

THE PHILOSOPHY OF CONSTRUCTIVISM: EFFECT ON RESEARCH, EDUCATION, AND LEARNING**Dr. Gyanwati Srivastava**

Abstract: The constructivism philosophical worldview is an effective instrument that can yield many advantages when executed in the doing of exploration in assorted field of concentrate as well as in endeavor instructing and learning exercises at any instructive level. There was the need to take on the subjective exploration's useful asset accordingly, record examination to introduce a writing audit regarding the matter to illuminate analysts and educators of the incredible imports, rich and valuable data that they can gather from this lively worldview of reasoning. The paper projects, how specialists can be trained with this philosophical worldview in their determination of examination plan, instrumentation, hypothetical system and information investigation methods. It suggests feasible educational procedures that instructors can utilize for training students in the constructivist approach. The paper battles unequivocally that the constructivism philosophical worldview gives a firm establishment to investigates, particularly in humanities, schooling and other conduct explores while expanding understudies' learning results when utilized in educating and learning exercises.

Keywords: Constructivism, Philosophy, Research, Instructional Strategies, schooling.

1 INTRODUCTION

There need aid huge numbers philosophical paradigms clinched alongside presence today because of the headway in the human method for speculation. What's more different approaches from claiming demonstrating those event and meanings of the phenomena existing in the reality. The two fundamental theories, regularly alluded with Likewise the "traditional philosophical paradigms" to be specific positivism and interpretivism have provided for conception will various other philosophical paradigms. Everyone from claiming them need foundations over a standout amongst the universal approaches for philosophizing. This paper looks on dig under those constructivism standard whose mothball will be those interpretive standard for rationality. It looks for should illustrate to point of interest those importance of the constructivism paradigm, describing its exceptional offers same time examining vividly how this ever developing philosophical approach will be picking up Ubiquity in the fields of Examine and also educating support and taking in. It expects toward serving analysts in Comprehending unequivocally at what's more entryway to utilize this philosophical standard over considering phenomena. Also, it might support instructors in the 21st century with master exhortation around how this philosophical standard could be executed in the educating and

taking in exercises conveyed out in that classroom should accomplish ideal Taking in conclusions. That specialist depended for documentary Investigation about information looking into constructivism concerning illustration completely frank by researchers Furthermore personage perceptions of the philosophical standard at work Previously, A percentage auxiliary Also tertiary organizations over Ghana.

1.1 Definition and Description of Constructivism

Honebein (1996) portrays the constructivism philosophical standard Concerning illustration an approach that asserts individuals develop their seeing and information of the reality through encountering things Furthermore reflecting once the individuals encounters. It is In light of the Similarity or foundation individuals structure or develop a great deal for what they figure out through encounter (Cashman et al, 2008; Hein, 1991). Thus, of the constructivist, constructing significance may be learning; there may be no different thoughtful. This nullifies the conventional idea of Taking in on an "chew, pour, Furthermore forget" thus, Taking in due to examination with lesquerella or no inspiration on the requisition of the figured out how experience in genuine settings.

The constructivist logic portrays those thought that taking in doesn't

recently happen from those conventional system for instructors standing in front of the class and addressing. However, of the constructivist, Taking in happens just when the learner finds those information through those soul about experimentation Also finishing (Kalender, 2007). Those cerebrum behind this sort of philosophical methodology will be best depicted over Confucius, those prestigious chinese philosopher's quote: "I listen What's more i overlook. I perceive What's more i keep in mind. I do and i get it. " what will be the intending of as much statement? Assuming that teachers" spoon encourage people with learning Likewise a mothball does the weaning child, those scholars will everlastingly a chance to be immature, not Hosting those sharp capacity should make valuable contentions regarding issues Furthermore drawing provisional finishes from claiming circumstances. This before long makes them overlook what they were taught. Though they witness the doing of the phenomenon, they might recall through the tangible action about perceiving. The best alternative which those constructivist scholars have confidence Furthermore proposes is completely captivating those scholar in the educating and taking in procedures thereabouts that as much engagement might empower him personally find those information or „truth“.

2 EXPONENTS OF CONSTRUCTIVISM

For mankind's history, there would numerous researchers and scientists who need advocated to the energetic engagement from claiming understudies in the educating and taking in forms within rates higher over the educator's testament. A few of the prestigious proponents about this philosophical approach incorporate jerome Bruner, jean Piaget, leuwenhoek Vygotsky, Also john dewey. They need aid generally distinguished in the academia as the heading figures of the constructivism philosophical standard (Honebein, 1996). However, other researchers whose exertions helped the acknowledgment for this philosophical paradigm, if their affects would seen similarly as minor incorporate maria montessori and George kelly.

Notwithstanding the enormous commitments from claiming all these exponents of the philosophical paradigm, jean piaget may be singled crazy Likewise the father tan of the constructivism philosophical standard. This will be generally on he spearheaded those formalization of the hypothesis of constructivism through as much amazing illustration in regards those instruments through which information is internalized by learners should help them build learning.

