

Learning from Dewey and Vygotsky Perspective

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Abstract

In their influential work, John Dewey and Lev Vygotsky propose their views on the learning process. This paper focuses on two major themes of each philosopher's work: Dewey's learning by doing and Vygotsky's zone of proximal development (ZPD). Dewey and Vygotsky have similarities, such as thinking and learning in the educational process, and differences in their work toward the learning theory and relationships between learning and development. Moreover, this paper discusses both theorists' perspective of the learning process through implementing their theories in our current schools.

Keywords: John Dewey, Lev Vygotsky, learning theory, learning by doing, zone of proximal development (ZPD)

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Theorists, Illeris (2000) and Ormrod (1995), define learning as “a process that brings together cognitive, emotional, and environmental influences and experiences for acquiring, enhancing, or making changes in one’s knowledge, skills, values, and worldviews” (Merriam, Caffarella, & Baumgartner, 2007, p. 277). Learning is a processing center on what happens while learning takes place. In social learning, the behavior is determined from the surrounding environment. Young children, for example, usually are doing similar actions of what people around them are doing but perhaps in a different way or with their own strategy. Therefore, the theory of social learning considers the idea of a child to be a learned response to social stimuli. It emphasizes the social content rather than the individual mind (Bandura, 1977).

Johan Dewey and Lev Vygotsky focused on the social learning theory with similarities and differences. While both theorists had similar ideas toward the learning process and social development of a child, they differed on the idea of the social environment in the educational sequence. Dewey focused on means of knowledge that explained the effectiveness of individual question by experience as the most important part of humans. Vygotsky focused on the importance of the role culture plays in education and considered the cultural goals as a part of the social pedagogy. This paper is going to compare Johan Dewey and Lev Vygotsky’s learning theory and the perspective of each scholar toward learning. Specifically, describing and comparing Dewey’s learning by doing versus Vygotsky’s zone of proximal development (ZPD).

Dewey, who lived from 1859-1952, visited the Soviet Union in 1928. During that time, Dewey met Vygotsky, who lived from 1896-1934, through mutual friend Blonsky. Based on the relationship between the two theorists, we can most likely conclude that Dewey had an influence on Vygotsky’s early work (Glassman, 2001). However, Dewey provided a critique that defined the difference between his educational philosophy and Vygotsky’s educational philosophy which is that Dewey looked at the Soviet educational system as being based on propaganda. Dewey felt the educational system was being used to develop good Soviet citizens that understood and fit the communist social order (Dewey, 1964).

Dewey believed that learning was active; he felt that children should come to school to practice with others in a community that gave them the experiences to share with a society. For instance, students should be involved in real-life and make a connection between what they experienced and what they learned in school. Moreover, Dewey focused on learning by doing by explaining that schools typically do the same activities that they are doing at home.

Also, the level of the growth gradually improves because their social life and the school life are connected together (Dewey, 1897). This method works particularly well in educational activities because the students are interested in discovering things for themselves.

Vygotsky's theoretical idea is that social interaction is the essential part in the development of cognition. In 1978, Vygotsky said that "every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people and then inside the child. This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals" (p57). Also, Vygotsky believed that the community plays an important role in the process of learning, particularly so with the interaction of parents, teachers and tutors. For example, a child models the behavior that a tutor gives him/her via verbal instruction. In other words, the child wants to understand the actions or instructions provided by the tutor such as a parent or a teacher, and then internalize the information, using it to guide their performance (Vygotsky, 1978). Vygotsky called this collaborative conversation, which happens while the tutor provides the needed assistance to the child.

DEWEY'S CULTUER AS EXPERIENCE

Dewey believes that students should be involved in real life tasks and challenges, and his point of view continues to strongly influence the educational approach of learning by doing. However, Dewey abhors the dualism that appears between the actions a person takes and the way this person thinks about these actions (Dewey, 1916). He personally puts more emphasis on the physical action part because it gives more value to the education and connects the students' experiences and teaches them what they can do by using their body actively. According to Dewey, to learn by experience one must be aware of the step leading up to what we do and the step that comes after what we do.

