# Comparative Analysis Of Constructivism And Its Impact Over Traditional Learning

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#### **ABSTRACT**

Constructivism has become one of the most important trends in education over the past 25 years. The idea that the teaching-learning process should be centred on making sense fits with what many educators already believe. This is because, in constructivist-based instruction, the students' learning is more important than anything else in the classroom. Because of this, it has a big effect on the way schools work. Its constructive theory says that knowledge is uncertain, that the process of learning is also the process of developing knowledge, that students are the main source of knowledge and that they build knowledge on their own, and that teachers help and push students to build knowledge and that students are the main source of knowledge. It's possible that constructivism's most important contribution to date is the way it puts the student at the centre of learning. The idea says that people learn and find meaning in their lives through the things they do and see. In the form of a table, the main differences between a traditional classroom and a constructivist classroom were listed. We also talked about the main ideas behind constructivism and some of the ways it has changed education and the way people learn. Teachers who use the constructivist approach tell their students to always think about how the activity helps them learn. The study's results showed that teachers need to think about how they do things to use these ideas in their work.

Keywords: Constructivism, traditional learning, basic education, learning and teaching

## **INTRODUCTION**

It's important to know that teachers can't just give their students things to read. Instead, students must use their minds to come up with new information. In other words, they look for and change data, compare new and old information, and change rules when the old ones don't make sense anymore. Assumes that the person learning is actively taking part in the process. Singh and Yaduvanshi say that understanding needs self-control as

well as the building of conceptual structures through reflection and abstraction (2015). (2015). Even though there are many ways to look at constructivism, it's important to note that these different points of view have both important things in common and big differences.

Constructivism is a new way of thinking about how people think, and it is having a big effect on the education business. Changes in epistemology and learning psychology caused by the shift from behaviourism to cognitivism to constructivism are also a revolution in traditional schooling. Constructivism has a traditional effect on how teachers teach and how they think about teaching. This is because it has a deep and unique understanding of how people learn. In recent years, many experts have spent a lot of time explaining and studying constructivism. This has led to a lot of useful research results (Singh and Yaduvanshi, 2015). (Singh & Yaduvanshi, 2015) Experts say that the constructivist way of teaching will have a big effect on elementary school education reform. This study looks at the teaching theory of constructivism and tries to figure out what it means for traditional education and teaching methods.

According to the University of Buffalo (2015), constructivism is the idea that people should make their own knowledge instead of passively taking it in. When people experience the world and think about it, they build their own models and add new information to the ones they already have (schemas). Constructivist theories of learning are used by teachers to help their students learn. WGU says that constructivism is an educational theory that says people actively make their own knowledge and that the experiences you have as a learner shape the reality you see (2018). When building new knowledge, learners use what they already know as a starting point. Because of this, each person's learning is different because it is based on their own life experiences.

The main idea behind constructivism is that people learn by building on what they already know. This idea says that what you already know might have an effect on what you learn or how you learn it. This continuum is made up of three main groups: cognitive constructivism, which is based on the work of Jean Piaget, social constructivism, which is based on the work of Lev Vygotsky, and radical constructivism. These three groups are based on the ideas of three different theorists (McLeod, 2019). Constructivist learning theory is the basis for many different ways of teaching that focus on the student. This theory is different from the traditional model of education, in which teachers just teach their students what they already know.

The constructivist theory of learning has the potential to inspire many different ways to teach. Students are often told to learn by doing things like experimenting and solving problems in the real world. After doing these things, they should think about how their knowledge has grown because of these methods. Before making an activity that builds on what the students already know, the teacher asks them questions to find out what they already know. Through this method of teaching, students learn to always think about how the activity is helping them learn. When students in a classroom that follows the constructivist learning philosophy think about how they learn and what they do to learn, they move closer to becoming "expert learners." Because of this, they have direct access to educational resources that are always being updated. When the classroom is set up in the right way, students learn how to learn (WNET Education, 2017).

#### RESEARCH PROBLEM

Constructivism is a hypothesis regarding the way in which individuals acquire knowledge, and its foundations are observation and research in the scientific community. People gain knowledge of the world around them through direct experience and selfreflection on what they do. When we learn anything new, we need to consider how it fits in with what we currently know and what we have achieved before moving on to the next item. It's possible that we'll alter our ideas, but it's also possible that we won't think the new information is all that significant. In any case, the result of our own labour is the accumulation of our own unique knowledge. In order to accomplish this, we need to question, investigate, and assess the existing state of our knowledge. The constructivist theory of learning has the potential to motivate a diverse array of instructional strategies. In order for students to acquire additional knowledge, active learning strategies, such as doing experiments or finding solutions to problems that are relevant to the actual world, are strongly encouraged. An activity is designed by the teacher to address and further investigate certain themes after it has been determined what the students already know about those subjects. As a result of this, the study places a greater emphasis on the value of constructive learning in comparison to traditional learning within the context of education.