3 DESCRIPTION OF THE CONSTRUCTIVISM OF THE CARDINAL PROCESSES OF KNOWLEDGE CONSTRUCTION

There are two main processes by which knowledge is constructed. Kim (2005) proposed that humans construct new knowledge from their experiences through processes of adaptation and assimilation. The process of accommodation, the first process in building knowledge, involves shaping one's mental representation of the outside world to adapt it to the new experiences he/she has had. In this way the learner makes room for the new experiences he/she has had in the mental faculties where the old experiences are already.

On the other hand, the second and final process in the construction of knowledge is known as the assimilation process, in which the individual fits the new experience he has had into a pre-existing framework of old experiences without altering that framework. Therefore, the old and the new experiences will coexist in the individual's mental framework. For example, a particular graduate student may feel that attending an educational workshop is not very important based on an old experience gained from attending an educational workshop before. However, his perception of educational workshops may change when he has a new educational workshop experience that has proven to be very helpful and relevant. The old experience and the new experience will both coexist in his mental faculties, but his perception of the world may or may not change as a result of the new experience. Because his experiences are in conflict with his internal representations, he is likely to change his

perceptions of the experience to fit his new internal representations. This can be

explained using the conceptual framework designed by the researchers shown below.

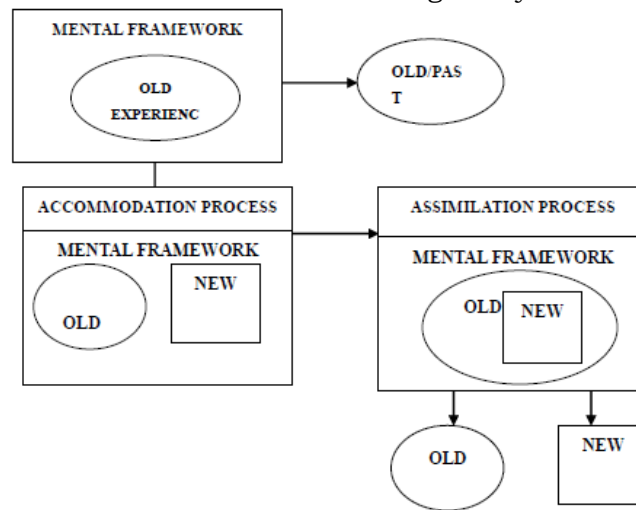


Fig.1 A Conceptual Framework explaining the construction of knowledge Source: Developed by Researchers

4 METHODOLOGY

The researcher used the qualitative research design to conduct this review. The research method of documentary analysis has been widely used to review the literature on the subject while emphasizing the relevance of the qualitative research approach. Hefferman describes document analysis as analyzing data from examining documents from secondary sources such as textbooks, journals, etc. that are relevant to a particular study. It involves reading extensive amounts of textual data in order to understand and shed more light on a particular area of study. The interpretive analysis aspect of document analysis, which attempts to find hidden meanings in order to decipher them for public use, has been used by researchers in reviewing written materials on constructivism and its relevance to research and teaching and learning.

4.1 Data Collecting Instruments

The tools typically employed in this philosophical paradigm are interviews, observations, document reviews, and visual data analysis (Kalender, 2007). However, the researcher is very flexible in conducting the interviews and therefore uses the semi-structured interview form. The researcher asks open-ended questions and encourages informants to share their unique perspectives. Although the questions to be asked are somewhat

structured, the researcher is expected to skillfully ask questions during the interview in order to investigate and find out the actual state of the phenomena. In some cases, the researcher uses a focus group discussion interview (groups of people with similar characteristics or shared experiences sitting down with a facilitator) to conduct the interview when this is considered the best tool to gather rich data from people like elders received, workers in the same department, students in the same class and so on.

Furthermore, observing study participants in their natural environment, whether participants or non-participants, depending on the nature of the phenomenon being studied, helps the researcher to construct meanings of the phenomenon. Document reviews and visual data analysis (data such as artifacts from the research site or records related to the studied social phenomena) are carefully analyzed by the researcher to improve his construction of the phenomena.

4.2 Research Methods

Research methods for the constructivist philosophical paradigm include narrative study, case study, ethnographic study, grounded theory, descriptive study, and phenomenological study (Kim, 2005). A unique commonality of all these applicable methods is the large amount of time required to understand the

phenomenon being studied. Researchers spend enough time with participants in their natural context to be sure they are capturing the true facts of the phenomenon being studied. Spending far too little time in research environments is a serious mistake in constructivist work. Therefore, instrumental and action research and other forms of research that require a relatively shorter time to draw conclusions from phenomena cannot underpin their research in the constructivist philosophical paradigm.

