Toward a Constructivist Approach in Saudi Education

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Abstract

In the way to develop the educational system in Saudi Arabia, the emphasis was only on the materials with no more attention for the role of the learner and the teacher in the learning process or even the external factors around them. However, there are many theories and approaches that may help the Saudi students in different levels to understand the real aims of learning. Constructivism is one of the most influential theories in learning but not the only one. Constructivist approach has different versions that might be applied successfully in Saudi context. This article will introduce two versions of constructivism which are cognitive and social constructivism. This approach can make a real change in learners and teachers in the circle of learning process in Saudi Arabia. Constructivism will be presented as an effective theory of knowledge can improve the educational system of Saudi Arabia.

Keywords: constractivism, education, Saudi Arabia, learning

1. Introduction

Many theories have been studied for learning and teaching in different contexts. Constructivism is one of the effective theories that demonstrates an explanation of learning as a self-regulated process where learners can build on their existing knowledge and should be active participants. Rogoff (1998) points out that constructivism are a collaborative process including social factors, interactions with surrounding environment and self-reflection. Constructivist learning theory involves several versions which are related and all these forms together can work to enhance the learning process and education in general. For a long time, Saudi education has believed that the only way to improve the learning is by providing enriched materials and the role of teacher as the only source of information neglecting the importance of the role of students as a source and center of knowledge with other external factors that may have wide influences on the education. For this reason, constructivism will be an appropriate theory of knowledge that may create a new view about learning in the Saudi community. This essay will present constructivism as a new theory of learning and teaching that will be applied in Saudi context in order to change the traditional and boring classroom to active and interesting.

2. Constructivism

Constructivist theory of knowledge concerns with the young children learning and how they can develop the cognitive structures with more attention to how they can manipulate new information. Constructivism promotes the knowledge and experience value that the learners come with it to the classroom (Duit & Confrey, 1996). Moreover, the individuals are not the only concern in this theory, but the social interaction is an essential part of constructivism where students communicate with their teacher and classmates as well.

Dewey (1916) argues that there is no objective and truth and humans do not need memorization any more while the memorization was central in American schools in 1900s. Dewey states that the new education should be active and constructive. Constructivism is an epistemology and many essential concepts in this approach are repeated by different theorists all the time.

Piaget is one of the modern theorists who contributes in supporting constructivism. Piaget (1926, 1965, and 1969) believes that the internal factors can provide the individuals with capability and motivation to promote learning. Piaget (1952) states that human mind creates schemes by what the learners intellectually adapt to in the environment. Furthermore, the process of adaption is constant in both child and adult. This cognitive process occurs through assimilation and accommodation processes. Assimilation is the way of adjusting the existing scheme to be placed in the cognitive structure whereas the accommodation is the process to use new information

to construct a new scheme. Cognitive-developmental constructivism is the umbrella that includes Piaget's theories in this approach which emphasizes on the individual as the main factor in learning process.

While Piaget is concern with the child development from internal process, Vygotsky is criticizing Piaget's works that emphasize too closely on the individuals' inner. Vygotsky (1978) posits that the development of child cognition is influenced by historical background, cultural and social factors. Vygotsky believes that what the child can do with help of others (e.g. parents or teacher) could be more declarative of their development than what they can do individually. In the "Zone of Proximal Development" which means the distance between their current level of cognition and the level they can reach it with guidance and support, Vygotsky indicates that the children can learn when they can get assistance. This is not the role of the teacher or parents only but even classmates and friends can do that. Vygotsky's theories in constructivism can be involved under the social constructivism which give more attention to the social factors to construct knowledge.

Shayer (1997) argues that the Piaget's and Vygotsky's theories are essential to be implemented together in education. He demonstrates that Piaget's cognitive development theory can frame the tasks in the classroom while Vygotsky's theory of social interaction can be applied when the students are doing the tasks.

Although cognitive and social versions of constructivist approach show different faces of constructivism, these two forms identify the characteristics of this approach. According to Howe and Berv (2000), constructivism includes the active form of thoughts and ideas. In other words, constructivist approach requires an active participation in classroom to develop the learning process. Learners should manipulate objects and interact with classmates or even think in themselves how to deal with new information. Furthermore, the learning in this approach in socially set located activities which are supported in meaningful context (Airasian & Walsh, 1997). Interactions between learners are one of the main characteristics of constructivism. In this principle, constructivism does not emphasize on the inborn features only but also the external factors that affect the students (e.g. environment, culture and other people). Vygotsky (1978) argues that communication between students shape their thinking and forming new knowledge. Self-regulation is a significant principle in constructivist approach and help students to be aware more about their learning. Self-regulation means the ability of learners to control their actions, thoughts, motivations and feelings. For example, the zone of proximal development is a Vygotsky's conception which proves to the learners when they interact with others that their understanding is insufficient and they need more understanding. Making sense is a unique outcome from learning in constructivism (Bruner, 1990). The learners can realize the knowledge that they receive might be related or might differ. This approach enhances the critical thinking in individuals which helps them in making sense about new information.

The common sense of constructivism is as mentioned above a learning theory, but Thompson (2000) argues that constructivism is not restricted to be a learning theory it moves beyond this to be a model of knowledge. This means constructivism can be an effective teaching approach. Nonetheless, the learning theory of constructivism has demonstrated most of the progression in constructivist pedagogy. Atwell (1987) and fosnot (1989) were interested in the meaning of teaching using constructivist approach. The emphasis moves in this approach from how individual learners know to methods that can facilitate the learning process.