Moreover, doing things that become experiences gives one the opportunity to discover things and make a connection with each other (Dewey, 1916). This mentioned statement shows the importance of giving the students more of a chance to discover things by their own curiosity. "Dewey (1925) later developed an alternative conceptualization based on primary and secondary experience, experience which has important implications for educators as well as his own ideas concerning education" (Glassman, 2001, p.8). The primary experience is what happens through the accidental reflection and the secondary experience is "the intervention of systematic thinking" (Dewey, 1929, p.4). Dewey's idea of secondary experience was creating a substantial experience based on the first

experience which serves as a test for secondary experiences. He believed that the second experiences appear with much better results.

VYGOTSKY'S CULTURE AS EXPERIENCE

Social interaction and culture has a dramatic impact on cognitive development. Cognitive processes (language, thought, reasoning) develop through social interaction. Moreover, learning is primarily mediated by social interaction of students. Vygotsky's perspective toward experience and culture is not that far from Dewey's perspective. Vygotsky recognized two levels of culture which are close to Dewey's concept. Dewey sees two levels of experience: the culture that appears through everyday concepts, and the culture that appears through scientific ideas. Vygotsky profoundly explained the activity as both the actions that humans take and the subtext of those actions which happen by desired consequences (Vygotsky, 1987). He does not reject the rote habit of learning, but he believes it has no influence on the cultural development of the child (Glassman, 2001).

Vygotsky named his theory zone of proximal development (ZPD) and is applied mostly in collaborative activities. The definition of ZPD is stated as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Given that the student is provided with excellent help, Vygotsky believes that while the student is in ZPD for a particular task, he/she has a higher chance to achieve the task successfully (McLeod, 2010).

SIMILARITIES BETWEEN DEWEY AND VYGOTSKY

Both Dewey and Vygotsky have a similar notion of thinking in the educational process; specifically, in making students raise questions based on progressive problem-solving and motivating the students to think creatively and meeting the needs of that situation. From Dewey's point of view "thinking is something to be used in situations of solves problems. Dewey is most adamant on this point: The only use of thinking is the better living of life" (Glassman, 2001, p.10). Vygotsky has a similar idea of thinking by mentioning that thinking drives to social cohesion and to the achievement of a high level social group (Vygotsky, 1978).

Thus, interest from Dewey's perspective is not something that can happen in the educational context but something that comes from the interaction between the student and situation. There must be interest from the student to give an opportunity to recognize the situation and be motivated by doing that particular situation (Dewey, 1920). Vygotsky also looks at interests as a key to the educational process. However, he expands the concept of

interest further by defining it as “an expression of the child's organic needs” (Vygotsky, 1997, p. 87) and, therefore, means that social interaction has far more control in developing specific situations.

Both Dewey and Vygotsky rejected the atomistic views of human development, views which emphasized the analogy between human and animal development, but ignored the unique plasticity of human behavior made possible through social interactions (Russell, 1993). “Dewey and Vygotsky bound their faith in a given society’s capacity for historical advancement to the efficacy and sensitivity of that society’s cultural resources. For both Dewey and Vygotsky, cultural advancement represented a more diffuse and complex affair and drew upon meanings of every kind” (Mayer, 2008, p. 8).

DIFFERENCES BETWEEN DEWEY AND VYGOTSKY

Dewey believes that doubt is found by an individual in unique, naturally progressive situations. In other words, when problems arise during situations, children are going to confront them through the natural momentum of activity (Dewey, 1916). But for Vygotsky, the situation is the product of the mentor. Doubt is not discovered by an individual but shown by the society through complementary action of the social interlocutor. Development occurs when the children solve the problem with provided help (Vygotsky, 1978). The distinct differences appear when discussing the interaction between learning and development.

Vygotsky explains that relationships between learning and development are a separate process from each other. But in fact, “the processes of learning are independent of development, that learning is development, and that learning and development are two inherently different but related processes” (Glassman, 2001, p. 10). Dewey believes that learning leads to development. He further explains that “it is a process of helping students to create their essential experiences that will drive them naturally to the secondary experiences of question and the organization of knowledge” (Dewey, 1912). However, the important step of learning is that desire of the child in the activity pulls them toward that process.

