

Study on the Reform of the Examination System Based on the Training of Applied Science

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Abstract— Cultivate high-level applied talents in the background of internationalization, and promote talent engineering and quality engineering by school-enterprise cooperation project. The undergraduate teaching of computer, electronics, communications and other information technology majors must be based on the educational model of training students how to analyze problems, problem solving and application of innovative talents, must be based on changing the assessment structure of theoretical and practical courses, deepen the practice of professional application of knowledge, the focus of the investigation should be the students' ability to analyze problems and solve problems, through a series of examinations experience to draw on the experience dedicated to Research on the reform of the assessment system to ultimately improve the competitiveness of the applied engineering workforce.

Keywords—examination system; Training; applied science; reform

I.

INTRODUCTION

Since the 1990s, the United States, the United Kingdom and other countries have been influenced by the trend of humanistic education, and new trends have emerged in the development of educational evaluation theory, in which evaluation has shifted from decision-making to human-centeredness, with the investigation of students' abilities as the latitude, the implementation of diversified testing methods and test forms, and the establishment of a scientific and comprehensive academic evaluation system for students.

From the official exchange of letters between the Chinese and German governments in 1990, when the cooperation between the two countries began, to the new round of provincial and state exchange and cooperation projects and inter-university cooperation projects, the depth and breadth of the cooperation between our university and the German University of Applied Sciences (GUD) has been constantly expanding. In recent years, our university draws more deeply on the experience of running schools of German University of Applied Sciences, promotes the

"three major projects", insists on "establishing the university with quality, strengthening the university with talents and developing the university through cooperation", cultivates high-level applied talents under international background, and promotes talents through university-enterprise cooperation projects. Engineering, driving quality engineering. Computer, electronics, communications and other information technology professional undergraduate teaching must be based on the education model of training students how to analyze problems, problem-solving application of innovative personnel training, must be through changes in the theory and practice of the course assessment structure, deepen the practice of professional application of knowledge, the focus of the investigation should be the students' ability to analyze problems and solve problems, through a series of examinations experience is committed to reference Research on the reform of the assessment system to ultimately improve the competitiveness of the applied engineering workforce.

II. OBJECTIVES

In order to give full play to the advantages of the international cooperation between our university and the German University of Applied Sciences over the past 20 years, we learn from its practical teaching assessment system and the experience of its implementation, so that the content of the practical teaching assessment can track the development of disciplines and courses in a timely manner, thus exploring the way of teaching reform of the practical ability assessment system of university applied innovation talents. Through the study of the examination experience of overseas universities and the future direction, it will provide reference and reference for the reform of the examination and evaluation system of Chinese universities. Firstly, to change the traditional view of examination, establish the view of talent quality in the era of knowledge economy, base on quality education and cultivation of innovative talents, take cultivating people's innovative spirit and innovative ability as the centre, and establish an assessment mechanism that integrates broadening knowledge, cultivating ability and improving quality; secondly, to change the "integration of teaching, examination and assessment" of university examination; and thirdly, to change the "integration of teaching, examination and assessment" of university

examination. In addition, a scientific and fair examination operation mechanism should be established; the content and methods of examinations should be reformed, and a combination of diversification and openness should be advocated, with an appropriate increase in oral examinations; a scientific grading system and a comprehensive evaluation system for students should be established, and a combination of formative and summative examinations should be insisted upon; the "four-module comprehensive examination" and the "four-module comprehensive examination" should be explored; and Combining the mode of "examination and assessment", establishing and improving the assessment system for evaluating qualified talents under school-enterprise cooperation, inviting technical experts from enterprises, teachers and students going into enterprises to carry out practical project teaching, reforming the experimental examination mode and professional curriculum setting, making it play its due role in cultivating high-quality engineering talents as an educational goal. The role of the company is to develop the talent that the company needs.

This project will learn from the experience of overseas university examinations to form a four-module comprehensive assessment system that runs through the whole education process, namely, "the integration of regular grades, practical assessment, comprehensive examinations and oral examinations" of the innovative talent assessment system, and adhere to the principles of comprehensive, diversified, open and scientific, so as to fully achieve the purpose of the examination system.

