

# The Contributions of John Dewey's Philosophy of Pragmatism to an Understanding of Education and Its Reform

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**Abstract:** John Dewey, a prominent 20th-century philosopher, is renowned for his contributions to educational reform and progressive education. His pragmatic philosophy, emphasizing experiential learning, has had a global impact on education since the 1920s. This paper explores Dewey's theory of experiential learning, its historical influence on modern teaching methods, and its potential for future educational research. It aims to provide educators and learners with insights into Dewey's philosophy and its application in contemporary education. The paper is structured into three parts: an introduction to Dewey's pragmatic philosophy in education, a discussion on the application of experiential learning in current educational practices, and suggestions for future research on integrating teaching and learning.

**Keywords:** The Contributions to Education; John Dewey's Philosophy of Pragmatism; Understanding of Education; Educational Reform.

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## 1. Introduction

John Dewey is the most famous and influential philosophers among the 20th century since he is most famous for his contributions in the field of education. He was also a primary educational reformer for the 20th century, being a significant voice of progressive education (Sharma et al., 2018). Besides, Dewey is critical to traditional indoctrination based on emphasizing on educating children. As a result, Dewey's pragmatic philosophy has an extensive influence in education, spreading to the whole world after the 1920s (Sharma et al., 2018). However, according to Dewey (1986), education deals with the essence of that creating sufficient conditions for learners to 'experience'. This means his theory of 'experiential learning' should be regarded as a compulsory perspective to understand his philosophy of pragmatism. Thus, although the contributions of Dewey's theory to modern education are mostly acknowledged, this paper will mainly focus on his theory of 'experiential learning'. The primary purpose of this paper is to give educators and learners a historical understanding about how Dewey's theory influenced modern teaching methods and to give them guidance of what this theory will adequately apply to the future study. This paper will focus on discussing how Dewey's theory of experiential learning already applied and how it will apply to modern education. Overall, this paper will divide into three parts, namely introducing the theoretical background of Dewey's philosophy of pragmatism in education, discussing how his theory of experiential learning already applied to education and my ideas on how his theory of experiential learning could be applied to a future educational research on how to promote the integration of teaching and learning.

## 2. Theoretical Background of Pragmatists' Ideas and John Dewey's Philosophy of Pragmatism in Education

According to Sharma et al. (2018), four fundamental principles form the theory of pragmatism on education, namely, principles of utility, interest, experience and integration. Some philosophers (such as idealists or absolutists) believe that the truth is the truth, and the facts will never vary (Sharma et al., 2018). However, pragmatists believe that the truth can be changed instead of being immutable. The real meaning of 'fact', for pragmatists, is whatever works and gets results at any time (Sharma et al., 2018). Thus, pragmatists pay more attention to taking action and achieving results. This guides to the idea of 'the truth come from results' for pragmatic education theory (Adeleye, 2017). After introducing the general views of pragmatists, the following contents of this paper will focus on John Dewey's philosophy of pragmatism.

Overall, there are at least three essential parts of Dewey's contributions to education. While as a pragmatist, Dewey firstly uses the term "instrumentalism" to interchangeable with the term 'pragmatism' on education (Dewey, 1997). He promotes the idea that knowledge (or a theory) is only advantageous for humans when it is utilized (Dewey, 1997). Secondly, Dewey is the first person who brought pragmatism to education. In his book (1997), Dewey encourages students to learn by doing, meanwhile, thinking and reflecting on what they did. Hence, his idea of experiential learning becomes one of his labels. Lastly, according to Adeleye (2017), another contribution of Dewey to pragmatic education is his critical ideas of traditional education. Different from the traditional views of education, Dewey considers students should be problem-solvers rather than note-recorders (Adeleye, 2017). Meanwhile, schoolteachers should teach students to solve problems and develop their knowledge and skills relating to their lives (Dewey, 1997). Thus, Dewey has been widely

associated with the application of pragmatism to the practicality of education (Adeleye, 2017). Adeleye (2017) endorses that some more progressive views which Dewey presented to teaching and learning, such as “experiential learning” (i.e., “learning from experience” and “learning by doing”), “education and democracy”, “education as life”, “school as society” and “the teacher’s role as facilitator”.

