

# Research on the strategy of resource database construction for the Cultivation of Applied Talents based on Internet +

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**Abstract:** In this paper, combined with the current situation of the curriculum resource database of application-oriented talents training, the construction strategy of curriculum resource database is given, which plays an important role in promoting the improvement of teaching level.

## 1. Introduction

In recent years, the development of information technology and Internet has been widely applied in the educational field. People's learning needs and methods have undergone tremendous changes. The traditional teaching resources library can no longer meet the needs of the "Internet plus" era, in order to fully display the advantages of modern digital information resources, meet the students' needs for autonomous learning, and expand teaching space. To promote effective expansion and extension of traditional teaching and improve the overall level of professional teaching, we need to integrate modern information technology, especially Internet plus technology and education, to reform the curriculum resource pool, and build diversified, three-dimensional, flexible and vivid curriculum teaching resources, thus constructing an open teaching resource environment and realizing resource sharing. Enjoy, continue to optimize the teaching effect.

## 2. Current situation of curriculum resource database for Applied Talents Training

Combined with the talent training orientation of Application-oriented Universities and the requirements of engineering education professional certification for graduates, in the process of teaching and training, it is particularly necessary to carry out various teaching activities under the background of engineering practice. At present, the construction of curriculum resource database platform in some application-oriented colleges and universities lacks enterprise participation, does not reflect the national professional qualification standards related to the curriculum, lacks specific cases in the production line of the factory, can not well meet the relevant needs of the production line, can not reflect the industry dynamics and development status in real time, and can not meet the relevant needs of enterprises for posts. In the context of "Internet plus", combined with the objectives of training applied talents and professional certification of engineering education, we have established long-term operation mechanism of school enterprise cooperation through school enterprise cooperation, and studied and produced "resource pool" suitable for curriculum needs. We have integrated the latest concept of "shared data cloud architecture" and constructed "Internet plus" curriculum resource library construction and sharing services, so as to achieve the goal of teaching traditional courses. The effective expansion and extension of learning resources and the "six element operation" (sharing, mobile, customized, structured, fragmented, interactive), so as to improve the overall teaching level and education quality, and cultivate high-level application-oriented talents to provide theoretical support and practical reference.

### **3. Definition of concept**

#### **3.1 Internet +**

Internet + is a trend of interaction and evolution between Internet and traditional industries, driven by innovation 2 of knowledge society, and a new form of Internet development under the 2 innovation. Internet plus is the Internet plus all traditional industries. But this is not simply a combination of the two. It's a new integration of the Internet with traditional industries, creating new development ecosystems by using information and communication technology and the Internet platform. China's "ten year development plan for educational informatization" points out that "the development of educational informatization should be based on the construction of high-quality educational resources and information-based learning environment, guided by the innovation of educational philosophy, and centered on the innovation of educational mode and learning mode". Internet plus education will become a new focus and research topic. How to rationally analyze and actively respond to the new changes of educational ecology under the background of "Internet plus" and how to use the achievements of Internet innovation to help improve the quality of school education are important issues worthy of in-depth consideration and careful planning.

#### **3.2 Course resource database**

With the rapid development of educational information construction, the construction of teaching resource database should meet the needs of education, guided by teaching application, guided by system theory, followed by technical specifications, and truly realize the sharing of teaching resources. The course resource pool of this topic is built in accordance with the training objectives of applied talents, combined with the concept of engineering education professional certification, and through the cooperation between schools and enterprises, the traditional teaching resources are effectively expanded and extended under the background of "Internet plus", and the operation of "six elements" (sharing, mobile, customization, structural, fragmentation and interaction) is realized, thus promoting students' independent learning. Xi, cultivate high-level application-oriented talents to meet the needs of the industry and enterprises.

### **4. Strategies for the construction of curriculum resource database**

#### **4.1 Optimize the construction cost of curriculum resource database and focus on the construction of curriculum resource library supported by modern information technology**

The construction cost of the curriculum resources library under the original Internet plus concept focuses more on the construction of websites or software, and often transfers teaching resources from teaching content to teaching platform construction, weakening the significance of information teaching. Based on the research of the construction and sharing of the "Internet plus" curriculum resource database, more information resources have been reused in the existing commercial backbone network, which has reduced the difficulty of information construction. Focusing on the teaching strength and resources, the teaching effect and quality have been improved, and the result has been achieved twice the result with half the effort.

