has to use both traditional teaching and story-based pedagogy in order to investigate the relationships between various areas. Many effective tactics that are still applicable for achieving a more constructivist style of learning are outlined in the NCF 2005. As a result, innovative approaches to teaching are required. The current research attempts to investigate how the social constructivist model of instruction might help students learn more in an engaging and fun way.

Positive or negative reinforcement shapes the learner's behavior from the beginning, when they have a blank slate. The likelihood that the antecedent conduct will recur is increased by both positive and negative reinforcement. Punishment, on the other hand, lessens the chance that the previous conduct will recur. Positive signals the administration of a stimulus, whereas negative signals its withholding. Accordingly, learning is described as a shift in the learner's behavior [6]. Numerous behaviorists have conducted animal studies; Pavlov, for instance, studied dogs and then extrapolated his findings to people. According to behaviorist views popularized by Watson, the person who created the stimulus response model, individuals pick up knowledge via watching one another and then modify their behavior as a consequence.

The learner's external environment is what drives the transformation, which calls for reinforcement and repetition. Through his trial and error hypothesis, Thorndike further argued that learning would happen when the brain could systematically connect the behaviors into patterns and that learning was influenced by a learner's recognition of the benefits of the behavior change.

In order to learn, learners correlate stimuli with reactions according to Pavlov's classical conditioning theory. According to Santrock (2006), Skinner's operant conditioning is a kind of learning in which the outcomes of conduct alter the likelihood that the behavior will occur.

Impacts of Behaviorism on learning: There are drawbacks to behaviorism. It is challenging to research students' comprehension, reasoning, and thinking since it is based on visible behaviors, despite the fact that these skills are vital to education. Because it defines multiple universal rules of conduct and simply takes into account observable behavior, this theory is reasonably easy to grasp. Its methods of both positive and negative reinforcement may be particularly helpful in treating a variety of human illnesses, including as antisocial behavior, anxiety disorders, and autism. Teachers that choose to praise or penalize their pupils' conduct often use behaviorism [7].

Cognitive Theory: The internalizing mental processes that result in the capacity to assess a situation and take deliberate action are the focus of cognitive theory. While cognitivists acknowledge some of the ideas presented in the behaviorist model of learning, they contend that learning really happens when the brain processes and rearranges the information it is given. They think there are several appropriate answers to a lot of issues. As a result, the discovery approach was suggested by several cognitive theories. Using this approach, a teacher guides a student in choosing and resolving an issue [9]. In addition to directing the pupils toward the relevant resources and data, the instructor poses thought-provoking questions. However, it is required of every student to find a solution on their own. Cognitive theories explain brain-based learning by looking beyond behavior. Cognitivists take into account how learning is facilitated by human memory. To educators who operate within the framework of cognitive theory, the physiological mechanisms involved in classifying and storing knowledge and events into short- and long-term memory are crucial. In opposition to behaviorism, persons are observable entities that need active participation in order to learn and whose behaviors are the result of thinking, not programmed creatures that just react to environmental cues.

Humanist Theory: The 1960s saw the emergence of the humanist worldview, which emphasizes the potential, freedom, and dignity of every person. A humanist thinks that studying the person as a whole is essential, particularly as they mature and change over the course of their lives. Thus, research on motivation, goals, and the self is particularly interesting. The fundamental concern for human progress in learning is upheld by humanistic thought. Two important humanist theorists are Abraham Maslow and Carl Rogers. Maslow is the most well-known pioneer of the humanism movement, as shown by his hierarchical theory of motivation. Personal development and satisfaction in life were considered by both Maslow and Rogers to be fundamental human motives. This implies that everyone aspires to continually improve themselves and develop mentally in various ways [11]. The self-directed learning approach, in which we are driven, accountable, and guided to learn according to our motives, is most obviously related to this learning paradigm. They emphasize how vital emotions are to learning. A teacher should support students in gaining the necessary information and skills while also assisting them in exploring their emotional needs and aspirations, in accordance with humanistic ideology.

Constructivist Theory: According to constructivist theory, learning is an active process in which the student creates new ideas or concepts using prior and present information. Learning happens when past information is actively constructed and reorganized via a variety of connections to

previously acquired knowledge and different possibilities. It is difficult to teach in a constructivist classroom because one must direct students' thinking toward a deeper comprehension. A teacher must listen to the ideas, concepts, and ways of thinking of their students while also acting as a facilitator and guide. Peer pressure is not required, although it may assist raise issues and encourage thought. It is the student's responsibility to actively develop and produce concepts in their minds.