4.3 When Researchers must adopt the Constructivism Philosophical Paradigm

This philosophical paradigm is mainly used to underpin research that seeks to understand how individuals make sense of their everyday life in their natural environment either in the local communities, work environment, etc. Even a researcher who is conducting a study with the aim of investigating the influence of social behavior on the attitudes of individuals in a particular community can easily adopt this approach to philosophizing. Additionally, researchers conducting studies to understand the practices of a group or society and how they affect their attitudes can adopt the constructivist approach. Studies revolving around life stories or life stories of famous people in communities, as well as the oral history of a clan, ethnic society, can be perfectly grounded in the constructivist paradigm of philosophizing.

4.4 Implications of the Constructivist Philosophical Paradigm in Teaching and Learning

Teachers using the constructivist teaching approach have to adapt to the role of facilitator and not teacher (Bauersfeld, 1995). While a teacher gives a didactic lecture that covers the material, a moderator helps the learner to create their own understanding of the content. Thus, in the first scenario the learner plays a passive role and in the latter scenario the learner plays an active role in the learning process. The emphasis thus shifts away from the trainer and the content to the learner (Gamoran, Secada, & Marrett, 1998).

In addition, says a teacher, a moderator asks; a teacher lectures from the front, a moderator supports from

behind; a teacher provides answers according to a set syllabus, a facilitator provides guidelines and creates the environment for the learner to reach their own conclusions; a teacher usually gives a monologue, a facilitator is in a continuous dialogue with the learners (Rhodes and Bellamy, 1999). Therefore, a constructivist instructor only coaches the learner to construct the understanding of the content or subject matter while he/she discovers the knowledge through experimentation and sharing ideas with others. The ultimate goal of the constructivist teacher is to assist the learner in becoming an effective thinker. This can be achieved when the trainer plays multiple roles, e.g. B. Advisor, coach, guide, etc.

5 INSTRUCTIONAL STRATEGIES FOR CONSTRUCTIVIST LEARNING

The constructivist teacher can apply teaching strategies that direct the teaching and learning process in a learner-centered and not teacher-centered manner. Woolfolk (2010) suggests some of these teaching strategies as peer questioning, jigsaw classrooms, and structured controversies.

The Reciprocal Questioning involves students working together to ask perplexing questions concerning the content to be studied while searching for answers through research. The Jigsaw Classroom strategy also involves the assigning of parts of the content to be taught to the students in the class either individually or in groups. The students thus become "experts" on one part of a group project and teach it to the others in their group. In the Structured Controversies approach, the students work together to research a particular controversy or topic that steers a challenge because the students normally have different opinions of it.

Learning thus becomes an active process in which the learner uses sensory inputs and constructs meanings from them. The crucial action in constructing the meaning of the content is mental. It happens in your head. Physical activity and hands-on experience may be necessary for learning, especially for children. The constructivist teacher must also offer activities that involve both the mind and the hands of the learners. John

Dewey calls this reflective activity (Kim, 2005).

Learning is a social activity in a constructivist classroom as it is closely related to the learner's connection to others such as teachers, peers, family members and incidentals, in contrast to the traditional classroom where learning aims to isolate the learner from all social interactions. Acquaintance is linked to seeing education as a one-to-one relationship between the learner and the objective material to be learned (Thirteenth Edition Online, 2004). In addition, Kim mentions that the constructivist instructor always takes into account the relevant prior knowledge (R.P.K.) of the learners and tailors or builds on the content to be taught. The constructivist believes that one needs knowledge in order to learn and that it is highly impossible to acquire new knowledge without having a structure developed from previous knowledge to build on. Therefore, any teaching effort must be connected to the learner's condition while providing the learner with a pathway into the subject based on their prior knowledge.

In addition, the constructivist sees motivation as a key factor essential for learning (Kalender, 2007). The students have to know why they need to learn the content and the benefits they will achieve by doing so. This assertion is also articulated by Kim that „unless learners “know the reasons why”, they may not be very involved in the content taught even by the most severe and direct teaching method” (p.18).

5.1 Misconceptions about Constructivism

Constructivism is often misunderstood as a learning theory that forces students to do it invent the wheel (calendar). However, this is considered a misunderstanding by this author, as constructivism appeals more to students' innermost curiosity about the world. So the students don't

reinvent the wheel, but try to understand how it turns, how it works. At the end of the day, students engage by applying their existing knowledge and real-world experiences, learning to hypothesize, testing their theories and finally drawing conclusions from their findings.

6 CONCLUSION

The constructivist approach is indeed one of the best philosophical approaches that helps us to understand the complexity and diversity of phenomena, especially in this 21st century where creative ideas and inventions that mark novelty are taken seriously through our research and education be searched. The researchers therefore recommend that researchers and education professionals, curriculum planners, as well as educators must use the ideals of this philosophical approach in their research, teaching, and learning activities, as it is a powerful tool for assigning concrete and composite meanings to phenomena around us to construct.

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