

The Learning Theories of Piaget, Vygotsky & Bruner and Their Influence on Teaching

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Abstract: The whole paper mainly focuses on the introduction and analysis of Piaget, Vygotsky and Bruner's pedagogy theory, their influence on teaching, and the similarities and differences of their theories against each other. The three of them have made important contributions to the development of world education, guiding the development of teachers' teaching in different directions.

1. Introduction

In the paper, the learning theories of three psychologists will be introduced.

Vygotsky was a psychologist from Soviet. He combined the related knowledge of psychology with Marxist philosophy and created his own unique cognitive theory which is now widely used in modern educational practice.

Piaget, a child psychologist from Switzerland. His cognitive development theory is innovative, and he wrote more than 60 monographs and more than 500 papers for researchers. He had lectured in many countries and won dozens of honorary doctorates, honorary professors and honorary scientific academicians.

Bruner is American famous cognitive scientist and educator. He developed his own cognitive theory on the basis of Piaget's cognitive theory. He had left behind the precious knowledge wealth to the modern education.

Next, we will introduce their theory and influence in detail.

2. The Theory of Vygotsky

Vygotsky's theory of the zone of proximal development is of great significance for educational practice.

Vygotsky (1994) gave an example to illustrate the problems existing in traditional corrective classes. Take speech as an example again: a student who was corrected by teacher in front of whole classmates in a speaking class may feel ashamed and embarrassed to speak again unless he had obtained the high standard in speech. This sensation caused the student to "shutting down in participance" (P.195). The kind of decision by the student had many consequences in the classroom. For example, influencing other students thought that the student lacked some kind of intelligence, and lead to the student's aggravation of anxiety and inferiority. As a result, the student is even more afraid to participate in the class, which will further affect the student's future performance. To sum

up, the main reason is that the teacher made a wrong plan and did not guide the students to carry out the exploratory speech, but directly made the final standard for students.

Although Vygotsky lived in a time far away from us. However, his contribution to modern education in teaching practice deserves the attention of all researchers and teachers. Nowadays, the theory of Vygotsky is now widely used in field of teaching. For example, facing a class, the differentiation teaching will be implemented. In the process of teaching, teachers can mainly focus on the level of most students to carry out teaching tasks, and at the same time give consideration to the outstanding students (higher than the general level of the class) and poor students (lower than the general level of the class) who are in the minority in the class.

3. The Theory of Piaget

Doyle and Lunetta (1978) believed that there are many teaching models derived from Piaget's theory, and that the main goal of these teaching models is to help children develop logical thinking. Doyle, for example, suggested that three pedagogical models use Piaget's theories to develop children's logical thinking. *Early Childhood Curriculum, The science Curriculum Improvement Study* and so on.

These three teaching models did not set standard answers in the teaching process but encouraged children to explore by themselves in an environment and assisted by certain guidance from teachers. The purpose was to stimulate children to constantly update their understanding and constantly develop to a higher level of balance, to achieve rapid development. But at the same time, this was also a very important point in the process of the three modes, that was, the teacher's participation and guidance are not ignored.

About significance of pedagogical, Doyle and Lunetta (1978) noted that Piaget's research provided a new way for educators to focus on children and their learning styles.

4. The Theory of Bruner

Takaya (2008) believed that Bruner's theory emphasized the need to transfer knowledge to students. Teachers need to popularize the key part and then guide the students to obtain this new knowledge. This also supported Bruner's theory, which we mentioned earlier. In his opinion, Bruner's theory was conducive to the reform of teaching, such as helping students to explore and practice, transforming passive learning into active learning, so as to promote the development of practical teaching (Takaya, 2008).

At the same time, Takaya proposed the most important influence of Bruner's theory in teaching: more and more schools begin to design courses, which no longer focus on the importance of target knowledge, but allow students to experience the process of forming target knowledge in courses. This teaching method is more and more widely used in modern education, and had achieved a lot of results ((Pinar, Reynolds, Slattery, & Taubman, 2000).

5. Discussion

The theory of Bruner developed from Piaget's cognitive theory. Therefore, we can find common ground in their theories. For example, both of them believe that in the traditional teaching concept, the way in which teachers are dominant and students are taught mechanically is wrong. On the contrary, we should change our minds, improve students' initiative in independent learning, and guide them to acquire knowledge through continuous exploration (Bruner, 1966; Piaget, 1953).

And the theory of Vygotsky can be understood in the same way. But Vygotsky, for his part, is more specific about how to teach and how to do it. Specifically, in combination with each student's

current situation and their potential learning ability, set a goal that students can achieve through guidance, and then guide them according to this goal. Step by step, students will be able to acquire the target ability in this way. Vygotsky's theory is also a hotspot of debate in modern education --differentiation (O'Brien, 2001).

For Piaget and Vygotsky, there were fundamental differences between their theories. Bruner (1966) and Vygotsky (1978) argued that a person developed only through social interaction. For example: using tools, symbols, and so on (Vygotsky, 1978). This difference has caused confusion and even misunderstanding among many researchers. Some scholars criticized Piaget for placing child development into an isolated position just focusing on laboratory and ignoring social conditions (Bodrova & Leong, 2015).

Of course, the reasons for these differences root in their respective starting points. Piaget put thinking and individual at the key of children's cognitive development, because he started from the perspective of an epistemologist and emphasized the attention to the development of thought. Vygotsky, on the other hand, studies the problem mainly from a psychological perspective (Devries, 2000).

Vygotsky has its shortcomings, too. On the problem of internalization, Piaget explained and described the staged changes of internalization in detail. Vygotsky, on the other hand, did not specify exactly how the internal procedure, as it was called in his theory, worked.

There were, of course, many similarities between Vygotsky and Piaget's theory. For example, they all believed that human cognition was constantly developing, whether through individual development or through social activities. Secondly, attention should be paid to the important role of autonomy in cognitive development (Lourenço, 2012).

Comparing Vygotsky and Bruner, what they have in common was that they both believed that knowledge was constantly developing, among which activity played an extremely important role. They all pointed out that the teaching process should abandon the previous single teaching method and change to the teaching method that guides students to actively explore.

In general, all three theories are feasible in practice. For example, in the recent development area of Vygotsky, teachers can use teaching methods to make teaching plans according to each student's current and potential level and guide students to master new knowledge. Piaget and Bruner's cognitive theory was even more so. Great success can be achieved only by focusing on encouraging and stimulating students to improve their initiative in autonomous learning. Don't, for example, tell the students with a single, traditional way to what should learn now, but combine theoretical content and in daily life what will encountered and interested by students. To cultivate their interest in learning need to motivate students brainstorming actively, and then lead them back to the class. In this way, teachers can get twice the result with half the effort.

Although there were also many scholars who believed that their theories were too idealistic or had not been supported by too many empirical studies. However, more researchers and scholars tend to affirm their theories and try to use them for educational practice (Lourenço, 2012; Steiner, 1974; Sutherland & Knight, 1987). Indeed, there were very few empirical studies. This should be noted in future studies.

6. Conclusion

This article mainly summarized the learning theories of Vygotsky, Piaget and Bruner. Examples were given to illustrate the contribution of their theories to teaching. When we talk about the necessity of this paper, some important points need to be made clear.

Why do we need to go over the theory again and again with these three or more people? Not only because they had made great contributions to the development of pedagogy, but also because

they had provided a solid theoretical foundation for future researchers. On this basis, more new theories can be explored and developed. This is very practical.

Vygotsky, Piaget and Bruner, although these three scholars were in different times and have different cultural backgrounds, they had made their own unique views on the development of cognition, and these views and theories had helped the development of modern education.

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