LITERATURE REVIEW

The goal is to identify the many aspects of arithmetic success in primary school students. A pre- and post-test were included in the design process of the quasi-experimental study. A Perception Scale was given to the experimental group as part of the data collecting process, and a Mathematics success Test was used to gauge student success. The experimental group's motivation in taking part in a group constructivist classroom was shown to be correlated with their notable improvement in mathematics proficiency when compared to the standard teaching technique [22].

A research on constructivism in scientific education was carried out by Sridevi (2008). The major goal was to ascertain how the constructivist method affected students' perceptions, the development of their science process abilities, and their attitude toward science. The chosen design was non-equivalent control and quasi-experimental. Selecting the schools included the use of purposeful sampling. There were 31 females and 37 guys in the sample. The findings gained indicate that the constructivist method was found to be beneficial in raising students' scientific achievement as well as their understanding of nature and science process abilities. It was discovered that females had a more positive attitude toward science than boys did [23].

Prabha (2010) noted that the National Curriculum Framework-2005 placed a strong emphasis on fostering a constructivist learning environment in science classrooms. Accordingly, the author of the paper "Characteristics of a Constructivist Classroom in the Context of Science Education" examined some of these traits in the context of science education. Constructivist classrooms are child-centered, recognize and value students' prior knowledge, foster interactive learning between students and teachers, practice democratic classroom management, teach students from beginning to end, and integrate assessment into the teaching and learning process. Constructivist classrooms vary from typical classrooms in a number of ways, as shown by these features [24].

In their work "New Paradigm in Education: Constructivist Approach," Gautam and Kulshrestha (2011) go over the idea and principles of constructivism. The author discusses constructivism's five fundamental tenets.

A control group design with a pre-test and post-test was used. Class VIII people made up the study's population (CBSE). There were 50 experimental groups and 50 control groups in the sample. Sampling in two stages was used. It has been discovered that students taught using constructivist learning-based instructional materials perform better than those taught using standard approaches [26].

Haribhai and Kumar (2012) examine the constructivist 5 E model's efficacy. The primary goal was to investigate how well this model performed in terms of accomplishment and retention when

compared to the lecture technique. One rural school and two randomly selected urban schools were used as the study's sample. The findings imply that the constructivist 5E model was successful in both schools in terms of performance and retention. In order to improve student success and retention, it was recommended that science instructors use the 5E approach [27].

The relevance of concept maps in the constructivist method for individual scientific learning accomplishment was questioned by Jena (2012). The research investigates the suitability of hierarchical concept maps and cooperative modes for success in scientific idea learning. 64 sixth graders from Rajasthani primary schools made up the population of the experimental procedure used. The study's main conclusions were that, as compared to individual learning, hierarchical concept maps and cooperative spiders performed better in teaching scientific concepts, and that concept maps might be used to apply constructivism [28].

A research on the impact of a constructivist approach to science and technology education was carried out by Raval (2012). The major goal was to evaluate how well constructivism-based animal categorization instruction works. A post-test, opinion scale, interview schedule, and quasi-experimental methodology were used. The method of purposive sampling was used. Students in the ninth standard made up the study's sample. The main conclusion was that, as compared to the conventional technique, the constructivist approach was more successful.

Chowdhury (2013) carried a research to determine the impact of constructivist 5Es instruction. The research was quasi-experimental in its design. There were two tests administered: one for the class nine kids, which had sixty total. Comparing the constructivist method to conventional education, the results showed that pupils' performance in mathematics had improved [31]. In their article, Chabra, Chetna, and Mathur (2013) spoke about the difficulties facing teacher educators as well as the evolving role of educators in general and constructivist education in particular. Consequently, there has been a suggestion to alter teacher education curricula in order to equip educators for the many tasks and responsibilities imposed by emerging technologies and structures. Programs for preparing constructivist teachers are intended to be transformative rather than just informative [32].

A research on the constructivist method and its impact on mathematics was carried out by Chowdhury (2013). The aim of the research was to ascertain the level of mathematical accomplishment among students based on their gender and to identify the many aspects of mathematical achievement. The study's sample was chosen using a purposive sampling technique. When compared to conventional teaching methods, the study's results demonstrate a considerable improvement in students' mathematical proficiency. Using the constructivist method to improve their mathematical results benefited both boys and girls equally. When compared to skills like knowledge and skill, students educated in a constructivist learning environment demonstrate improved comprehension and application ability [33].