The constructivist pedagogy is presented in different works (Cobb et al., 1991; Tobin, 1993; Freedman, 1994; Wilson, 2001; White, 2001). The implementations of constructivist pedagogy share the coming features. First, the learning is student-centered which means more attention to the individuals to be the first source of knowledge in the class. Second, this method manipulates the group interactions including dialogues that facilitate sharing information between learners. Third, the introduction of the lesson usually is unplanned because it depends on the learners themselves and their prior knowledge. This tells the instructor where the start point of the topic. Last, the opportunities of participating in the class help learners to share their information with others and enhance the self-confidence.

3. Saudi Education

Saudi Arabia uses traditional methods of instructive-based teaching which relay on rote memorization, teacher-centered learning and tests. Many studies have demonstrated that learners who do well in exams are often unable to practice their memorized knowledge outside the classroom in real life situations (Yager, 1991). This is really common in Saudi context where students forget what they have learnt after few days of exams without any ability to practice it in real life. Moreover, Caprio (1994) argues that traditional teaching approaches, where teachers are central in the learning process and the sole of information, do not give students the opportunities to interact and share knowledge with others. These barriers likely lead to hamper students to acquire knowledge and realize the meaning of learning.

Constructivist approach has different versions but in this essay the emphasis was on the cognitive-developmental and social constructivism because these two forms will help in changing the traditional Saudi pedagogy. First, students should be involved in this approach step by step. For the cognitive form, they have to work with ideas and topics that need discovering and connecting with other topics. Then, they have to suggest solutions to the problems that might be experienced through learning. Furthermore, students have to pose questions, do researches or any possible ways that enable them to think by themselves. Whereas the social constructivism entails that students share other classmates and teacher their knowledge and learn from each other by working in small groups. The interaction between students will facilitate for them the ability to deal with different situations in the real life. One of the essential purposes of learning is the ability to experience the real problems in daily life with ability to solve it.

It is important to know the role of Saudi teacher in applying constructivism in the classroom. Von Glasersfeld (1989) posits that teachers have to "encourage and orient the students' construction effort rather than presenting ready-made results as the only permitted path". This means that teachers should be patient with students and do not give the right answer immediately. They direct the students to the goal and wait until they find the answer by themselves. Providing opportunities for students will help them to create their own ideas and solutions (Millar, 1989). Moreover, teachers not only facilitate or lead the discussion, they have to be competent in learning in order to answer any question or offer suggestions for students. Many teachers in Saudi Arabia do not have sufficient experiences that enable them to teach. They just have certificates in their major with no courses in teaching. Thus, they need extend their learning and understand the methods of teaching by taking courses in teaching and how to manage the classroom. This is s step towards constructivist classroom if the teachers become capable to do their role effectively.

Mr.Ahmad Alsaleh is a geography teacher in secondary school and he tried to implement the constructivist approach in his classroom. He started his class by writing the topic of the lesson ad he asked the students to discuss into group about the topic. Few students who participated in the discussion while the majority complained about this way of teaching even the parents thought the teacher does not want to teach their children by creating this method. It is obvious from the beginning that this method will fail. Saudi students used to be passive students for most of the class they only participate on answering the exercises at the end of the lesson. Therefore, it is too difficult to change this method of learning to the opposite. Hodson and Hodson (1998) argue that the responsibility of learning should be transferred gradually from the teacher to the students till students become accustomed to learn independently and no need for the teacher assistance any more. This is the good beginning when the teachers decide to apply a new approach in his classroom in particular the constructivism. Implementing constructivism in Saudi context need many preparations from teacher such as introduce this approach for students, indicate its importance for them in real life and start by apply this method for limited time in the lesson until pupils become familiar with constructivist approach.

4. A Vision for Education

Education is an essential component and cornerstone in developing any nation. Educational system of any country needs a great effort to improve or renew to suit with the recent time. For instance, King Abdullah tries to develop Saudi Arabia by focusing first on education and how can be improved. Thus, the king welcomes the new ideas and plans that contribute to enrich the learning with useful approaches and method of teaching. This essay is an attempt to provide a new approach (constructivism) to be implemented in Saudi context. This context has a distinct culture which require from student to engage more in real life and realize their unique culture. The learning is not only acquiring a new knowledge but how to practice it in real situations which promotes the communication between students and the society. Therefore, applying constructivist approach will achieve most of the aims that integrate Saudi students with their significant culture. Constructivism is not the only approach that will develop the education but there are many other approaches and methods that may facilitate learning which might be implemented in the future.

5. Conclusion

For a long time, constructivism has become a popular conception that changed the traditional views about learning and teaching. Constructivist approach has different versions and every form emphasizes on specific factor. Cognitive-developmental and social constructivism both compose a strong version of constructivism which will make a difference if this approach will be applied in a context like Saudi Arabia. This context contains a unique and distinct culture and lifestyle which will be easily conveyed to students when teachers emphasis on this approach in their teaching. Moreover, this method will change the way of thinking in students and increase the motivation for learning when teacher apply the constructivism gradually.

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