

An Analysis of the Impact of Educational Psychology Thought on Educational Reform Based on Dynamic System Theory

Huaxi Yin¹, Wenli Wu²

¹Xi'an International University, Xi'an, Shaanxi, 710077, China

²South China University of Technology, Guangzhou, Guangdong, 510641, China

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Abstract: Educational psychology is an applied branch of psychology and plays an important role in promoting the reform of school education. Psychology, as a discipline with strong theoretical nature, needs teachers to keep pace with the times in practical teaching and combine psychological theoretical knowledge with practical knowledge to promote the improvement of students' comprehensive quality. With the continuous development of society, educational psychology has now become one of the required courses in various colleges and universities. The purpose is that students can master the skills and basic knowledge of educational psychology. Starting from the evolution of the contemporary educational reform movement, examining the interaction between educational reform and the development of educational psychology has important reference value not only for the development and improvement of the educational psychology department, but also for the theoretical guidance of the educational reform. Based on the dynamic system theory, this paper discusses the principles of psychology teaching innovation reform and the impact of teaching innovation reform.

1. Introduction

Since its birth, educational psychology has continuously drawn on the latest achievements in pedagogy, psychology and various fields in its 100-year development process. At the same time, it has also made outstanding contributions to the theoretical and practical development in the fields of psychology and pedagogy [1]. With the continuous development of society, educational psychology has now become one of the required courses in various colleges and universities. The purpose is that students can master the skills and basic knowledge of educational psychology. Psychology, as a discipline with strong theory, needs teachers to keep pace with the times in practical teaching and combine psychological theoretical knowledge with practical knowledge to promote the improvement of students' comprehensive quality level [2]. The special function of educational psychology is to transform the theories and methods of psychological research on human nature into teachers' wisdom, which can be used in school teaching and reflect the aims and ideals of education in students' physical and mental growth [3]. From the current situation of psychology teaching in higher vocational colleges, the focus of teaching is difficult to combine with real life, resulting in the students' practical ability is not improved. In the teaching curriculum of college educational psychology, the learning materials will be updated every five to six years, which leads to the backward knowledge of educational psychology that students have learned, which seriously affects the effectiveness of students' learning psychology.

Educational psychology is the science of studying the various psychological activities of people's teaching and learning situations and the interaction mechanism and basic laws of the interaction [4]. Starting from the evolution of the contemporary educational reform movement, examining the interaction between educational reform and the development of educational psychology has important reference value not only for the development and improvement of educational psychology, but also for the theoretical guidance of educational reform [5]. Human growth stems from the need of individual self-realization, and the need for self-realization is the driving force for the formation and expansion of personality. Personality is the performance of a person who strives

to achieve self-realization according to his own knowledge of the external world [6]. Learning is a kind of psychological phenomenon shared by animals and people. It is one of the most basic concepts in educational psychology, and one of the most studied and active areas in educational psychology [7]. For psychology, some theoretical knowledge and psychological phenomena need to be given scientificity in the process of teaching, so that students have a clear definition of it, so that students can have a deeper understanding of it. Based on the dynamic system theory, this paper discusses the principles of psychology teaching innovation reform and the impact of teaching innovation reform.

2. Problems in Curriculum and Teaching of Educational Psychology

Psychology takes people's psychological activities and behavior thoughts as the main research object. Teachers should take students as the teaching subject in teaching, so as to promote students to better play their subjective initiative in the process of psychology learning. The teaching materials and curriculum core content of educational psychology mainly take the representation and acquisition of knowledge as the main core, resulting in the repeated intersection of cognitive psychology and inquiry topics, thus ignoring the actual needs of teaching. It is precisely because people need to realize themselves that the potential of organisms can be realized, maintained and enhanced [8]. Constructivism advocates student-centered situational learning under the guidance of teachers. It not only emphasizes the initiative and enthusiasm of human learning, but also pays more attention to the reflection and creativity of learners. The main purpose of educational psychology is to solve the problems in educational practice and to improve the quality of learning and teaching.