A study on the effects of constructivist education on the academic performance of elementary school students was conducted in 2013 by Tyagi and Verma. The sample consisted of 75 students from Central School, of whom 38 were placed in the control group and 37 in the experimental group. The findings show that there is a positive effect on students' academic achievement [36].

Erigala (2014) explains in his article Constructivism in Teacher Education-Toward Enhancing the Quality some of the theoretical foundations of constructivism and the role of the teacher in the constructivist learning process. In order to adequately educate instructors for the plethora of duties and obligations that the new technology will impose, he advises in his paper that teacher education programs be modified. A theoretical and practical knowledge training program is required for teachers, both pre-service and in-service. Students are often given opportunities to practice solving real-world challenges. Constructivism promotes self-directed lifelong learning, which may be difficult for both teachers and students to implement [37].
A constructivist teaching style used in the Telangana area was analyzed by Krishnaiah (2014). Examining constructivism's place in education and the relationships between many facets of the teacher-student demographic were the main objectives of the study. to investigate teacher perfection, classroom management, and the constructivist approach to performance evaluation.
Based on the examination of Raveendran (2014), how far along is the constructivist approach to economics teaching and learning? The aim of the study was to examine the data that supports the use of constructivist methodologies to learning activity design, new material presentation, student evaluation, and economics education. The study discovered that philosophical concepts have not been used in real-world contexts. Students are not given a clear understanding of how what they learn in class relates to their own experiences. Most of the courses focused mostly on the textbook and were lecture-based. It is also shown that the emphasis of the teaching-learning process was marks [41].

Rout and Behera (2014) examined a summary of the constructivist approach in teacher professional development. This article's author argues that, depending on the circumstances, teacher professional development may be useful, especially in outcomes-based environments. Additionally, they advocate for a change in the viewpoint on teacher professional development from one that is mechanical (modernist and behaviorist) to one that is holistic (constructivist and situational or contextual). In conclusion, it can be said that teacher professional development plays an almost exclusive role in preserving the quality of educational programs. It appears that constructivism has a lot to say about professional development, especially when it comes to abilities like classroom management and leadership, policy implementation, curriculum issues, building relationships within the organization, and assuring quality in outcomes-based classrooms, to name a few [42].

DATA ANALYSIS METHODOLOGY

In this study, **"secondary data collection"** is adopted to collect different types of data from the existing source. The study depends on gathered data collected from prior research with the implementation of **"secondary qualitative data collection"**. The researcher is able to give the most accurate data that helps to improve formulation based on new hypotheses. This data collection method helps to remove the load of data collection for the researcher [1]. At present, searching online to gather information on a particular subject is the quickest way to collect data and this process made it simpler for the researcher. This type of data collection helps the researcher to learn more about the selected data that is available as an e form of numerous sources. The researcher can easily find any type of desired data as per the abundance of logic and different types of literature available online.

This study is mainly based on qualitative methods to analyse the data that comes from different sources. This method is selected because it helps to integrate the data as per the requirements of qualitative data. The data analysis part contains a variety of data types with a major interpretation of data that is the context of the study [2]. The researcher has integrated different types of data that have been gathered from various sources for this study. Hence, the researcher has preferred to use a secondary qualitative method to provide the concerns about the study-related objects. The researcher always tries to collect positive information that is related to the study and this is beneficial for the research. Data collection and data analysis are the important aspects of the overall research. The researcher gives their best to develop the quality of the study as per their own view.

Population

Two secondary schools in Rajasthan one government and one private make up the study's population. There are 244 pupils in the population, 109 of whom are female and 131 of them are male.

Table 1: Population of the study

Type Of Management	Total No. of schools	No. of Students		Total No. of Students in class IX
		Male	Female	
Government	1	66	58	124
Private	1	65	55	120
Total	2	131	113	244

Sample

For the current research, 100 students from class IX of the academic year 2020–21 were randomly recruited from two schools: a government school and a private school. Next, 50 students for the experimental group and 50 students for the control group were randomly chosen from each of the two schools.

Procedure for selecting sample

The whole population of the study, consisting of 124 government and 120 private pupils, was tested using the Standard Progressive Matrices by the researcher. The examinations were given at each of their individual schools. in order to produce the student groupings that are identical to those in table 3.2.