### **3. Discussing the Contributions of John Dewey’s Theory of Experiential Learning (i.e., “Learning from Experience” and “Learning from doing”)**

Since Dewey’s pragmatic ideas are widely applied in education (Sharma et al., 2018), this paragraph aims to briefly outline the contributions of Dewey’s ideas (except “experiential learning”) to teaching and learning. Defining his idea of “education as life”, Dewey (1997) supports that learning is lifelong, as well students should interact with the outside world, in order to learn knowledge from things in their daily life and adapt better to the environment. Applying this idea in science education, educators prefer students to study science for everyday life, promoting students’ abilities to discover new and learn in life (Aikenhead, 2006). Aikenhead (2006) appreciates that this application in science curriculum has changed the history of the science reform. In addition, Hansen (2012) presents that in Dewey’s education and democracy, Dewey pointed out the view of “the teacher’s role as facilitator”, reducing the dominance of the teacher’s role. Using this democratic idea in teaching, Rodgers (2002) agrees that this has changed the traditionally antagonistic relationship between teachers and students, helping to promote the democracy of modern education. To sum up, applied in education, Dewey’s ideas of pragmatic theory has made significant contributions to replacing outdated educational ideas, promoting the democracy of modern education and improving the development of pedagogy.

However, focusing on experiential learning, this paper will discuss the contributions of this theory to education in detail. According to Meriam and Clark (1993), there are two essential understandings of experiential learning, namely learning from activities (i.e. learning from doing) and learning from experience. Therefore, based on both understandings, the following sections will illustrate the contributions of Dewey’s experiential learning to education, applied in three parts: 2.1 Applied as a teaching method in the class, 2.2 Applied in changing the ways of museums utilizing and 2.3 Applied in Chinese educational reform.

#### **3.1. The Contributions of the John Dewey’s Theory of Experiential Learning Applied in Teaching Approaches in Class**

Requiring learners to learn actively, experiential learning creates positive learning achievements when being implemented in advanced classes (Smart et al., 2007). In *Experience and Education* (1986), Dewey compares and contrasts progressive and traditional education, introducing his theory of experiential learning. In this book, Dewey (1986) regards experience as a process of action recognition. After this book, experiential learning, advocated by John Dewey, is a technique applied by developmental reformers of education. In addition, Meriam and Clark (1993) describe what students

can absorb only ten per cent of their reading, twenty per cent of the content of what they hear and thirty per cent of the total of seeing. However, if a teacher associates these senses in a lesson with an experiential learning circumstance, students will obtain fifty per cent of the content of seeing and hearing, seventy per cent of the content of their saying, as well ninety per cent of the content of their doing and experiencing (Banikowski, 1999). It means students can learn and retain much more from their experience of doing than from merely listening to teachers in the classroom. Therefore, Banikowski (1999) endorses that applying the theory of experiential learning in class contributes to promoting students’ skills of absorbing contents in class.

Moreover, agreeing with Dewey’ idea of ‘learning by doing’, Davis (1993) considers that students can learn advantageously during taking part in the learning activities by practising what learned or using some views or theories in their real life. Dewey (1986) also argues that this experiential teaching approach supplies practising as a valuable learning resource that helps learners to accept and enjoy knowledge with unforgettable activities. Thus, after using Dewey’s experiential learning into modern teaching methods in the class, teachers often organise various class activities for encouraging students to use and practice the knowledge in those activities, improving their proficiency in using knowledge in real life (Smart et al., 2007). Since experiential learning has applied in changing traditional teaching approaches, it can also offer opportunities for synergy and engagement through supervised activities and pedagogical interventions (Smart et al., 2007). Besides, since Dewey’s theory of experiential learning supports students to explore and learn from their life and environment (Smart et al., 2007), the experiential teaching approach considerably expands students’ learning recourses. Thus, it is believable that applying the theory of experiential learning in teaching methods, and it enhances students’ abilities to assess and initiate things independently, besides its contribution of improving students’ proficiency in using knowledge.

Furthermore, a teaching method associated with experiential learning increases students’ thinking ability to solve problems by reflecting on what they experienced (Banikowski, 1999). Since Banikowski (1999) points out that solving problems in life seems to be one of the purposes of education, it is evident that improving the ability to solve problems is compulsory for learning development. For example, The Puzzle Brain Spark activity (i.e. a game designed for the language class) described in Newstrom and Scannel’s article (1998, cited in Smart and Csapo, 2007), using a jigsaw puzzle for training children’s ability to overcome difficulties and solve problems. When working with the puzzles, students may fail at first. However, after reflecting on what did wrong, they may find that the game should start from the edge of the picture. This is a process of children’s learning order and logical thinking exercises. Going through the experiential process of assumption, judgment and choice, students learn how to use the reflection to solve problems (Newstrom et al., 1998), not only in the game but also in life, since students can employ this ability into real life.

