

Research on the Current Situation and Regulation Mechanism of College Students' Learning Psychology from the Perspective of Engineering Education Certification

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Abstract: Engineering education professional certification standards require psychological counseling and learning guidance for students, enhance students' learning initiative and consciousness, and enable students to have the awareness of autonomous learning and lifelong learning, and have the ability to continuously learn and adapt to development. This requires observing and evaluating students' learning psychology through various ways in the teaching process and extracurricular activities, and at the same time establishing a good communication channel between teachers and students, correcting and assisting problems found in time, and helping students to achieve the curriculum goals. Therefore, starting from the learning psychology of non-intellectual factors that affect the achievement of college students' academic results, this study explores the current situation of college students' learning psychology and analyzes the adjustment mechanism of learning psychology through investigation and questionnaire. So as to promote students to learn effectively and provide practical basis for engineering specialty teaching under the background of engineering education specialty certification.

1. Introduction

The university stage is a critical period for the development of college students and an important stage for the growth of talents. In addition to intellectual factors affecting academic performance, learning psychology and learning efficacy have an important impact on the achievement of academic goals. Learning psychology is a kind of psychological state existing in learning. It is the most easily neglected and the most concerned part in front-line teaching. It affects the learning efficiency and cognition of learning value of students. In a sense, a healthy learning psychological state has far-reaching influence on the establishment of college students' outlook on life and world outlook.

However, at present, there is not enough attention paid to students' learning psychology in teaching and academic guidance. It is easy to ignore the characteristics of college students' learning psychology and deviate from reality. Therefore, starting from the analysis of the formation of college students' learning psychology and the psychological factors affecting learning, according to the current situation of education development, combined with the characteristics of college students' learning psychology, it is of great significance to explore the education and management mechanism, teaching and academic guidance methods that are more in line with the laws of college students' learning psychology.

2. Psychological Analysis of College Students' Poor Learning from the Perspective of Engineering Education Certification

At present, the psychological causes of college students' learning come from various aspects, such as utilitarian learning objectives, external influences on learning motivation, deviation in learning methods, lack of active exploration and innovation of knowledge, and poor learning adaptability. Therefore, from the perspective of professional certification education, this paper analyzes and studies the learning psychological factors that affect the achievement of students' academic performance and learning effect, and analyzes the current situation of college students' learning

psychology. Starting from the deep-seated reasons, this paper constructs a learning psychology tracking feedback mechanism and puts forward solutions, which will provide the basis for the later education, teaching and management guidance of engineering majors and train qualified outstanding engineers in the new era.

(1). Learning attitude is not correct, the goal is not clear. Before entering the university, the student's goal is relatively clear, and will enter a good university as the sprint goal. However, after entering the university, many students are at a loss as to what to do, their future plans are unclear, they lack clear learning objectives, they do not have a correct outlook on life and values, and they are unwilling to think and study for a long time, thus losing their way forward. The attitude towards learning is not correct and one cannot study with all one's strength.

(2). Learning motivation is short-sighted and there is procrastination. At present, college students' learning motivation tends to be short-term, instrumental and practical. For course learning, they only aim at passing the examination requirements, and lack the spirit of assiduous study and hard work. Usually, I spend a lot of time on playing or extracurricular activities, doing things I like and studying in my spare time. At the same time, due to the relative reduction of external supervision after entering the university, the students' procrastination psychology is increasing day by day, and they are content with the status quo.

(3). Learning willpower is weak, lack of enthusiasm. Learning is a long process that requires perseverance, perseverance and courage to overcome difficulties. However, in real life, some college students have weak willpower, lack of perseverance and perseverance in learning, and are difficult to persist for a long time. There is not enough sense of achievement in learning, no desire and enthusiasm to actively seek knowledge.

(4). Learning psychology adjustment ability is poor, adaptability is poor. Some students are unable to bear the pain in the learning process, or unwilling to accept the unpleasant results obtained after hard study, unwilling to face the failure in learning, and with poor psychological adjustment ability. In the face of one or two failures in the learning process, one loses confidence, is depressed, and cannot adjust one's psychological condition in time. The students' psychological adjustment ability will definitely affect the whole physical and mental health.

3. Analysis of Factors Affecting College Students' Learning Psychology from the Perspective of Engineering Education Certification

Starting from the analysis of the formation and influence of college students' learning psychology, the achievement of learning objectives and the factors of learning psychology, and based on the current development status of engineering education professional certification, combined with the characteristics of college students' learning psychology, this paper analyzes the factors of influencing college students' learning psychology.

(1). The influence of the current bad society and network environment. Some unhealthy social phenomena, the influence of impetuous atmosphere, some social unfairness and dishonesty, cheating in exams, money worship, hedonism, employment difficulties, etc., make the college students show impetuous, manic and blind psychologically.