Table 2: Rajasthan (India) Norms

Percentile	Rajasthan	Description	Grades
95	49	Superior Intelligence at or above the 95th	GRADE I.
90	48	Above Average is located at or above the 75^{th}	GRADE II
75	44	The range of intellectual average is from 25th to 75th.	GRADE III
50	38		
25	28		
10	15	mentally challenged at or below the 25th	GRADE IV

5	12	mentally challenged at or below the 25th	GRADE V

Following the Standard Progressive Matrices exam, the students' scores were computed and grouped based on percentile norms. The male and female students were divided into three groups based on their allocated serial numbers and percentile scores. Since we didn't find any intellectually disabled people in the population that ranked at or below 25 or below 5, we were able to construct the three categories Intellectually Superior, above the Average, and Intellectually Average. Following classification, the students—male and female—were maintained within those divisions. Following categorization, there were thirty male students in the cognitively average group, fourteen male students in the above-average group, and twenty-two male students in the superior group in the government school. Comparably, there were twenty-one female students in the group of students who are intellectually superior, twelve in the group of students who are above average, and twenty-five in the group of students who are intellectually average.

For the control groups of both male and female pupils, the blue-colored serial numbers from the government school were used. Similarly, as shown in table number 3.3, serial numbers in the green color were chosen for the experimental group, while those in the red color were eliminated from the three groups.

Table 3: Grouping of Government school students according to serial number.

No. of Students Government	**Intellectually Superior**	**Above the average**	**Intellectually Average**
Male	g1, g2, g5, g6, g9, g14, g17, g18, g21.	g3, g7, g13, g19, g33, g34.	g4, g8, g10, g11, g12, g15, g16, g20, g22, g23.
	g25, g30, g32, g39, g40, g41, g52, g56, g57.	g35, g37, g38, g44, g47, g49.	g24, g26, g27, g28, g29,g31, g36, g42, g43, g45.
	g58, g59, g60, g64.	g51, g61.	g46, g48, g50, g53, g54, g55, g62, g63, g65, g66.
Total	22	14	30
Female	g69, g72, g74, g75, g76, g77, g79, g84, g86.	g71, g81, g82, g83, g85, g87.	g67, g68, g70, g73, g78,g80, g88, g90, g91, g92.
	g95, g98, g103,105, g106, g109, g110, g114, g116.	g89, g97, g100,g102, g108, g115.	g93, g94, g96, g99, g101, g104, g107, g111, g112, g113.
	g118, g119, g122.		g117, g120, g121, g123, g124.
Total	21	12	25

Table 4: Sample of students in experimental and control group from Government school.

Control group	Male	9	6	10	25

(50students)	Female	9	6	10	25
Experimental group (50 students)	Male	9	6	10	25
	Female	9	6	10	25
Total		36	24	40	100

Following categorization, there were 19 male students in the intellectually superior group, 25 male students in the above-average group, and 21 male students in the intellectually average group in the private school. Comparably, there were 18 female students in the group of students who were intellectually superior, 16 in the group of students who were above average, and 21 in the group of students who were intellectually average.

The samples from a private school were chosen using a comparable process for the control and experimental groups. For the control groups of both male and female students, the blue-colored serial numbers from government schools were chosen. Similarly, as shown in table number 3.5, serial numbers in the green color were chosen for the experimental group, while those in the red color were eliminated from the three groups.

Table 5: Sample of students in experimental and control groups from Private schools.

Control group (50 students)	Male	9	6	10	25
	Female	9	6	10	25
Experimental group (50 students)	Male	9	6	10	25
	Female	9	6	10	25
Total		36	24	40	100

To ensure that the groups are comparable, a homogenous sample of individuals with little personal characteristic variation is chosen. The more similar the students' personal qualities or attributes are when the researcher divides them into the two groups, the more these characteristics or attributes are controlled in the experiment (Creswell, 2012). The experimental group in this research received therapy using the social constructivist paradigm of education, whereas the control group received instruction using the conventional approach. As shown in table 3.7 below, the experimental and control groups for both managements are made up of 100 male and 100 female students, respectively.

RESULT

Theme 1: Impact of modern teaching methods on students' academic performance

The ultimate responsibility of the modern teaching method is to carry out the assistance of learning activities. These methods help to encourage the students to more engage in learning and increase their academic performance. This advanced method has many challenges to implement in the rural area of Rajasthan. After the pandemic, the traditional teaching process has transformed into an online process that is possible only with modern technology [3]. Day by day, technology has developed and its impact on the modern teaching process. Through this process, students are involved in different types of activities that are related to learning, which helps to boost their academic performance. This type of teaching method is focused on the interests of students and their capabilities regarding writing, speaking, analysis, creativity, construction and handling the current situation.