To sum up, applied in teaching approaches in class, the theory of experiential learning contributes to updating teaching methods and improving students’ learning achievements, by promoting students’ skills of absorbing contents, improving students’ skills in using knowledge, as

well enhancing their ability to solve problems.

### **3.2. The Contributions of John Dewey's Theory of Experiential Learning Applied in Changing the Role of Museums on Education**

Besides applied in teaching approaches in class, Dewey's theory of experiential learning can also be applied in changing the ways of utilizing museums. Since museums have a historical background of educating the citizens, Monk (2013) writes an article to examine the outcomes from learning in museums based on John Dewey's philosophy of experiential learning. He (Monk, 2013) measures the essential concepts of Dewey's experiential learning with the aims of the museum educational foundation, approving their effectiveness of improving learning achievement. As a result, the experiential nature of museums (i.e. the experiential function) can enhance people's learning achievements from museums. To explain in detail, since Dewey (1986) emphasizes that interaction as an essential perspective of experiential learning, he explains that the experiential function of museums associates the cooperation of previous experiences with the current knowledge.

Although museums are experiential, the way used by traditional museums to transfer information is dull, merely transferring facts passively to learners (Monk, 2013). Those traditional museums are insufficient for learning. Hence, Monk (2013) suggests that museums managers should learn from Dewey's theory of experiential learning to design a more appealing learning experience. As stated by Dewey (1986), as promoters of experiential learning, the educators should encourage learners to reflect on what they have learned from the interaction of a present case and their experience, creating new knowledge and skills, in order to solve future problems efficiently. Thus, Monk (2013) suggest that the administrators and instructors in museums also should take the responsible roles of assisting the public people in learning to reflect from experience, supporting the process of the development. As a result, being different from traditional museums, many experiential activities designed in modern museums draw the public people in, stimulating their willing for participation (Monk, 2013). Meanwhile, through the touching or doing process, people are able to remember the knowledge learned from unusual experience longer. Thus, it is evident that these modern experiential activities are of helpfulness to improving public peoples' learning interests. Similarly, Hein (2004) also believes that based on Dewey's philosophy of experiential learning, an optimal museum should offer opportunities for learning life experiences in the external environment. Therefore, applying Dewey's theory of experiential learning, those modern experiential activities are used to shorten the distance between people and knowledge.

Summarizing what discussed above, through their interactive and experiential nature, Hein (2004) points out that the theory of learning experiences applied in modern museums may improve people's knowledge level by giving opportunities for observing a real fossil or touching an antique instrument. For example, when visiting the British Museum, I saw a number of magnificent jade and porcelain from China, as well as seeing the emperor's unique seal. This experiential process enables me to associate these items I saw with my past experience of studying history about the Opium War in China, developing my continuity of experience after reflecting on both historical and present events. Therefore,

based on Dewey's theory of experiential learning, changing the roles of museums, namely, from a controller who transfers information statically to a facilitator who encourages reflection and interaction of experiences, helps learners to reflect on their past experiences, modifying some misunderstandings, as well constructing new knowledge in the future. Hence, it is clear that Dewey's theory of experiential learning makes a significant contribution to increasing public people's enthusiasm for learning by changing the traditional usage of museums.

### **3.3. The Contribution of the John Dewey's Theory of Experiential Learning Applied to Chinese Education Reform after being introduced by Tao xingzhi in early twentieth century**

According to Yao (2002), being a Deweyan reformer, Tao xingzhi (i.e., "Tao" in the following contents) is a famous educator in China. Some of Tao's ideas on education which are borrowed the philosophy of Dewey are widely applied in various reform projects throughout China in the 1920s, (Yao, 2002). Similarly, from Zhou (2005), Dewey's theory of experiential learning, introduced to China by Tao, has influenced the Chinese education reform of curriculum and opening vocational courses in rural areas since the early twentieth century.

First and foremost, Zhou (2005) points out that the influencing of Dewey's theory of experiential learning on improving curriculum provision can be seen in the outline of standards for the curriculum in the new school system, which was released in 1923. The original ideas of this reform originate from Tao's educational ideas of making education as a technique for national reconstruction, being with universality and practicality (Yao, 2002). Tao's idea mentioned here is mainly based on Dewey's experiential learning. Hence, adding new subjects under the new curriculum system, Chinese middle school students in 1920s have to learn more practical knowledge than before, including social sciences, languages, mathematics, natural science and physical training (Zhou, 2005). Meanwhile, adding some science experiment courses to provide more opportunities for students to practice what they learned in the textbook. Thus, influenced indirectly by Dewey's experiential learning, the new curriculum becomes more colourful and meaningful after the education reform in the 1920s compared with the previous situation that students only had to learn rigid classical Chinese.