# RESEARCH SIGNIFICANCE

When teachers have an understanding of how constructivism may be applied in the classroom, they are able to create a one-of-a-kind learning environment for their students. In a constructivist classroom, it is the teacher's job to create an environment where students can work and take an active role in their own learning. Lessons are getting shorter, and students are being asked to do more for their own education. Before moving on to a new subject, teachers need to find out what their students already know and what they think. Teachers will also have to change their lessons so that they are right for each student's level of understanding at the time (Tularam, 2018). (Tularam, 2018).

There are a number of ways in which traditional classrooms and constructivist classrooms are different. Constructivist classrooms are student-centered and focus on the questions and interests of the students. They build on what the students already know; they focus on interactive learning and are student-centered; teachers talk with students to help them build their own knowledge; they are based on negotiation; and students work mostly in groups. Constructivist classrooms are different because of these things. Most of the time, students in constructivist classrooms have to work in small groups, do activities that require them to work together and talk to each other, and have open conversations about what they need to do to be successful. Because of this, it is very important to learn about constructivism instead of more traditional ways to study in school.

Constructivism grew out of ideas from the fields of education, psychology, sociology, and philosophy. It's important for teachers to understand constructivism as a theory, but it's just as important for them to understand what this way of looking at education means for the classroom and for their own professional growth. Constructivism is based on the idea that learning is a process of discovery and that students should add new information to what they already know as they go through their education. This is a very different way of thinking about learning than the idea that knowledge is passed from one person to another. Here, receiving information is seen as more important than making it. (Suhendi, 2018). (Suhendi, 2018). The simple idea that new information is always being gathered can be used to prove two important points. The first is that students build new ideas on top of what they already know by using what they already know. White boards are not meant to have new information written on them. Instead, when a student enters a classroom, they bring information from other learning experiences with them. This affects what kind of new or changed information they will learn there. This information comes from what the students have learned in the past.

## **AIM AND OBJECTIVES**

## Aim

The aim of this study is to conduct a comparative analysis of the constructivism and its impact over traditional learning and this aim will be attained through following objectives.

# **Objectives**

- To examine the constructive approach of learning and its basic principles
- To study the need of constructive approach over traditional learning
- To conduct comparative analysis of constructive and traditional approaches of learning

## RESEARCH METHODOLOGY

S Tertiary data is data that has already been compiled from primary sources and is readily available. As a result, researchers can use this data in their own research because it has already been compiled. It's a particular kind of information that was gathered and stored in times gone by. The data that were collected for a project may be made accessible to other researchers so that they may use it in their own initiatives. Another alternative is that the data were not gathered for the goal of doing a particular piece of study but rather for use in general, in a manner analogous to how the data for the national census were obtained. were gathered for a purpose of There is a possibility that a piece of data that is seen as vital in one study could be regarded as secondary in another. When data is recycled, its status can change from that of primary data to that of secondary data depending on the context in which it is used. This is always the case. Secondary data can be collected from a broad variety of sources, such as books and journals as well as websites and government records (Mpewe, 2019). Secondary data are easier to obtain than primary data, according to common sense. You won't need to do much in the way of research and may instead rely on the contributions of others in order to get the most out of these resources. Because of the proliferation of electronic media and the Internet, secondary data sources are now much simpler to track down than they were in the past. As a consequence of this, the investigation will only collect data through the use of secondary sources of information.

## LITERATURE REVIEW

## The origin of constructivism

Every theory has a starting point and a story about how it got there. This is a rule that can't be broken, not even by the constructivist learning theory. Its roots are mostly in the fields of philosophy and psychology.

## Where philosophical ideas come from

Constructivism is a new way to learn and a different way to think about how students should be taught. Some people think that Socrates was the first person to believe in constructivism. His use of "hippcrates" is a great example of how constructivism can be used in the classroom. Kant's study of how to combine rationalism and empiricism in their study shows that he was a constructivist. He thinks that the topic doesn't have enough to say to the rest of the world. The only way for the subject to organise their past experiences and learn new things is to use the pre-programmed cognitive principles. Later, when post-structuralism took the place of structuralism, rationalism's claim to absolute authority was hurt even more. Constructivism is a new learning theory that came about because cognitivism became more popular (Fu et al. 2021).