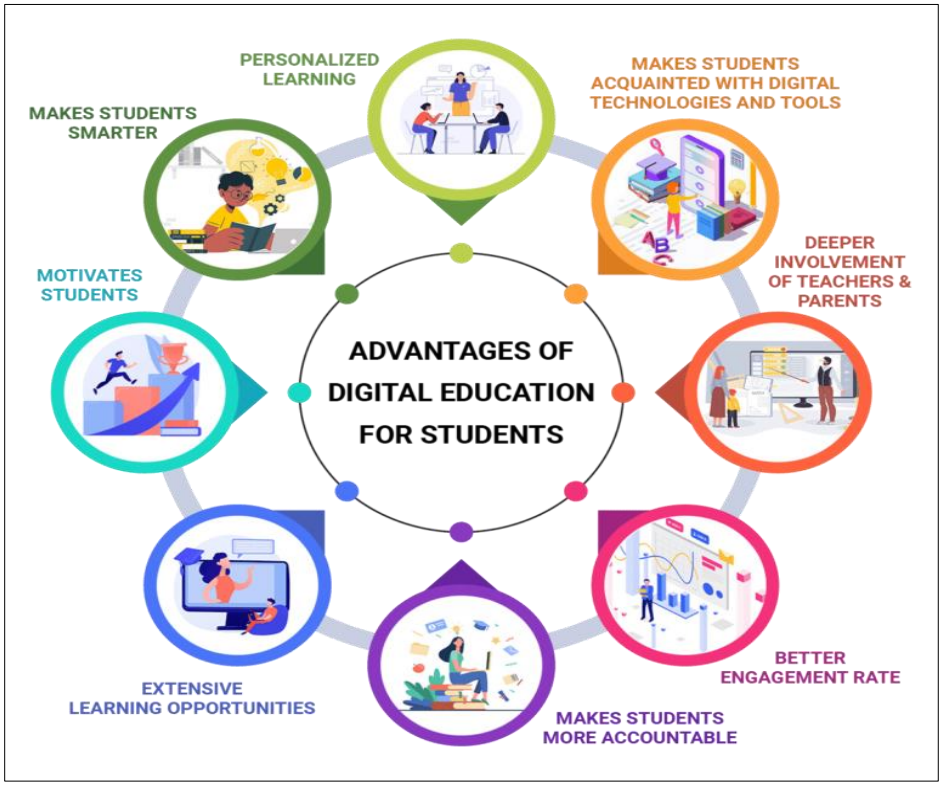

Figure No 1. Advantages of modern educational tools for students

Modern teaching methods influence the creativity of teachers and improve the diversity of students. This method encourages introspective thinking, assists students in learning from their mistakes and gets them ready for future encounters. Modern approaches demonstrate the learning strategy that builds a strong relationship with teachers and students [4]. Through this approach, students are able to learn different types of modern technology that help to enhance their academic performance. This type of teaching method provides flexibility for not only students but also for teachers. It can be more helpful for different types of subjects, science experiments and sports coaching.

These teaching processes influence students for experiential learning by monitoring their progress regularly and thinking about what they have learned. Students are attracted to new types of teaching processes to build their academic performance which is beneficial for the development of their future [5]. This type of teaching method helps to engage the students in different types of sectors to gather knowledge from different fields. This teaching method is effective in learning about different ideas that come to the classroom. Apart from this teaching method encourages "open communication" between students with teachers to solve their curiosity and questions.

Figure No.2. Modern Teaching Methods

Theme 2: Modern teaching tools and changing learning environment

Many types of modern teaching tools are elaborately explained in this study to examine the overall learning environment such as "project-based learning, problem-based learning, cooperative learning, game-based learning, computer-based learning" etc. At present, these types of teaching tools have great impacts on the study of the students and they are more involved in this learning process. During project-based learning, the teacher sets a real-world project for the students. This type of project mainly addresses practical issues rather than conceptual ones [6]. It helps to improve thinking levels practically and improves creativity and problem-solving skills.

Problem-based learning is quite similar to project-based learning, the main difference is that the problem is given before any other material that is already taught. The student progresses from the foundational information that is early discovered to more complex tasks and the challenge level arises.

