

Compare Constructivist and Socio-Cultural Approaches to learning. Evaluate these approaches in contemporary education

Nan Tao

Nantong Development Zone Experimental Primary School Xinghu Campus, Nantong 226000, China.

Abstract: Constructivist and sociocultural theories are crucial to contemporary education. This essay will compare the similarities and differences between the two theories, and analyse the strengths and limitations of both of these theories in the learning process.

Keywords: Constructivist; Sociocultural Theory; Contemporary Education

Introduction

Constructivist and sociocultural theories influence contemporary education. “Constructivist theory is an epistemology, a learning or meaning-making theory, explaining the nature of knowledge and how do humans learn” (Ultanir 2012). In this approach, educators do not instruct learners directly but provide some opportunities to encourage them to participate in activities (Glaserfeld 2005). Sociocultural theory explains how individual mental function is related to cultural institutions and historical context (Scott and Palincsar 2013). These two approaches have some similarities and differences. Both approaches require learners observing others and constructing knowledge from the social circle. In contrast, the key difference between these approaches is that they focus on different parts. Constructivist approach emphasizes self-direction, while sociocultural theory emphasizes expert’s support. Besides, these theories have some limitations in the teaching process, especially in different age groups, group size and subjects. This main body of the essay will be divided into two parts. Firstly, it compares similarities and differences between constructivist and sociocultural approaches, and then evaluates these two approaches in contemporary education from two aspects.

1. Compare constructivist approach and sociocultural approach

While there are some similarities between constructivist and sociocultural approaches, there are also differences. And those differences are crucial to the comprehension and application of these two approaches in educational settings.

2. Similarities between these two approaches

There are some similarities between constructivist and sociocultural approaches. First and foremost, both approaches require learners observing others. Ultanir (2012) claims that we learn through observation in daily life or science. Meanwhile, Lantolf and Thorne (2007) point out that imitation is a way of sociocultural theory, which plays an essential role in the development of children. In the process of imitation, children need to observe others, rather than to mimic peers mindlessly. Therefore, these two approaches share the element of “observation”. In addition, knowledge is not naturally formed but constructed through reality and the environment. In the constructivist view, it means knowledge is constructed from the social circle (Ultanir 2012). Similarly, from the sociocultural point of view, humans’ cognitive activities are formed through the interaction in the social environment (Lantolf and Thorne 2007). Consequently, these approaches rely on observation and human’ knowledge construction through the social circle.

3. Differences between these two approaches

In contrast, some differences have been identified between constructivist and sociocultural theory. Firstly, these approaches emphasize different aspects. To be specific, constructivists emphasize individuals' experience and knowledge which are built by cognition (Ultanir 2012). Cognition is significant for construction of knowledge, while sociocultural approach emphasizes social interaction. According to Lantolf and Thorne (2007), the most important human activity is developing under the interaction of social and physical environment. Besides, in these approaches, knowledge is constructed in different ways. Constructivist theory argues that knowledge is constructed by individuals, whereas the latter believes that knowledge is passed from expert to novice. Piaget's constructivism points out that learners must construct knowledge by themselves (Piaget 1953). On the other hand, Sociocultural approach points out that teachers bring their existing knowledge to students helping learners solve problems in cooperation. In addition, these approaches focus on different things. Packer and Goicoechea (2000) found that while the first approach focuses on what students can take away from the classroom, the second approach focuses on classroom activities.

Through the above comparison, it can be found that constructivist and sociocultural theories are different routes to the same goal (Packer and Goicoechea 2000). These two theories aim to help learners to construct knowledge. Although these theories have some differences in subtle ways, they are useful for education. Then, the next section will evaluate these two approaches in contemporary education.

4. Evaluation of application in contemporary education

Constructivist and sociocultural theories have been widely applied in contemporary education, so this section will evaluate the use of two approaches in the classroom. Both approaches are relevant and effective. However, they have limitations in some cases. Therefore, this section will analyse from four teaching methods.

5. Constructivist theory in contemporary education

5.1 Flipped learning

Constructivist approach always has been used in higher education (Alt, 2015), while there are some limitations in the teaching process. Flipped learning is an instructional strategy, which reverses the traditional educational arrangement (Abeysekera and Dawson 2015).