The beginnings of studying psychology

Constructivism was first made by Dewey, Piaget, and Vygotsky. All three of them used it to help their students learn and get better at learning. Dewey was the first person who

did something important to help make constructivism happen. Dewey's contribution to the field of experimental learning theory is the way he puts a lot of emphasis on how experiences are made and changed. Switzerland Many people think that the influential French psychologist Jean Piaget started the modern constructivist movement. Jean Piaget came up with the ideas of "assimilation" and "conformability" in the year 1972. He thinks that the word "recognition" means that the subject has some kind of control over the object because of his own unique recognition structure. This makes sure that the subject and the object are in the right place. Piaget's ideas, which are based on psychological theories, say that all knowledge comes from the outside and that students' minds naturally develop as they learn new things. In the 1970s and 1980s of the 20th century, the great Russian psychologist Lev Vygotsky laid the groundwork for what is now called "modern constructivism." In the field of psychology, he did this work. He thinks that learning is something that society puts together. The person's past and the kind of social environment they grew up in could affect their ability to learn.

# **Principles of constructivism**

The educational theory known as constructivism may be broken down into a number of distinct parts and ideas, each of which plays a role in determining how the theory operates and what consequences it has for succeeding generations of students. Here is a rundown of the various constructivist concepts, along with an explanation of how they all connect to one another.

To put it another way, knowledge is constructed. This is the fundamental idea, which asserts that all information is constructed by first drawing from one's existing knowledge and then expanding upon that basis. Students select their own components and combine them in a way that is unique from the work produced by any other student in the class. Each and every component of a student's education that came before this point serves as a valuable foundation for further learning.

People develop the ability to learn on their own as they amass more information and experience. The process of learning involves the construction of meaning as well as many systems of meaning. When students, for instance, learn about the dates of historical events, they are simultaneously learning the definition of the academic discipline known as chronology. Students of history who are required to produce a paper also receive instruction in language and writing abilities. As a result of our ongoing discoveries, we have a deeper understanding of the world that surrounds us (Amineh and Asl, 2015).

• Learning is a fluid process that calls for engaged engagement on the learner's part. Learning is dependent on receiving input from one's senses in order to generate meaning. Because learning is not an entirely passive process, it is necessary for the learner to take an active role in the learning process. Students need to get completely involved in the environment that surrounds them in order to take an active interest in their own learning and development. Students are not permitted to merely sit back and take in knowledge;

rather, they are expected to participate actively in classroom debates, reading, and other learning activities.

The process of education includes a social element as one of its aspects. Because of our education, the manner in which we engage in conversation with other people will evolve. Our education is influenced in various ways by the people we know, such as our parents, siblings, grandparents, and other relatives. If teachers are aware that students retain more information when they collaborate with their peers, there is a greater chance that they will be successful. The best way to assist kids in studying together and developing as individuals is to segregate their learning. Progressive education emphasises an emphasis on conversation, contact, and collaborative projects between students because it recognises the significance of social connection in the educational process.

This question does not have a single correct response. Students do not spend their time in school merely memorising irrelevant facts and theories that will have little impact on their lives after graduation. People increase their knowledge as a consequence of making connections between what they previously know and how they currently think. The world around us has an effect on both our ability to learn and our ability to recall things. The extent of one's knowledge is a personal and confidential concern. Learning becomes a deeply personal endeavour when it is founded on the individual's own experiences and beliefs, as is the case with constructivism. Everyone present is responsible for bringing their own special point of view to the discussion. In this sense, there will be enormous differences between people in terms of the ways in which they learn and the content that they acquire in school.

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Learning takes place in the minds of individuals who are presented with various educational opportunities. Learning can be enhanced by the use of physical and hands-on activities, but these alone are not sufficient. Learning is at its most efficient when it is done in conjunction with active mental effort. Beyond simply carrying out activities with our bodies, we need to do more if we are to acquire real knowledge. Having an image of something in your head can assist you in remembering its details (Fu et al. 2021).

A desire to learn is the first step in achieving success in academics. Students won't be able to study anything if they don't have the desire to do so. In order to capture the attention of students, original strategies need to be developed to make them enthused about the prospect of studying. It is imperative that students be motivated if they are to make effective use of the information and experience they already possess in order to progress in their educational pursuits.