III. METHODS OF REFORM

The study on the reform of the examination system based on the training of applied talents will be implemented and enhanced mainly by building six platforms: the assessment platform for quality courses, the assessment platform for internationalized teaching, the assessment platform for personalized teaching, the assessment platform for cultural quality education, and the assessment platform for innovative practice. Through the guidance of updating the assessment system, the industry of Zhejiang Province will identify and cultivate young talents with specialized skills to help them embark on their professional path. At each stage, the instructor gives direction and methodological hints through the assessment system, rather than directly telling students what to do.

Research methods combine traditional Chinese educational ideas with modern foreign examination systems, and closely integrate scientific research, engineering practice and talent training, so that the educational concept, content, methods and assessment methods adapt to the requirements of the progress of the times, scientific and technological innovation and the overall development of human beings. We attach great importance to and actively promote the reform and innovation of the assessment mode of applied undergraduate engineering talents, with overall design and step-by-step promotion. Study the actual needs of society for high-quality innovative talents, learn from the successful experience of

German universities of applied sciences, adjust and improve the design of assessment methods and assessment and evaluation standard system for the education of applied undergraduate engineering talents, and establish an assessment system dominated by scientific research. Starting from the policy system, an open, mobile, competitive and collaborative scientific research mechanism will be established, and the incentive mechanism will be improved so that the appraisal system can be constantly updated.

An efficient assessment system must be established among all teachers and students who have truly updated their educational concepts, and is a comprehensive performance of the overall level of the school and its ability to train human resources.

Technical Route: Firstly, system construction and whole process penetration. We should take the innovation ability cultivation as the main line throughout the talent cultivation as well as the whole assessment process, and carry out system reform and overall construction in the key aspects of the assessment. To address the previous reform is not systematic, limited footing, single path, small coverage, a test set lifelong inadequacies, to achieve through the main line, the whole infiltration, full participation, all benefit. Second, multi-dimensional interaction, the main body of students. Focusing on the assessment of innovation ability, the discipline is orderly opened, through the "conditions and facilities open, scientific research process experience, scientific and technological resources into, academic atmosphere fumigation" and student interaction and extended assessment; course overall optimization, through the "curriculum system reform, course resources construction, experimental teaching reform, methods and means of The teachers are actively involved in interacting with the students and extending the assessment through "innovative teaching in the classroom, science and technology project tutors, excellent and typical demonstrations, and scientific research experience guidance"; the students are prominent, through "interest-led, personality-led, and hobby-led". Flexible choice, self-systematic planning, independent self-practice," the implementation of innovative capacity assessment. Thirdly, it combines hard and soft, and promotes the system.

Implementation Steps: while establishing a series of management systems and operation mechanisms such as the Innovation Assessment System and Innovation Education Base Operation Mechanism, we will comprehensively improve the construction of teaching laboratories, open innovation education bases, and provide high-quality hardware platforms for students' innovation practice. (1) Establish innovation design labs and joint training bases for school-enterprise cooperation: bring in enterprises, bring in projects, explore a new mode of experimental innovation teaching assessment, assess through projects, and improve students' ability of independent hands-on practice. (2) Practice semester practical teaching formative assessment implementation: broaden the meaning of school-enterprise cooperation in the construction of innovation experimental base,

reform the second practice semester, establish the assessment mode of school-enterprise cooperation. (3) The establishment of innovative practical project assessment: in the school-enterprise cooperation mode, strengthen the close cooperation with large companies in the IT industry in Zhejiang Province, and strengthen the practical teaching of the course assessment research. (4) Open management of innovative labs: using information technology and computer management technology, establish open lab management system, complete the establishment of open labs such as multi-core programming innovation labs, so as to achieve dynamic, open management of experimental courses. (5) Promote the reform of international assessment system for computer engineering technology courses: cultivate students' ability to survive in the international and multicultural social work environment. (6) Formation of a set of complete syllabus and network assessment platform in line with the innovative and practical ability training system.

IV. BACKGROUND AND CONDITIONS

Based on the Sino-German cooperative teaching bases, the computer majors are used as the construction platform, with complete research materials and a data room. The laboratory of network communication, software practice base, digital media laboratory, computer composition and microcomputer system laboratory, embedded system development laboratory, microcontroller and DSP development laboratory, computer foundation laboratory and other advanced experimental instruments and equipment, as well as mechanical engineering, control science and engineering laboratories support the completion of the project.

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