Moreover, Yao (2002) points out that Tao valued Dewey's idea of 'learning from doing'. Since coming from a low-income family, Tao found that people can learn everywhere in life, besides going to school (Yao, 2002). This idea was widely used to china's rural education reform in the 1920s (Yao, 2002). Some vocational courses were established because of some local needs, offering poor children opportunities to be an apprentice. In this way, they can learn by doing without worrying about tuition (Zhou, 2005). Besides rural poor children, these vocational courses also make it is easier for school students to learn by doing and have more chances to achieve more knowledge from both practice and their previous learning experience (Zhou, 2005). Hence, introduced the theory of experiential learning to China by Tao, both the education level and the productivity level in rural areas has been greatly improved since the 1920s.

Therefore, Zhou (2005) and Yao (2002) acknowledge that

Dewey's pragmatism theory, introduced by Tao, served as forceful support for the reconstruction of the new education system in China in the 1920s. Therefore, Dewey's theory of experiential learning involving the relationship between learning and experience, as well the relationship between participation and the learning initiative, has a significant contribution to the development of education in China.

#### **4. My opinions of John Dewey's Theory of Experiential Learning Applied in Promoting the Integration of Teaching and learning in the Future**

In my opinion, Dewey's philosophy of experiential learning could be used in research on how to promote the integration of teaching and learning in the future. However, in current educational philosophy, teaching and learning are generally opposites (Chenga & Linb, 2010), leading to an opposite's relationship between teachers and students. Resulting from its emphasis on learning from practicing and doing (Banikowski, 1999), the theory of experiential learning could deny the traditional and current models of teaching and learning, in which students must listen to teachers for receiving knowledge. Besides, standing on the opposite side of some outdated traditional ideas of education, the theory of experiential learning would give educators a support to replace the old teaching-learning model with an experiential one. Based on Dewey' idea of 'learning by doing', teaching seems to be no longer the teacher's prerogative, since students are able to learn through taking participate in activities or visiting modern museums (Monk, 2013). This may cause a reducing in the status of teaching while increasing it the status of learning. Aikenhead (2006) anticipates that teaching and learning will not be opposites anymore. Thus, it is believable that a balance will be formed between teaching and learning.

Furthermore, since this theory provides specific ideas, it may assist researchers to analyse and reflect on the teaching-learning relationship from the pragmatist's perspective to receive more detailed data. It means that Dewey's philosophy of experiential learning could be regarded as a theoretical basis in researching how to promote the integration of teaching and learning. Meanwhile, through the further research on promoting the integration of teaching and learning, it may cause a modification of the theory of experiential learning in return, in order to make this philosophical theory more consistent with the modern educational reality. Thus, the improved theory of experiential learning will again provide a more advanced theoretical basis to adjust and modify the future methods used to promote the integration of teaching and learning. Therefore, applying the theory of experiential learning in doing this research in the future would be feasible and anticipated.

#### **5. Conclusion**

In conclusion, it is believable that Dewey's theory of experiential learning has made outstanding contributions to modern education, by discussing and analyzing in detail how this theory of experiential learning already applied in changing the teaching approaches in class, changing the role of museums and its application in Chinese educational reform. Because of its relevancy to the mainstream thought of current education (Aikenhead, 2006), its emphasis on learning from

practising and learning from experience encourages the education to be more experiential, giving educators a whole new way of thinking on education and changing people's understanding of education.

Thus, besides applied in the three aspects, which are stated in the paper, Dewey's theory of experiential learning should be more widely used in other educational aspects, promoting global education development.

Although it is of the helpfulness in updating the understandings of education, there are still some unbalanced educational relations in modern education, such as the opposites relationship between teaching and learning. Thus, applying the theory of experiential learning in researching how to promote the integration between teaching and learning, in my opinion, is feasible from the philosophical perspective. By stressing the importance of practising, it could weaken the imbalance between teaching and learning, facilitating to replace the old teaching-learning model with an experiential one. Hence, applying the theory of experiential learning in this such future research may help provide the philosophic theoretical basis, promoting the research process much smoother.

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