# Need of constructivism over traditional learning in the current world

Teachers care more and more about their students' well-being and want to make the classroom a better place to learn. One important point made here is how important it is for students to be involved in every step of their education. Students have to work harder

to improve their knowledge and skills when they learn through exploration and teamwork. By doing this activity, students will learn a lot. To make a happy learning environment, all you have to do is give students what they need. The way people think about education right now can be summed up in one word: groundbreaking. With the goal of helping kids do better in school, primary education puts a lot of emphasis on constructionist ways of teaching.

To really change the teaching profession, there needs to be a fundamental shift in both what is taught and how it is taught." Teachers spend too much time analysing, presenting, and explaining subjects in traditional education. Students learn by taking in information without doing anything. Because they don't have much money, they can't fully think about how their actions will affect others. Instead of tailoring education to each student's needs, the traditional method only teaches what has already been planned. Because there isn't much help, students are likely to be afraid to use their own judgement or come to their own conclusions. This way of teaching is bad for kids' learning and development because it puts teachers at the top of the list. Constructivists believe that the best way to learn something new is to do it. The main goal of teaching is to give students the information and skills they need to be successful in life. It makes no sense for students not to take charge of their own education. Lastly, both students and teachers can get a lot out of teaching others. Teachers try to help their students learn as quickly as possible by giving them encouragement and help. Shah (2019) says that for kids to do well in school, they need to learn how to work together and talk to each other well. In most schools, students rarely work together in the classroom, and this lack of collaboration extends to the students themselves. The constructivist school of thought says that new knowledge is made when people and organisations work together. This means that they need to do group projects and work with their classmates in order to learn. Collaboration and interaction between students in the classroom pushes them to learn more. It could help young people build their own knowledge systems and improve their ability to think creatively and solve problems. Children can learn how important it is to be tolerant and how to be tolerant to the people around them just by watching how other people act.

A good place to start when teaching is to find out what students already know and how they think and feel. Cognitive psychology says that when we learn, we use both new information and information we already know. People's internal conditions for studying are based on the knowledge and methods that have been stored in their memory system over time." You can get to these at any time. According to research done by Bada and Olusegun, they found that students' prior knowledge is the most important part of their learning (2015). One theory in educational psychology says that what students already know is the only thing that matters when it comes to understanding how they learn. If you know this fact, the lesson will go more smoothly. This is very clear in the context of constructivist education theories. Students build on what they've already learned and done as they move through school. During each lesson, teachers have to get their minds ready for two different tasks at the same time. First, look for things that are the same and different between the course prerequisites and the required readings. In this way, you

will show what you know about the subject. Your articles are only as good as the way you present the information you've found and written about. The next step in getting to know your students is to watch them and try to understand them. You should also know what they have learned and done in the past. We think that using what students already know and have done can help them learn new things. Putting together what people have learned from many different times can lead to new ideas.

Semerci and Batdi, (2015) He also said that the teacher's role in the classroom should change from being a figure of authority to one that encourages equal participation and debate. In traditional ways of teaching, it is the teachers who are in charge and have all the power. They don't respect their students or care about them as much as they should, which causes tension between the professors and students and can even lead to fights. People used to say something like, "Those who know more teach, and those who have morals set a good example." Teachers owe it to their students to treat them with more respect and trust and to give them more chances if they want their students to have good relationships. Teachers owe it to their students to treat them with fairness, respect, and care, and to do so in a way that makes the classroom a warm and inviting place for kids to learn. Then, the students will be able to learn how to talk to their teachers and respond to their comments and criticisms. This could make the relationships between teachers and their students much stronger. Set up a relationship between students and teachers that is democratic and fair for both sides.

Set up an environment that is good for learning. To put the constructivism learning theory into action, students need to learn in a real or almost real setting and focus on non-structural information or their own past experiences. This needs to happen for the theory to work. Traditional teaching puts a lot of emphasis on structural information while ignoring non-structural knowledge and the students' own life experiences. So, when we teach, we should use the most up-to-date technology that was made to make learning fun and encourage students to learn more about new topics. Students should be able to do things on their own. Make a link between the new information you're teaching the students and what they already know. Because of this, they will be better able to deal with problems.