Cooperative learning is mainly collaborative learning that is mainly based on teamwork and cooperation with other efforts. It is a valuable approach for the students to better understand their roles for each team member of the project. Each student in the team is assigned a particular activity that finishes before the deadline. Game-based learning always attracts students to participate more in their studies. So, through the modern teaching process, teachers create different types of education games to attract and encourage students to their study. Computer-based learning is undoubtedly very important for students to gather different types of technological knowledge that help to create a strong academic future [7]. Electronic technology is an important key factor in the learning process and its function transforms the factors of the classroom. The students perform different types of activities that help to gather more knowledge regarding different fields and build strong communication with the other students and teachers. Therefore, based on educational objectives, modern teaching methods are appropriate for students.

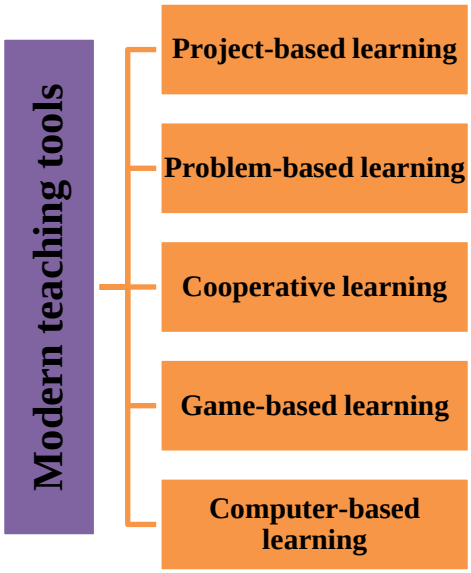

Figure No.3. Modern Teaching tools

The Social Constructivist Model of Teaching-Learning

Initiate: The two steps in this process are produce and introduction. The unit will be introduced by the instructor. Based on the material that the instructor has supplied, the pupils will create knowledge with the assistance of the teacher. Here, the instructor gives the class a free-form chance to engage with carefully chosen resources. This first lesson's main objective is for pupils to come up with questions and presumptions while they work with the resources. Before discussing their own understandings of the topics, the instructor will learn about the students' conceptual understandings.

Engage: This stage will include making connections with prior information to increase engagement. Through inquiries and exercises, the instructor piques students' interest. Degree to which logical connections are made to create connections between pupils' prior knowledge and the information that will be created. piques students' attention, stimulates their curiosity, asks questions, and gets answers that reveal what they know and believe about the idea or subject.

Demonstrate: Each student presents concepts that they have come up with on their own and makes assumptions. This will assist in identifying the child's autonomous abilities (scaffolding).Individual utterances and the idea of language are accommodated here. Language is important because some people may have correct ideas but be unable to communicate them. As a result, the instructor should endeavor to provide as much information as possible by asking students to talk in their native tongue. What are the minds of the pupils? Their assumptions will be influenced by their upbringing, encounters with peers and elders at home, and their cultural and social background. The interpreter is the pupil. A teacher must ensure that each student who has voiced an opinion is respected and understood by other pupils. The other pupils will attempt to ponder more deeply after reading that explanation. After analyzing the queries and concerns brought forth by the students which also allows for student evaluation the instructor should address them and let other pupils to respond.

Table 6: Mean difference between Pre-Test and Post-Test Scores (overall).

Test	N	Mean	SD	df	Calculated t- value	Table value	Interpretation
Pre Test-	200	7.87	1.44	199	42.19	2.60	Significant at 0.01 level
Post Test		38.68	10.29				

Extension: After all of that group effort, the students will present or debate the ideas they have generated. The instructor will increase the pupils' understanding by allowing more free conversation and requesting clarification. Students often reconceptualize and evaluate their own mistakes via elaboration. It is acknowledged by students that their first ideas are not always their greatest or final ideas. In this instance, the instructor exposes the class to situations that might challenge the students' preconceived notions. In order to better comprehend which concepts pupils may accept or reject instructors utilize information about the students' current conceptions, or points of view. All of the earlier stages include mental exercises that call on students to draw connections, examine texts and settings in great detail, and develop fresh understandings. Additionally, resources like maps and charts are included. People who like working alone may also be given consideration. The most basic kind of social organization in a classroom is the pairing of pupils. Social conversation and group debates ought to be at their best in this situation.