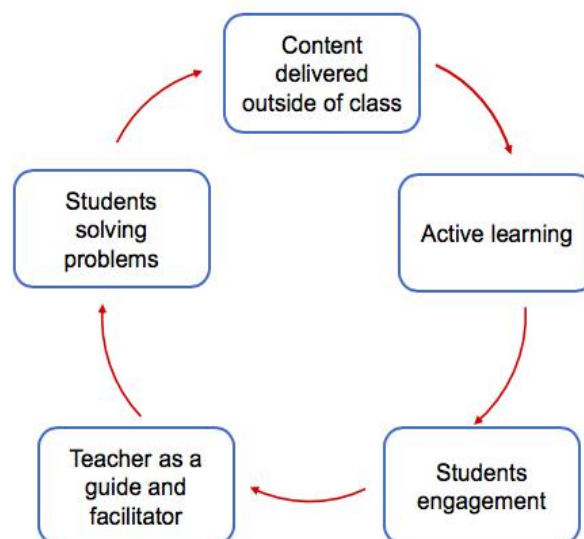


Figure 1 The Flipped Learning Model

Compared with traditional teaching methods, Students are encouraged to share their evaluations and views with other students in their groups (Phillips and Trainor 2014), so flipped learning can develop older children's self-direction and increase their learning interests. Besides, older children can study at their own pace. When learners have spare time, they can view lectures or videos on their mobile devices. However, if this approach is applied in low age groups, teaching quality would decrease, because this approach requires learners to have more previous experiences and good self-direction, but young children do not have good self-direction, educators cannot guarantee young children complete tasks before the class (Abeysekera and Dawson 2015). Besides, the teaching process relies on technology, some poor areas are hard to implement flipped learning. Moreover, implementing the flipped learning can be time-consuming in the teaching process, because instructors and peers are not available to answer questions during video viewing, they should spend more time to solve problems. Although this approach has some limitations, it is useful for higher education.

5.2 Anchored instruction

Constructivist approach is widely applied in contemporary art education, but it has some limitations. This approach connects easily with art education (Thompson 2015), like anchored instruction, which is contextualized to provide students with realistic roles and enhance the learning process. This approach is not about rote memorization, but it emphasizes thinking, analyzing and applying. So this instruction using an anchored stimulate learners imagination in art education (Rieth et al. 2003). Nevertheless, some limitations can be found in the teaching process. In theoretical education, learners discuss different issues according to the contextualized, some students may discuss something unrelated to the topic, and teachers are difficult to control the classroom. So the application of constructivist approach may reduce the efficiency of the classroom. But when educators apply this approach in the classroom that students can develop imagination, constructivist theory is more suitable for arts education (Thompson 2015).

As was shown, constructivist approaches have some limitations in teaching process. Then the next section will discuss the applications based on sociocultural theories.

6. Sociocultural theory in contemporary education

6.1 The Zone of Proximal Development

Sociocultural approach matters for early education (Edwards 2003), but in some cases some limitations can be found. Vygotsky's suggested that early childhood teaching should within the zone of proximal development (ZPD). ZPD is the conceptual gap between what a student is and is not able to accomplish independently (Vygotsky 1978).

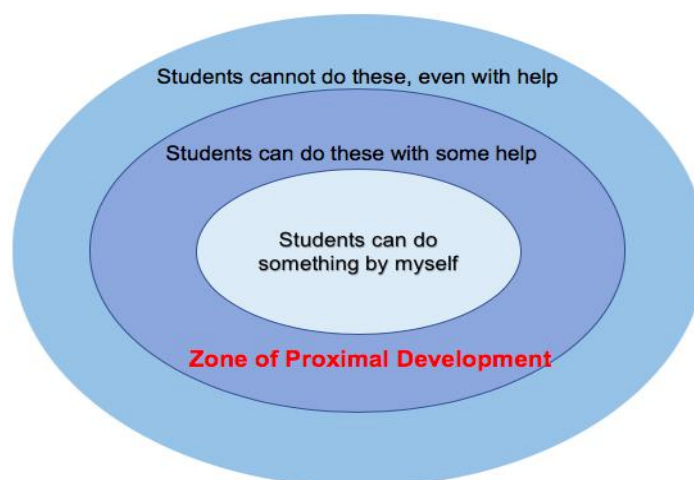


Figure 2 The Zone of proximal development, according to Vygotsky

This approach fits well with early childhood learning (Stremmel and Fu 1993), because children in low cognition stage who need teachers to help them to solve problems. And young children can comprehend theoretical knowledge faster under the teacher's guidance. However, applying ZPD in early education is difficult for teachers to diagnose every learner's level and prepare a teaching plan based on every child's ZPD, primarily when they use this approach to teach large numbers of children, they will spend more time on preparation and have increasing workloads. Besides, it is hard to identify children's ZPD, because everyone lives in a different learning environment and cultural background. These factors may influence on children's ZPD development. Even though it is difficult for teachers to diagnose each child's ZPD, it can assist early childhood in low cognition stage to comprehend fundamental concepts.