COMPARISON

No doubt, Dewey and Vygotsky have been remarkable theorists in the educational field. Dewey’s most popular works were *Studies in Logical Theory* (1894), *Democracy and Education* (1916), *Experience and Nature* (1925), *The Question of Certainty* (1929) and *Logic* (1938). For Vygotsky, *Thought and Language* (1986) and *Mind in Society* (1978) were his most popular work.

Comparably, Dewey focused on instrumentalist theory of knowledge which focused on instrumentalism, a method of looking at the ideas and thoughts as instruments for action. Instrumentalism emphasizes the concept of the experience in which the experience is able to achieve intelligent change. Also, it wonders about the students' change to what? To explain the logical probability of experience is not enough, but a treatment is also critical (Alexander, 2012). Also, Dewey's instrumentalism focused on various satisfactions of human activity as instruments developed by human beings to solve several individual and social problems.

Vygotsky focused more on social development theory which is based on social ideas that believe students can learn more while they are learning in a social environment. Furthermore, social cognition learning defines the culture as the essential place of individual development. People are just a kind to have created the culture; the child develops inside the domain of a culture. Also, learning development is different among children. It depends on if they live in a small group or large group (Vygotsky, 1962). Learning development for small groups is easy control and is more influential. In conclusion, both Dewey and Vygotsky emphasized the importance of a social environment and culture for the learners.

IMPLICATIONS FOR INSTRUCTION BY DEWEY

For Dewey, schools should have a mixing of vocational and academic studies which gives students opportunities to participate in life-like activities that generate creativity and cooperation. Dewey believed that mixing academic and vocational programs of studies are beneficial for students. In 1940, Dewey said that "instead of trying to split schools into two kinds, one of a trade type for children whom it is assumed are to be employees and one of a liberal type for the children of the well-to-do, [we must] aim at such a reorganization of existing schools as will give all pupils a genuine respect for useful work, an ability to render service, and contempt for social parasites" (p. 131-132). Dewey also emphasized that vocational and academic studies develop the students' creative thinking skills as well as knowledge towards different sectors of society.

However, Dewey was very much against rote learning which is learning based on repetition and memorization. Dewey considered this method as the worst way of teaching. He believed that the teaching method should be concentrated on thought, not on static content of the curriculum. In 1910, Dewey stated that "thought

affords the sole method of escape from purely impulsive or purely routine action” (p. 14). In other words, when students lack the ability to think, the generations are going into automatons and becoming void of analytical thought.

Instead of rote teaching, Dewey focused more on the interactive approach to problem-solving and creative thinking. Unfortunately, memorization is the common method of teaching in the schools of Saudi Arabia; however, I completely agree with Dewey’s idea of rejecting the repetition method because our generation of students are in dire need of being able to apply problem solving and critical thinking to meet a higher standard of education, and rote learning will only reflect poorly on the students’ performance. Moreover, I believe this is a good time to make a shift toward effective education by applying Dewey and Vygotsky ideas.

Furthermore, Dewey’s philosophy of education reinforces the natural urges of the child. Dewey supported the children questioning to discover the ideas on their own which rote learning will not do. He also proposed that children should learn by experience. Through this method, students not only absorb knowledge but improve their skills, habits and attitudes to solve problems. Dewey also encouraged teachers to be creative in their way of teaching to provide students with more chances to think. He further believed that education should help people become more efficient members of society by focusing on their values, equality, and societal responsibilities.

IMPLICATIONS FOR INSTRUCTION BY VYGOTSKY

Vygotsky believed that children could learn more effectively in a social situation. Basically, his theory, zone of proximal development, explains that there is a difference between the level of learning that occurs by studying alone and the level of learning achieved by working with a teacher or a peer. He also mentioned that “the common conception of the zone of proximal development presupposes an interaction on a task between a more competent person and a less competent person, such that the less competent person becomes independently proficient at what was initially a jointly accomplished task” (Chaiklin, 2003, p. 41). The primary concept of the Vygotsky theory is that the development of learning is based on help and guidance from teachers, peers, parents, tutors and mentors.