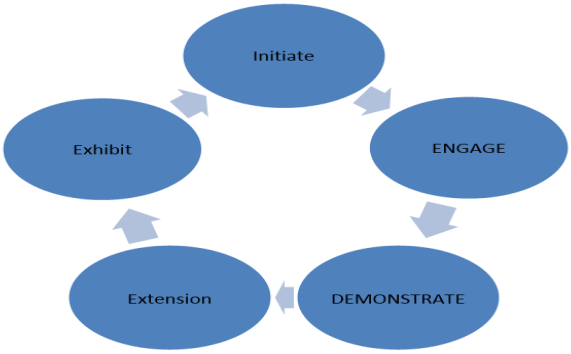

Figure 4: Cycle of the Social Constructivist Model of Teaching-Learning

Pupils will likely get a great deal from this kind of education. It teaches pupils how to study constructivistically, allowing their own home surroundings and the environments of their classmates to shape their ideas and actions. The knowledge generated by this paradigm could be more advantageous to society and students than the efficiency with which a certain set of goals is achieved. It may let a teacher reach a wider audience and provide his pupils access to a richer, more diversified environment. It may help curriculum developers make their offerings more flexible and provide students a variety of learning opportunities. It could help with the creation of more practical and interesting teaching resources and learning aids. The social constructivist, student-centered approach encourages higher level thinking. It promotes leadership, cooperation, problem-solving strategies, and meaningful learning. Strong motivation is present while working in a cooperative setting. Students acquire the abilities required for autonomous learning, creative inquiry, and independent study. With the essential skills, the students are ready to go on to the

following lesson. It makes teachers more prepared to teach each unit by encouraging them to undertake task analysis and set objectives before assigning activities. Regarding this paradigm, students will get thorough responses to all of their questions. Throughout the learning process, they have thought a lot, which has made it easier for them to understand the subject that the teacher is trying to cover.

Table 7: Mean difference between Pre-Test and Post-Test Scores (Control Group).

Test	N	Mean	SD	df	Calculated t -Value	Table value	Interpretation
Pre Test-	100	7.85	1.43	99	45.36	2.60	Significant at 0.01 level
Post Test		29.58	4.60				

The social constructivism paradigm holds that everyone is capable of acquiring new abilities and that learning is a social activity. Furthermore, it maintains that children's intelligence is neither inherent nor fixed. Through their interactions with peers, teachers, and other students, children fill in the blanks and realize their development potential. Teachers often express their ideas on how quickly pupils lose information and how little of what they really learn in class they actually remember. Nonetheless, this technique will help students retain the information for a longer period of time. Students using this strategy have access to an interesting and dynamic classroom where they are not expected to sit in quiet, in contrast to traditional teaching approaches that compel them to remain in silence the whole time. This idea brings real-world experiences into the classroom via the use of audio-visual aids. Gage and Berliner (1992) identified two primary benefits associated with the use of models in education. Models, first and foremost, provide accurate and useful representations of the data needed to address problems in a particular sector. Second, a model makes an area of knowledge easier to understand since it is a visual depiction of the topic. According to Gage and Berliner (1992), students who look at models before to a lecture may recall up to 57% more on questions relevant to conceptual knowledge than students who receive instruction without the advantage of seeing and discussing models.

CONCLUSION

The country’s education system is primarily based on academic development for its students and every effort that belongs to the system is directly forwarded to achieving the goal. In general, the entire society and the educational system are concerned about the interest of children’s future and their impacts on the integration of society. A key instrument for learning is instruction and modern teaching techniques help to facilitate learning. Obviously, there are some advantages and disadvantages, but applied determination is very important to successfully implement the process. This process is effective and suitable for the students and teachers to learn knowledge. Using the initial, engaging, demonstrating, extending, and exhibiting phases of the social constructivist geography teaching paradigm, the current study also highlights the significance of lesson preparation in teaching-learning. The investigator created a novel teaching approach that is a recent

development in the area of education: the social constructivist model. Given its effectiveness in this specific research, it may be used to teach geography to secondary school pupils. Thus, educators may utilize this technique to raise their students' accomplishment levels. Pre-service and in-service teachers may get training on the social constructivist teaching model via workshops. This will enable them to comprehend the paradigm and apply it to the creation of lesson plans and the teaching of geography. It is advised to use the social constructivist teaching paradigm while instructing secondary school pupils in geography and social studies, since research has shown that this approach has helped students succeed more in these subjects.

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