(2). The reform process of school teaching and management mechanism is slow. The ideological education and psychological counseling of students in institutions of higher learning are not in place, the professional setting is not perfect, the teaching materials are aging, the knowledge update is slow, the educational methods and methods cannot adapt to the ideological changes and psychological characteristics of college students, and the examination concepts and methods are lagging behind. At the same time, some bad school spirit and style of study in colleges and universities have also brought some negative effects on the study of college students.

(3). The influence of family training methods. For example, insufficient cultivation of students' independence leads to poor autonomous and conscious learning ability and professional learning ability; there is a lot of interference in students' professional study. As a result, students are not

interested in their major, causing learning difficulties. Other parents' education methods are improper, simple and crude, and cannot set an example, which also directly affects students' learning habits.

(4). The influence of students' own characteristics. Some students have bad learning habits and a weak foundation in primary and secondary schools. When they get to university, they cannot adjust and adapt quickly, resulting in poor learning results. Some students have poor self-control, lack of initiative and self-consciousness in learning, and lack of coping ability in the face of difficulties and setbacks. As a result, they are not active enough in learning and lose confidence in learning.

4. Tracking and Feedback Mechanism of College Students' Learning Psychology from the Perspective of Engineering Education Certification

Students' learning psychology mainly refers to students' learning motivation, learning interest, learning ability, etc. both inside and outside the class. It is mainly tracked through external manifestations such as attention level, participation state, emotion, etc. At the same time, teachers and students' academic guidance personnel set appropriate learning objectives and create a good learning atmosphere to guide students correctly, so that students can form the abilities of self-evaluation, self-control, self-regulation, self-improvement, optimize students' learning psychology, encourage them to achieve ideal academic results, and finally complete the university's learning objectives.

(1). According to Maslow's hierarchy of needs theory, learning needs belong to a higher level of self-realization needs for students with learning motivation deviation. Therefore, student managers and professional teachers need to cultivate students' professional identity to the greatest extent, stimulate students' psychological motivation to study hard, and regard assiduous study and breakthrough of academic research problems as their own challenges. In the teaching process, teachers should pay attention to the organic combination of the realization of curriculum teaching objectives and the satisfaction of students' needs at all levels, so as to stimulate students' internal motivation in learning. At the same time, according to the changes in the environment of the times and the characteristics of students, we should constantly combine new teaching techniques to innovate teaching modes, increase students' interest in learning, keep students' continuous enthusiasm for the major they study, cultivate the spirit of active exploration and active study, and urge college students to pursue the maximization of individual values.

(2). Students with weak will to learn, student managers use psychological skills and reasonable ways of conversation to communicate with students in depth, correct students' ideological understanding and learning attitude. And let excellent class students to help them, to promote their progress. Professional teachers can improve students' professional knowledge and help them to set up learning objectives, set up learning tasks with moderate difficulty and reasonable gradient, urge students to complete, and at the same time give more positive evaluations to such students to stimulate their interest. Schools can also organize more healthy cultural, sports, scientific and technological activities to attract students to participate in and realize the significance of learning. Student management personnel regularly check and urge students to attend classes, study rooms and other learning places, consciously convey learning pressure to students and give necessary supervision, reminding and encouragement.

(3). Learning environment is not suitable for students of poor type, who generally have weak learning foundation, backward learning methods and improper time management and are difficult to adapt to university learning methods. At the university stage, it is necessary to change the way secondary schools passively accept learning. Student managers and professional teachers should guide students to optimize their learning strategies, learn to think and study actively and actively, and cultivate critical thinking and questioning ability. They cannot simply memorize knowledge by rote, but only to cope with examinations. Help students to make learning plans and develop time management ability. Among them, teachers can give direct assistance through course counseling, answering questions and teaching learning methods. Excellent students can provide one-on-one assistance to these students in their study habits, study experience and course content.

(4). Students with learning psychological disorders, some students have anxiety, depression or inferiority due to the difficulty in achieving their goals or failing tests. Long-term will lead to slow thinking, memory loss or difficulty concentrating. In view of this situation, student managers and parents are closely connected with the psychological development and health education center. Through psychological crisis investigation, the establishment of psychological files and real-time attention, they will give care and care and relieve psychological pressure. Through relevant lectures, counseling and counseling on learning psychology, we will teach college students the psychological coping strategies and debugging skills for dealing with learning pressure and frustration correctly. At the same time, we should also strengthen the self-education of this kind of students' learning psychology. Teachers should give meticulous assistance in the course learning, help students to correctly understand and understand themselves on the basis of a comprehensive understanding of students' learning psychology characteristics, and continuously cultivate students' correct self-knowledge, positive self-experience, reasonable self-evaluation and effective self-regulation ability.

5. Summary

From the perspective of professional certification of engineering education, this paper analyzes the differences in learning psychology of different types of students. The achievement of academic goals means the relationship between students' learning effect and learning psychology. Combined with the current situation of college students' learning psychology, the paper puts forward the tracking feedback mechanism of college students' learning psychology and the ways of thinking to solve the problems of college students' learning psychology, providing practical basis for later professional teaching and learning guidance.

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