



**Figure 1.** The degree of anxiety of the two groups of students. \* $P < 0.05$  compared with that before teaching; # It means that compared with the Control group at the same time,  $P < 0.05$

**Conclusions:** Under many pressures, college students in higher vocational colleges are prone to psychological problems, such as anxiety, depression and so on. Excessive anxiety will affect students' mental health, lead to problems and obstacles in students' interpersonal communication and self-regulation ability, reduce students' psychological tolerance and anti-frustration ability, and then produce bad psychology such as inferiority complex, impulse, fear, cowardice and so on. Physical education curriculum is the main means to alleviate students' anxiety in higher vocational colleges, but the traditional physical education curriculum cannot fully alleviate students' anxiety, so it needs to be improved. Based on educational psychology, this paper puts forward some strategies to improve the teaching mode of physical education, including paying attention to the theoretical teaching of physical education, improving the teaching content, improving the teaching environment, changing the teaching methods according to the students' psychological status and so on. The improved physical education curriculum can give play to the discipline advantages, improve students' physical quality, alleviate students' anxiety and depression, improve students' mental health level, and then contribute to students' healthy development.

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## RESEARCH ON THE REFORM AND INNOVATION OF HIGHER MATHEMATICS TEACHING FROM THE PERSPECTIVE OF EDUCATIONAL PSYCHOLOGY

Lingxiao Li

*School of Mathematics and Statistics, Henan University of Science and Technology, Luoyang 471000, China*

**Background:** Compared with primary mathematics and secondary mathematics, the objects and methods of higher mathematics are more complex and the difficulty of learning is relatively high. Generally speaking, the coverage of higher mathematics includes calculus, algebra, geometry and other disciplines. The contents include sequence, limit, calculus, spatial analytic set and linear algebra. Advanced mathematics is a basic subject that postgraduates of engineering, science and finance must master. The most prominent feature of higher mathematics is its high abstraction, strict logic and wide application. Therefore, mathematics is also a way of thinking logic. The process of learning mathematics is also a process of training and cultivating students' thinking logic. The progress of human science, technology, art and social level is inseparable from mathematics. Therefore, higher mathematics should be paid attention to in higher education.

As the basic education for the all-round development of national education, mathematics plays an important role in the development of education, economy and science and technology. At present, there are many problems in higher mathematics education, which cannot adapt to the development of the times, and the teaching mode is relatively backward. The problems in higher mathematics education are as follows: the teaching mode is relatively traditional and single, which cannot mobilize students' learning enthusiasm and initiative, resulting in low teaching quality and low students' interest in higher mathematics courses. In addition, the traditional teaching concept of higher students is relatively backward. In teaching, students are only allowed to learn formulas, concepts and other contents rigidly, rather than practical application. For various reasons, it is difficult for contemporary college students to adapt to the teaching form and content of higher mathematics, resulting in a very high proportion of make-up examination and re study.

Therefore, the teaching mode and content of higher mathematics need to be reformed and innovated. Educational psychology is a branch of psychology. Its main research direction is the learning effect of students, the effect of teaching intervention, the teaching psychology of teachers and the social psychology of school organization under the educational situation. Educational psychology is to apply psychological theory to education, so as to improve teaching methods, improve students' learning enthusiasm, and help students solve various problems in the process of learning and growth. Therefore, the reform and innovation of higher mathematics teaching from the perspective of educational psychology is an important way to improve students' learning enthusiasm and practicality of higher mathematics.

**Objective:** To reform and innovate the teaching of higher mathematics from the perspective of educational psychology, optimize the existing teaching mode of higher mathematics, improve the teaching content of higher mathematics, improve students' learning enthusiasm for higher mathematics, and then improve their grades.

**Research objects and methods:** 140 students from a university were selected by stratified cluster sampling. The students came from different majors such as accounting and computer, including 97 boys and 43 girls. Using students' test results to evaluate the teaching effect of the improved teaching model.

**Study design:** 140 students were randomly divided into study group and control group, with 70 students in each group. The research group adopts the improved higher mathematics teaching mode. The improvement strategies include: improving the teaching methods and guiding students to participate in classroom teaching. Change teaching aids and flexibly use Internet and multimedia technology. Strengthen students' psychological cognitive foundation and promote mathematical understanding. The students in the control group used the traditional teaching mode. After 4 months of teaching, the high scores of the two groups of students were compared.

**Methods:** the relevant data were processed and analyzed by software SPSS 17.0.

**Results:** After teaching, the high scores of the students in the research group were significantly improved; There was no significant change in the high number scores of students in the control group ( $P < 0.05$ ). The high scores of the two groups are shown in Table 1.

**Table 1.** High scores of two groups of students

Timing	High scores		<i>t</i>	<i>P</i>
	Research group	Control group		
Before teaching	73.4±10.9	72.5±11.3	0.304	0.653
After Teaching	86.7±11.7	73.1±10.9	6.420	0.013
<i>t</i>	6.371	0.421	-	-
<i>P</i>	0.016	0.649	-	-

**Conclusions:** The reform and innovation of higher mathematics teaching from the perspective of educational psychology can significantly improve students' learning enthusiasm for higher mathematics, deepen students' understanding of higher mathematics, and cultivate more comprehensive talents for the country and society.

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## RESEARCH ON COMMUNITY CORRECTION SYSTEM OF JUVENILE MENTAL DEFECT CRIME

Wei Liao

*Applied Justice School, Guangxi Police College, Nanning 530028, China*

**Background:** In recent years, with the development of Internet technology, the threshold of minors' access to bad information has been greatly reduced, resulting in the younger age of offenders, the sharp increase in the number of juvenile criminal cases, the formation of criminal gangs and so on. These phenomena have attracted the attention of relevant departments in China. The Criminal Procedure Law implemented in 2012 stipulates that juvenile delinquency is treated as a special procedure, which shows that China attaches importance to juvenile delinquency. On the one hand, community correction can better balance the two purposes of punishing juvenile delinquency and safeguarding the legitimate rights of juvenile delinquents. On the other hand, most minors commit crimes when they are in an abnormal emotional state. Their understanding of the consequences of their actions is not clear enough, and their