6.2 Scaffolding

Implement sociocultural theory have some positive effects and limitations. Sociocultural approach connects with theoretical education easily, like teaching mathematics (Anghileri 2006). Recently, teachers use scaffolding to encourage students to share their mathematical ideas. Scaffolding is a mechanism by which learners are helped to achieve their potential learning (Stone et al. 1993).

Owing to scaffolding instruction develops individual thinking as well as leading mathematical valid understandings, this approach is useful for mathematical learning. Besides, this approach engages the learners, because learners through teachers prompting their build on previous knowledge and form new knowledge, rather than passively listen to presenting the information (Amiripour 2012). However, this approach also has some limitations. Firstly, when teachers use scaffolding in theoretical education, this approach requires that students should have some fundamental concepts. Scaffolding is actually like a bridge, which used to build up things that students already know to achieve things they do not know (Benson 1997). So if learners do not have relevant knowledge in some subjects, teachers are unable to implement the scaffolding. Besides, it is also time-consuming, educators do not have enough time to implement entire scaffolding lessons. On certain occasions, If teachers provide too much support to students, they can become dependent on teachers' guidance (McNeill et al. 2006). Even though there are some drawbacks to the implementation of scaffolding instruction, this approach is crucial to theoretical education.

This part evaluates these two theories in contemporary education. Although both approaches have some limitations in some cases, they are far more important that these approaches have some positive impacts on children's learning and development.

7. Conclusion

This essay compares constructivist and sociocultural theories and evaluated these approaches in contemporary education. The key difference between these two approaches is that constructivist theory claimed that self-directed is crucial, while sociocultural theory believed that knowledge is passed from expert to novice. Actually, these approaches play an important role in the educational process. Both approaches have some limitations in contemporary education, particular teaching in different age groups, subjects and group size. Educators should critically apply constructivist and sociocultural theories that enable these approaches to contribute to more learning outcomes.

References

- [1] Abeysekera L. and Dawson P, (2015). Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research. *Higher Education Research and Development*. 34(1), 1-14.
- [2] Alt D, (2015). Assessing the contribution of a constructivist learning environment to academic self-efficacy in higher education. *Learning Environments Research*. 18(1), 47-67.
- [3] Amiripour, P. Amir-Mofidi S. and Shahvarani A, (2012). Scaffolding as effective method for mathematical learning. *Indian Journal of Science and Technology*. 5(9), 3328-3331.
- [4] Anghileri J, (2006). Scaffolding practices that enhance mathematics learning. *Journal of Mathematics Teacher Education*.

9(1), 33–52.

[5] Benson BK, (1997). Scaffolding. *English Journal*. 86(7), 126-127.

[6] Edwards S, (2003). New directions: Charting the paths for the role of sociocultural theory in early childhood education and curriculum. *Contemporary issues in early childhood*. 4(3), 251-266.

[7] Glasersfeld E, (2005). *Constructivism: Theory, Perspectives and Practice*. 2nd ed. New York: Columbia University Press.

[8] Lantolf JP, (2007). Sociocultural theory and L2: State of the art. *Studies in second language acquisition*. 28(1), 67-109.

[9] McNeill KL. et al., (2006). Supporting students' construction of scientific explanations by fading scaffolds in instructional materials. *The Journal of the Learning Sciences*. 15(2), 153-191.

[10] Packer MJ. and Goicoechea J, (2000). Sociocultural and Constructivist Theories of Learning: Ontology, Not Just Epistemology. *Educational Psychologist*. 35(4), 227-241.

[11] Phillips CR, and Trainor JE, (2014). Millennial students and the flipped classroom. *ASBBS Proceedings*. 21(1), 519.

[12] Piaget J, (1953). *To understand is to invent*. New York: Grossman Press.

[13] Rieth H. et al., (2003). An Analysis of the Impact of Anchored Instruction on Teaching and Learning Activities in Two Ninth-Grade Language Arts Classes. *Remedial and Special Education*. 24(3), 173–184.

[14] Scott, S. and Palincsar, A., (2013). Sociocultural theory. [online]. *Education. Com*. [Viewed 30 July 2019]. Available from: <http://www.education.com/reference/article/sociocultural-theory/>

[15] Stone CA. Forman EA. and Minick N, (1993). *Contexts for learning : sociocultural dynamics in children's development*. Oxford: Oxford University Press.

[16] Stremmel AJ, and Fu VR, (1993). Teaching in the zone of proximal development: Implications for responsive teaching practice. In *Child and youth care forum*. 22(5), 337-350.

[17] Thompson CM, (2015). Constructivism in the Art Classroom: Praxis and Policy. *Arts Education Policy Review*. 116(3), 118-127.

[18] Ultanir E, (2012). An epistemology glance at the constructivist approach: constructivist learning in Dewey, Piaget, and Montessori. *International Journal of Instruction*. 5(2), 195-20.