Moreover, Vygotsky considered his theory as a tool of collaboration and direction for the children to solve their tasks in a professional way. Vygotsky did not believe that learning was solely related to the zone of proximal development. He also believed it should always be enjoyable to the learner. For example, if a student loses a race

that he has no interest in; this action could be considered as a part of the zone of proximal development because it reflects on the student's development in the future (Chaiklin, 2003). Vygotsky believed that peer interaction is an important part of the learning process because it gives the children the opportunity to learn effectively. When students are in the zone of proximal development and the teacher gives them some help, this is considered a base for completing their task successfully and effectively.

Moreover, Vygotsky focused on the importance of the leadership role for learners. He believed that leadership contributes to enhancing the intellectual and social development of students. Vygotsky also believed that collaborative activities among learners engage the students and teachers during the tasks that are highly important. Learning can also be reinforced through play or work between a learner and a more experienced learner. However, teachers must effectively assist the students to provide growth for their students. Play can also be used as a useful tool in the thinking processes of children. During play, Vygotsky suggested that children become more aware of what the connection is between what they are doing and why they are doing it.

ZONE OF PROXIMAL DEVELOPMENT (ZPD)

Dewey's learning by doing and Vygotsky's zone of proximal development (ZPD) are the same in that they are both effective learning methods that teachers can use as a technique in teaching. Vygotsky developed his theory by focusing on the relationship between instruction and development and how ZPD improves and builds the students' future. He also emphasizes that "what the child is able to do in collaboration today he will be able to do independently tomorrow" (Vygotsky, 1978, p. 86). Basically, the idea is to enable the student to learn first with supervision, and then the student will master the skill spontaneously due to the initial experience.

However, ZPD assumes that the teacher or parent is more competent in the knowledge that they are teaching the child. The child's knowledge does not particularly matter. What matters most is the child's understanding and meaning of that assistance in relation to a child's learning and development. "One attraction of the idea of zone of proximal development in relation to educational practices is that it provides a distinctive perspective for conceptualizing the relation between human learning and development perspective that also has some fundamental differences with many of the current predominant views about this relation" (Chaiklin, 2003, p. 58).

Moreover, ZPD focuses on two different aspects. The first is the analysis of psychological development, for example, the child's transition from one age period to another. The second is the psychological functions of the child and the relationship between developing these functions and the need of transition (Chaiklin, 2003). One way of applying ZPD in a classroom setting is to divide the class into small groups of four, hand out a worksheet to each student and ask them to discuss each question or item on the worksheet among themselves "students were divided into small groups of four. An artifact discussion activity worksheet was distributed to the students. Each group of students was asked to discuss among themselves each of the items on the worksheet" (Vacca, 2008, p. 655).

Dewey's learning by doing is focused more on discovering things according to the student's natural curiosity. To Dewey, education must focus on learning via interaction and experience. Textual knowledge is of limited use for children, and the most effective way is to ensure learning is a hands-on experience. During the course of my teaching career, I have realized that no one theory holds true on its own. There is a need to employ a number of tools to ensure that the child continues to take an interest in the subject at hand. For this reason, Dewey's theory holds an importance and is regularly utilized by me. When imparting elementary skills, such as learning mathematics, the first step is almost always doing an operation yourself and then trying to get the child to learn the skills or task (Benjamin, 2003). From this and other activities, I have found that learning by doing makes a huge difference in the learning process. I believe that these two theories are very useful in providing the curricula in an effective way to our students and can be easily used together. For example, while the students are receiving assistance in a particular task, we can provide an instruction that makes students stay on task, which then gives the student an opportunity to learn by doing.

I have tried during my career as a teacher to apply the learning by doing theory on my students. I saw, firsthand, an impressive improvement in the result of my students, especially from those who were relatively weaker and less accepting of other ideas and teaching strategies. By applying the learning by doing theory, it was easier to minimize resistance and use the child's instincts to teach a child what was required. Activities were also more interesting, and there was a stark contrast from the mundane daily work that many students have to perform. Using Dewey's ideas as the starting point of education has enabled me to convey my idea in a better fashion than before, and the feedback from children has also been positive.

