

Research on the improvement of engineering college students' artistic accomplishment under the new engineering background

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Abstract. The new engineering is the product of interdisciplinary, breaking through the institutional bottleneck and administrative barriers in universities in interdisciplinary, is the new engineering must cross a barrier. Based on the construction of new engineering, this paper promotes the deep cross and integration of engineering and art disciplines. To explore the ways to integrate innovative thinking training into professional education systematically from the aspects of research significance, research status, development plan and effect evaluation, so as to improve the artistic accomplishment of engineering college students.

1 The connotation of new engineering

New engineering is a higher education reform plan with Chinese characteristics in response to the global situation, the development situation of domestic engineering education and the service of national strategy. New engineering mainly includes three aspects: first, the transformation and upgrading of traditional engineering; The second is the new engineering specialty that faces the new economy; 3 it is the new major that points to engineering course and other discipline cross generation. Guided by virtue and cultivating talents, the company cultivates diversified and innovative outstanding engineering talents in the future through inheritance and innovation, crossover and integration, coordination and sharing.

2 The lack of artistic innovative thinking of new engineering college students

The depth and breadth of art practice are not enough in the training programs of engineering students in domestic universities. As a result, college students do not know what is the beauty of art and what can meet the public aesthetic taste, leading to the disconnection between technology and design.

Engineering and art are not opposed to each other, and there will be no gap in professional integration. Inevitably, engineering students are relatively weak in art foundation, but when they finish some basic art-related theories and majors, they will ignite

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their interest in art, and interest-based learning will have original self-drive. In the process of training students, it is also necessary to apply science and engineering knowledge and creative art theory to practice, so as to cultivate the cognition of the intersection of technology and creativity.

3 Significance of research on the improvement of new engineering college students' artistic accomplishment

In the context of new engineering, new requirements are put forward for the quality of new engineering talents, among which the imagination/innovation of engineering students is particularly important. Improving the artistic quality of engineering students plays a very important role in improving these abilities. Based on the current academic background/artistic foundation of engineering students, the training of creative thinking is integrated into professional education. To enable students to grow into professionals who understand both technology and art and have trans-boundary cognition of "science and technology aesthetics". At the same time, the intervention of creative thinking training also makes the knowledge structure of engineering students richer, which also happens to coincide with the current training of new engineering talents.

4 Research status of the improvement of new engineering college students' artistic accomplishment

Since some foreign art colleges and engineering colleges began to design digital media education in the mid-1990s, after more than 20 years of changes, especially with the development of computer, Internet and other technologies and the advent of the digital era, the current combination of engineering and art education at home and abroad is developing rapidly. It has the dual characteristics of engineering and art, and integrates different disciplines such as technology and art, media and culture, digital and design.

In February 2017, the Ministry of Education issued a notice on The Development of New Engineering Research and Practice, aiming at the urgent need of current and future industrial development to promote the cross-fitting of existing engineering and engineering with other disciplines. Break the barrier of the discipline, complete curriculum integration, the key lies in the diversity of courses and knowledge system, take the student as the main body, let the students receive diversity of knowledge and information, pay attention to the practice of the art, the transition, the pragmatism of art courses, reduce the cultivation of the art in the areas of background knowledge, make course subject, strengthen the theoretical education and design practice, The depth, professionalism and practicality of art courses will be increased, from cross-boundary general knowledge to cross-boundary knowledge, and finally cross-boundary practice will be realized.

5 The overall goal of improving artistic accomplishment under the new engineering background

The development of the series of activities to improve artistic literacy, centered on the cultivation of high-quality talents, based on the characteristics of the school itself, relying on a sound implementation system, scientific system, deeply attract the attention and participation of all teachers and students of the school. With the rich content and form of cultural and artistic practice activities, relying on its positive ideology and innovation, it promotes the development of quality education and teaching in schools, improves the

quality of school personnel training, and cultivates comprehensive talents. At the same time, the establishment of evaluation and feedback system, to establish a systematic and standardized art literacy promotion activities as the standard, in the same colleges, nationwide promotion, evaluation, so that it serves the campus culture construction, talent comprehensive quality training.

6 Carry out the plan to improve artistic accomplishment under the new engineering background

6.1 Take morality as the priority, focus on the top-level design of artistic accomplishment promotion activities, improve the cultural and art practice development system, and create a scientific platform for cultural and art practice development

The top-level design of artistic accomplishment promotion is the premise of doing well in activities, which mainly includes the establishment of artistic accomplishment promotion system, management system, incentive system, activity content setting and so on. The top-level design should be based on moral cultivation, according to the actual situation of new engineering, combined with the teaching curriculum system of quality-oriented education and the characteristics of students, to form a complete, detailed, scientific and practical scheme in line with the school, and apply it to practical work.