In educational psychology, problems solving, skills learning, knowledge learning, motivation stimulation, moral attitude and so on should be part of the content. Strengthening the links of students' activities is an important measure to improve their cultural quality, ability quality and moral quality. In the process of education and teaching, we should attach importance to students' activities, combine theory with practice, and enhance students' comprehensive quality through practical activities. The learning model can be described as a “catalytic reaction” as shown in Fig. 1.

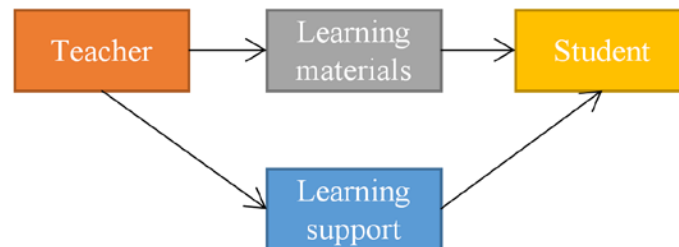


Fig. 1 Catalytic reaction mode

In the course of educational psychology, teachers should take practical case analysis to make students understand theoretical knowledge, and then observe students' mastery and understanding of knowledge during questioning. Higher vocational colleges should make teaching revolve around students' life when training talents, thus making teaching content more practical. The lack of innovative ability of psychology teachers and the lack of practice ability of students have seriously hindered the development of psychology. Educational practitioners can only explore through experience in their daily teaching work, knowing that educational psychology is useful but not knowing how to use it. Teachers should change themselves from instructors to leaders, create situations for teaching in class, prepare actual case analysis, guide students to think independently, and carry out group discussions among students [9]. There is no unique criterion for learners to construct their understanding of things in their own way, but through the guidance of teachers and the cooperation of learners, the understanding can be enriched and comprehensive. In the process of education, we can improve the learning effect by improving the enthusiasm of students to participate in learning activities. At the same time, attention should be paid to cultivating students' interest in learning, so that students can have correct learning motivation, work hard under

a positive mentality, and constantly achieve good results in learning.

3. The Influence of Educational Psychology on Educational Reform Movement

3.1 Pragmatism Education Movement

Changing educators' teaching ideas and educational concepts is the primary task for higher vocational colleges to carry out innovative reforms in psychology teaching. It can promote educators' educational ideas and concepts to meet the needs of society, thus realizing the reform of teaching mode. Educational psychology should play a more active role in educational reform. It can not only make use of the general rules of human learning discovered by it, but also directly participate in major decisions of educational administrative departments. The task of teaching is to create a learning situation conducive to the development of students' potential, so that students' potential can be brought into full play and their personality can be fully developed [10]. A good teacher-student relationship is the guarantee for the success of learning activities. The initial research of educational psychology started from students' learning. One-sided emphasis on the study of learning theory once put the development of educational psychology theory into a dilemma. Teaching method is an important factor that affects the smooth progress of education and teaching. At present, problems such as heavy burden and weariness of study are common among middle school students in our country.

When carrying out innovative reforms in psychology teaching, educators in higher vocational colleges must improve their own cognition of psychology practical teaching, so as to effectively combine theory with practice in the teaching process. Personalized learning is a learning method that can adapt to and meet the different learning needs of different learners and improve the learning quality and efficiency of learners. After each parameter adjustment, the data flow quickly reaches a stable state. The initial rotation is too large, which may result in too many data streams. Perform three sets of data tests and statistical results, as shown in Fig. 2.