#### **4.2 Enterprises participate in the sharing of teaching resources to realize the sharing of teaching resources database and cross platform communication**

In the process of training applied talents, through the construction and sharing of teaching resources database based on "Internet plus" course, not only can we share the teaching resources of multiple teachers through the management permission sharing mode, but also we can build learning groups through platform, realize the sharing and learning resources of students in groups, and realize the sharing of resources across platforms, and achieve the total teaching resources in the industry. Sharing and publishing, more important is to actively attract well-known enterprises and companies to participate in the construction of curriculum resource database platform, greatly broaden the learning enthusiasm of the learning group and the scope of teaching resources

acquisition, so that the knowledge learned by students is closer to the actual production.

#### **4.3 Mobile teaching platform to expand teaching space and realize multi terminal teaching coverage**

Building Internet plus based computer resources library can not only cover the traditional teaching facilities such as classroom projection, computer PC terminals, but also break the limitation of teaching and learning through mobile micro applications such as mobile phone and Pad, and make learning places diversified.

#### **4.4 Carry out school enterprise cooperation, customize teaching content, and realize customized teaching resource library of application-oriented teaching**

Under the concept of engineering education professional certification, the teaching content is customized in line with the cultivation of applied talents. The teaching content pays attention to the integration of theory and practical engineering, and the enterprise and school are deeply integrated. The productive training is integrated into it, and a teaching mode with practical ability as the main line, working process systematization as the framework and project driven as the orientation is established. Enterprise experts and business backbone jointly develop teaching resources. And the use of modern multimedia technology will be micro video, courseware, handouts, e-books, homework, testing and other information into one, so that teaching becomes intuitive, image, knowledge and information dissemination efficiency is also greatly improved, can greatly improve students' learning enthusiasm, mobilize students' learning enthusiasm, can significantly improve the teaching and learning effect.

#### **4.5 Meet the employment needs of enterprises, structure teaching resources, and form a differentiated teaching platform suitable for students at all levels**

From the perspective of curriculum teaching and students' learning effect in recent years, different students have different understanding ability, knowledge accumulation and knowledge structure. Moreover, according to the employment needs of enterprises, structured education should be carried out for students at different levels. On the one hand, it can meet the needs of research-oriented and exploration-oriented learning resources for students who have spare power to learn; on the other hand, they can not give up backward students, so they need to carry out structural education. Systematic guidance and Q & A should be carried out for the basic knowledge and the content required by the syllabus. To ensure that all levels of students can obtain their own learning resources on the platform, to achieve individualized teaching, to meet the needs of different levels of industry and enterprise applied talents training.

#### **4.6 Combined with the actual engineering background, fragmentation teaching elements, make full use of students' fragmented time to improve the teaching effect**

According to the professional certification target of engineering education, aiming at the rich and complex knowledge points of automatic control theory, it is difficult to fully instill knowledge into students through single classroom teaching, and the teaching effect of the course often depends on the students' learning enthusiasm after class. In order to reduce the students' learning inertia after class and improve the learning effect, the key knowledge of the course can be fragmented by combining the actual engineering background, making full use of the fragmented time of students after class, carrying out teaching element learning through mobile terminal fragmentation, and effectively optimizing the individual teaching time resources of students.

#### **4.7 Interactive teaching form, effectively carry out teaching interaction and self-study and mutual assistance at any time, on the spot and anywhere**

The construction and sharing of the teaching resources database based on Internet plus can help students to interact with teachers on any topic at any time and place. What is more important is that students, teachers, enterprise engineers and social personnel can effectively interact, so that the knowledge learned by students is closer to the actual production, serve the industry, break the

limitations of time, region and theme, and quickly organize interactive teaching and self-study mode.

## **5. Conclusion**

To sum up, the traditional teaching resources can no longer satisfy the needs of the enterprises and the teaching needs of the "Internet plus" era. By carrying out school enterprise cooperation, making full use of modern information tools, means and methods to build "Internet plus" curriculum resources pool and sharing is an extremely effective measure to provide diversified teaching models. Guiding and training students' skills and literacy in modern Internet technology under the background of "Internet plus", thus cultivating students' new learning beliefs, and playing an important role in promoting teaching level.

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## **References**

- [1] Li Yuefeng. Research and application of the platform for the curriculum resource database in the era of Internet plus. [J]. computer education, 2018, Ninth issue.
- [2] Zhang Yang, Chen Yixuan. Construction and research of sharing logistics teaching resource database [J]. Journal of Hubei open vocational college, issue 24, 2018.
- [3] Guo Kexin, Cheng Minxi, Yue Peng. Research on the construction of university physics experiment open course resource database based on cloud storage [J]. Physical experiment, may 2017.
- [4] Zeng FanMei, Wei Yan. Research on problem-based fragmented learning model [J]. Adult education, 2018 (2).
- [5] Yu Deying. Construction of teacher education curriculum resources in the context of "Internet plus" [J]. education theory and practice, 2016 (23):28-30.