At the same time, the improvement of artistic literacy should focus on the design of the expansion plan for the improvement of artistic literacy by integrating and summarizing existing resources, combining with the teaching planning of school quality education and the deficiency in talent training. Art literacy promotion activities should be carried out closely around the curriculum construction, which is an extension and expansion of cultural art practice courses, but also a summary and verification. Therefore, schools should timely combine talent training programs, sort out the existing art literacy promotion activities, and set up art practice activities in a scientific way and a systematic way to make them scientific and advanced.

6.2 Formulate a scientific management system, increase the benefits of cultural quality education and teaching, and increase its radiation.

Cultural quality education cannot be separated from students. Likewise, artistic quality improvement activities cannot be separated from the participation of students, especially teachers. The school should formulate the relevant system scientifically, let more people participate in the activities through standardized management, broaden the radiation of cultural quality education and teaching, increase the benefit of cultural quality education and teaching.

The establishment of the management system of cultural practice and art activities in colleges and universities should have the characteristics of the school, centering on the style of running the school and the characteristics of students, combining the actual resources of the school, the direction of talent training and social needs, and formulate scientifically. In the process of establishing the system, we should pay attention to the responsibilities and obligations of the school staff, especially the student counselors, and organize and guide students to participate in the cultural activities of quality education in a systematic, standardized and planned way with teachers as the starting point. To ensure the smooth development of cultural and artistic practice activities, effectively enhance the benefit of cultural quality education and teaching.

6.3 Innovate the form of activities, enrich the content of activities, improve the school's artistic accomplishment and enhance the overall level of activities.

Quality art literacy promotion activities can broaden students' horizons, mobilize their potential interests, and improve their cultural and artistic literacy. The innovation of activity forms and the enrichment of content should also follow a certain system and mechanism and develop in a scientific and healthy direction.

The improvement of artistic accomplishment is a process for students to practice, learn and improve themselves in cultural and art activities. Activities should cover traditional Chinese culture, history, philosophy, art, science and other aspects of multi-disciplinary content, should not stay in the shallow level of literary activities. Universities such as Tsinghua university, Fudan university in Shanghai, Zhengzhou sustained over the years, such as "reading classics" series activities, cultural quality of students in reading and writing set up the correct moral values, the outlook on life, the feeling of Chinese traditional culture essence, enrich students' culture, cultivating students' elegant temperament, build school humanities atmosphere, at the same time promoting quality-oriented education teaching achievements. Therefore, colleges and universities should often organize teachers to investigate and study, to share the latest progress and excellent results of talent training in the way of communication, broaden ideas, improve deficiencies, and comprehensively improve the level of national culture and art practice and development activities.

6.4 Develop a complete evaluation system for the promotion of artistic literacy activities to achieve systematic and standardized management.

Nowadays, many colleges and universities, in addition to the youth League committee, cultural quality education base, student office, various departments, student associations are holding different lines of color, a variety of student activities. Art literacy promotion activities, different from other student activities, should have planning, curriculum and continuity. However, so far, many schools have not developed the relevant activity evaluation system, responsible for the overall management of cultural and artistic activities, and there are no unified standards and regulations as a reference.

Evaluation system should accumulate through long-term practice, combining study, research, and to explore, develop directional, representative, directivity, evaluation system of culture and art activities, covering arts and culture perspective, creativity, artistic level, participation in scope, influence such as evaluation content, combined with the talent training schools focus on the direction, set the impact factor, one by one, grade evaluation, Promote high quality student activities, eliminate backward cultural and artistic practice activities one by one, so that they are more systematic and standardized, and can better serve campus cultural construction and education.

6.5 Rely on art quality promotion activities, integrate artistic talents, cultivate comprehensive talents.

For many years, engineering universities have been faced with such problems as insufficient cultural and artistic resources, lack of artistic talents and lack of campus cultural and artistic atmosphere. Through the development of art literacy promotion activities, high-quality cultural and artistic talents of the school can be excavated, so that they can better play their strengths, and promote the overall cultural and artistic atmosphere of the school. At the same time, the university of engineering should formulate the

cultivation mode and management mode of art talents suitable for the university, and build the related management system and training scheme for the backbone students of art and art, so as to make the art talents grow better.

7 Evaluation of the effect of improving artistic accomplishment under the background of new engineering

Art literacy promotion activities are more likely to be accepted by engineering students who lack art foundation. At the same time, integrating a relatively new teaching method into the teaching process is conducive to arousing students' interest in learning and expanding the number of engineering students who are effectively influenced by art. Using the course design in class and the practice after class, it promotes the improvement of engineering college students' imagination/innovation ability.

To sum up, an innovative talent training path with the construction of new engineering as the main body, strengthening the crossover and integration of different disciplines and majors, promoting the combination of art and engineering disciplines, taking "art science and technology" and "science and technology art" as two wings, and cultivating diversified, compound and high-quality talents.

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