However, the benefits of applying learning by doing do not stop there. Teachers continue to impact teaching at a later stage as students realize the benefits of such techniques and do not give up unless they try a task themselves. My reflections have also allowed me to improve on my teaching by developing new activities which is also part of Dewey's learning by doing approach. Also, I completely agree with Dewey's assertions that children are not miniature adults; they must have the time to enjoy this phase of life, and this right must not be taken away from them (Dewey, 1916). For this reason, I have found learning by doing to be a technique which allows children to enjoy and learn at the same time. But let's imagine what the result would be if we combined ZPD with learning by doing. From my opinion, unifying these two theories and applying it in our school would help our students learn with full pleasure and motivation for two reasons. First, the student is doing his task with assistance and supervision from the teacher. Second, the student is applying what he learns by doing related activities to the lesson. To conclude my point, Dewey and Vygotsky's theories provide a strong base to start from and ensure effective teaching in the classroom. By being more involved with children, I have been able to improve my teaching skills to obtain better results and more responsive students.

Dewey and Vygotsky envisioned a world where labor productivity would be based on the fact that the students learn well from an institution which encourages learning and new ideas. At the same time, using techniques such as "learning by doing" and ZPD enhance the transfer of knowledge from previous generations to new ones in a more effective fashion.

Discussing the ideas of Dewey and Vygotsky was very interesting to me. It widened my gaze toward reading deeply in learning theory. For example, when I read that Dewey believed that students should be involved in real life tasks, I found this idea to be relatively simple and not hard to apply it in my classroom. I also learned that by comparing Dewey and Vygotsky, I am able to apply a learning theory that will be more useful to my students. More specifically, when I encourage my students to discover things based on their natural curiosity, the environment in the school will attract the students to learn more effectively. What I strongly learned and believed from Dewey is that avoiding memorization and repetition is the best strategy because when the students are given opportunity to think independently, critique and question, the result of education is dramatically improved. Also, the idea to make learning based on a hands-on experience seemed very reasonable because students' attention is limited when using the traditional lecture style approach.

Under Vygotsky's approach, the student is working on a task with help from a teacher or parent which gives the teacher a more informative assessment. I learned that ZPD can be applied to my students by having them collaborate with each other. However, the most important lesson can be drawn from comparing the ideas of Dewey and Vygotsky. By comparing them, I was able to focus more on finding the best instrument to use in the learning process.

The implications of what I learned from comparing Dewey and Vygotsky is that the learning method should be related to a combination of their theories. For instance, I could use learning by doing as a strategy to deliver my lesson to my students. During my career period, I have taught history classes, so I took my students to the museum to explore the ancient history of Saudi Arabia. In doing this, the students were able to have a hands-on experience and interact with the sculptures which represent what they learned in the class. But I can also apply Vygotsky's theory of learning, ZPD, by providing the assistance to my students to improve their performance. By comparing these two theories, I learned how important the learning and teaching process is for my students.

However, the learning process must be thoroughly examined to ensure its effectiveness. From this point of view, the first research question I should ask is, how do I apply learning by doing to improve my students' performance in the history lesson for third grade? During the investigation of answering the question, I will determine whether or not this is a valid theory. My second question of research would be to ask, does ZPD improve the students' performance in the history lesson for third grade? During the investigation of answering this question, I will find out if the ZPD is useful for my students or not by examining the difference between the students' ability to achieve a task on their own and their ability to finish the task with my assistance.

The relationship of the aforementioned research questions and the comparative analysis is very connected because both ideas of Dewey and Vygotsky examine the learning process and fully explain how learning should take a place in the classroom. Furthermore, by investigating the answer to these questions, I will find out the validity of these methods. To conclude, Johan Dewey and Vygotsky focused on the social learning theory with similarities and differences. Dewey emphasized on the means of knowledge and how to deliver the content of curricula by proposing his theory of learning by doing which focuses on reinforcing the transfer of knowledge to students in a creative way. Vygotsky focused on the importance of applying zone of proximal development (ZPD) in the learning method which focuses on providing the assistance to students while doing their task.

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