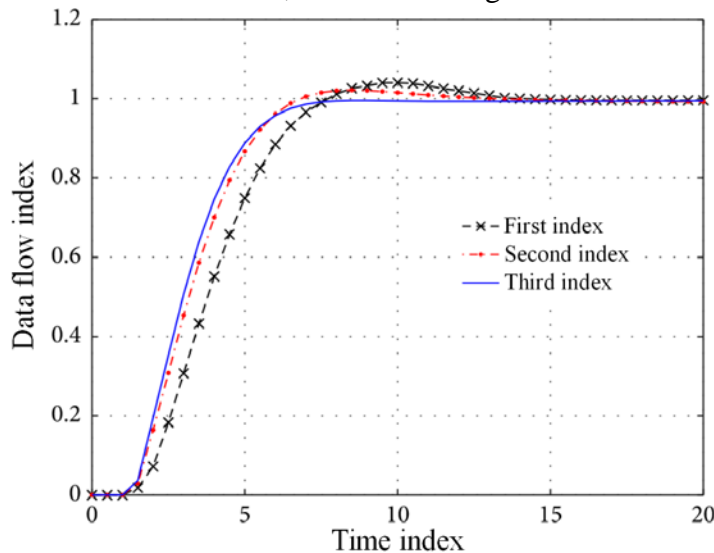


Fig. 2 Data impact over time

As far as education is concerned, whether or not to achieve educational goals is an important basis for measuring the success or failure of the work. Learn how to modify the corresponding to make its shape have ideal performance. The energy for a state can be defined as:

$$\sigma_r = \pi b_r^2 = \pi d_{AB}^2 \left(1 - \frac{\varepsilon_c}{\varepsilon_r} \right) \quad (1)$$

Depth mining data, using quadratic correction function:

$$\varepsilon_r' = \frac{1}{2} \mu \omega_r^2 (1 - \sin^2 \theta) = \varepsilon_r \left(1 - \frac{b^2}{d_{AB}^2} \right) \quad (2)$$

By being a polynomial kernel function:

$$\ln \frac{k_2}{k_1} = \frac{E_a}{R} \left(\frac{1}{T_1} - \frac{1}{T_2} \right) = \ln \frac{t_1}{t_2} \quad (3)$$

When the parameter is fixed, it is simplified as:

$$\ln k = -\frac{E_a}{RT} + B \quad (4)$$

3.2 Structuralist Curriculum Reform Movement

Quantitative methods alone cannot effectively solve educational psychological problems. Qualitative research methods emphasize that observers participate in the experience in natural situations, and finally obtain and explain the research methods about the depth information of the research objects. Learning is a process in which learners actively construct internal psychological representations, which includes not only structural knowledge but also a large number of non-structural experience backgrounds. Teachers should have correct role consciousness, establish equal relationship between teachers and students and the relationship between students and students in solidarity, form an atmosphere of psychological compatibility between teachers and students and between students and students, and create a democratic and harmonious educational situation. In the establishment of practical teaching operation system, higher vocational colleges must gradually improve and perfect the teaching in the summary and reflection of actual teaching. The use of practical teaching can promote the comprehensive quality of students to be improved in the gradual and subtle ways. The teaching situation model can promote students' enthusiasm and participation in learning, so that students can learn the way of thinking in the learning process. In the teaching process, teachers need to design a unique teaching model according to the students' mastery of knowledge and the personality of the students, so that each student can stimulate their potential in teaching and fully develop their individuality.

4. Conclusion

Educational psychology is one of the most important courses in Colleges and universities. The reform of inquiry teaching and curriculum is only to provide methods and experience for the reform and innovation of other courses. In higher vocational education, if psychological teaching wants to be innovated and reformed, it must start from the aspects of educational thought and teaching operation system. In practical teaching, teachers need to strengthen the cultivation of students' independent learning ability and innovative ability. Educational psychology has not only its inherent defects, but also many advantages. It attaches great importance to respect and care for students, gives full play to their initiative and creativity, and advocates that teaching should pay attention to creating good interpersonal relationships and classroom atmosphere. The rapid development of high technology not only provides great convenience for data processing and analysis, but also provides many new support for qualitative research. Educational psychology should develop into a science. With the human beings in the educational process as the research object, we should pay full attention to the characteristics of the discipline itself, and use the scientific research methods and means to conduct in-depth research on the cornerstone of humanistic thinking. Psychology The reform of the curriculum requires teachers to carry out comprehensive conditioning and rectification, and achieve active coordination and coordination between teachers and students, thus achieving the successful completion of the reform of educational psychology curriculum.

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