To sum up, constructivism has become a popular topic not only in the classroom but also outside of it. This has led to a lot of new ideas and points of view. Fairness requires that we judge and learn from them, taking into account things like the subjectivity and objectivity of information, the knowledge transfer and construction that happens during learning, the supervision of instructors, and students as the centre, and fairly applying applicable theory to the teaching of basic education. (Mpewe, 2019). **Comparison of constructive classroom and traditional classroom** 

The fundamental responsibility that falls on the shoulders of the educator is to create an environment in the classroom in which students are inspired to collaborate with one another in order to find answers to problems and to take an active role in their own education. According to this viewpoint, the fundamental function of a teacher is not that

of an instructor but rather that of a facilitator of the learning process. Before the instructor plans an activity to address and build on such themes, he or she ensures that he or she has a good understanding of what the students already know about those subjects.

Traditional Classroom	Constructivist Classroom
Strict adherence to a fixed curriculum is	Pursuit of student questions and interests is
highly valued. Curriculum begins with the	valued. Curriculum emphasizes big
parts of the whole. Emphasizes basic skills.	concepts, beginning with the whole and
	expanding to include the parts
Learning is based on repetition.	Learning is interactive, building on what the
	student already knows.
Teacher-centered.	Student-centered.
Teachers disseminate information to	Teachers have a dialogue with students,
students; students are recipients of	helping students construct their own
knowledge (passive learning).	knowledge (active learning).
Teacher's role is directive, rooted in	Teacher's role is interactive, rooted in
authority.	negotiation.
Students work primarily alone (competitive).	Students work primarily in groups
	(cooperative) (Semerci and Batdi, 2015).
Materials are primarily textbooks and	Materials include primary sources of
workbooks.	material and manipulative materials.
Assessment is through testing, correct	Assessment includes student works,
answers	observations, and points of view, as well as
	tests. Process is as important as product
Knowledge is seen as inert.	Knowledge is seen as dynamic, ever
	changing with our experiences.
Students work primarily alone.	Students work primarily in groups.

#### **FINDINGS**

You can look at the many published curricula and different ways of teaching to see how constructivism has changed education in the present day. One of the most obvious ways that the constructivist theory has changed things is in the way schools and universities are set up and organised. Teachers today are more aware of how important it is for their students' learning that they get along with each other and with the classroom as a whole. Children learn more and have more fun when they are involved in what they are learning instead of just sitting back and taking it all in. When it comes to education, what works best is putting more emphasis on critical thinking and understanding than on memorising facts by heart. By making learning experiences relevant to the real world, constructivism gives students more control over what they learn. This keeps the students' minds active and keeps them interested. Students in constructivist classrooms are taught to ask questions and to use their natural curiosity to learn more about the world.

Constructivism teaches people how to get along with others and talk to them by making the classroom a place where students can both learn and talk about their ideas. Participating in group assignments helps students learn how to explain their ideas and work on projects in a clear way. Students have to share their ideas, which means they will have to figure out how to "negotiate" with each other and judge what others say in a way that is socially acceptable. This is a must if they want to be successful in the real world, where they will face a wide range of situations where they will need to work with other people and understand their points of view.

In a constructivist classroom, the students often have more important roles than the teacher. No longer is the classroom a place where the teacher (the "expert") gives information to eager students who are waiting to be filled up like empty cups. The constructivist paradigm supports and encourages the idea that students should be active in their own learning. In the classroom, the teacher acts as a guide who coaches, mediates, inspires, and helps students develop and test their understanding, which helps them learn. In a constructivist classroom, both the teacher and the students know that knowledge is an ever-changing, dynamic picture of the world we live in, as well as the ability to successfully stretch and investigate that picture.

Because of this, the constructivist theory is the best way to explain how people learn. If this is the case, the best way to teach students is to set up learning environments where they can talk directly to the things they are learning about. Because a student can only understand what they mean by seeing the world for himself or herself. From this, we can conclude that constructivist learning must take place in a setting that is good for that kind of education.

#### **CONCLUSION**

Following the behaviorist movement, constructivism in education emerged as a welcome and refreshing way of looking at learning that emphasizes the learner's role in the

teaching-learning process. This emphasis on the individual (within the greater social framework) has caused people to pay more attention to their existing ideas, abilities, and knowledge. Prior knowledge has been found to have a significant influence on how people make meaning of what they learn. Because constructivism places a strong emphasis on the social environment and the greater community of learners, there has been a significant shift away from individual-based instruction and toward teaching that incorporates and is founded in the larger community of peers, younger pupils, and older students. Finally, by moving the emphasis from knowledge as a product to knowledge as a process, constructivism may have done the most good for education. The legacy of constructivism is expected to have a long-term and significant impact on the way schools are organized.

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