

# *Discussion on Online Teaching Curriculum Design of Local University of Finance and Economics Based on Industry-University-Research Cooperation Mode*

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**Abstract:** Industry-University-Research education research is the key to cultivate creative, planning and marketing talents of financial management in colleges and universities, and it is also an important way for China to build an innovative country and speed up the adjustment of industrial structure. Online education has developed from the original single teaching video to various platform operation modes. While vigorously promoting it, we should also pay attention to the fact that the development of online education depends on many factors, such as: the superiority of curriculum content; The richness of learning resource data; Rationality of curriculum design, etc. Among them, curriculum design is particularly important. Based on the cooperation mode of Industry-University-Research, taking the financial management major of local financial and economic colleges as an example, this paper discusses how to do online course teaching well in the face of emergencies such as epidemic situation from many aspects.

## 1. Introduction

Online education is also called online education. It refers to the educational activities across a variety of spaces through the Internet [1]. Online education has a great impact on the authority of traditional education, and has innovated the limitations of traditional education forms. This kind of teaching mode enables everyone to receive education in fragmented time, and breaks through economic barriers to realize the popularization of education. It overcomes the limitations of traditional offline education in time, space, educational environment and economic barriers, and brings a brand-new teaching mode.

The teaching mode of “combining Industry-University-Research” not only makes full use of various individualized teaching environments and resources such as universities, research institutes, enterprises and institutions, but also gives full play to the advantages of different educational subjects in personnel training, providing college students with a wide application space of integrating theory with practice [2]. Therefore, this paper puts forward the corresponding strategies of online teaching curriculum design in local universities of finance and economics based on Industry-University-Research cooperation mode, and applies them to the curriculum development

of financial management specialty, and evaluates its practical effect.

## **2. Disadvantages of Production, Learning and Research Education of Financial Management Major in Local Colleges**

### **2.1 Industry-University-Research is Independent of Each Other**

Industry-University-Research goes its own way, which is a common problem in Industry-University-Research teaching in colleges and universities all over the country. There is one set of classroom learning in schools and another set of practice in enterprises. Most financial management Industry-University-Research teaching does not really bring the knowledge close to the industry and market to the classroom, and there is a lack of interactive practice platform in schools between production and learning. In research, the research direction and achievements of many teachers majoring in financial management are seriously out of line with the development of the actual financial management industry. The final result is that production, learning and research have an empty shell of cooperation and no actual interactive connotation, which seriously deviates from the original intention of Industry-University-Research teaching.

### **2.2 Attach Importance to the Combination of Industry and Research, and Despise the Practical Application of Teaching**

In the mode of combining Industry-University-Research, production, learning and research are often unable to have both. Driven by the possible benefits brought by Industry-University-Research, in the process of cooperation between Industry-University-Research, we often pay attention to the economic benefits arising from the application, but ignore whether it can really produce practical results in teaching. It is beyond reproach that financial management companies hope to obtain talents and creativity through Industry-University-Research cooperation, but ignoring the ability training of financial management talents in colleges and universities is actually a departure from the original intention of Industry-University-Research cooperation mode.

### **2.3 Industry-University-Research Education is Limited**

On the one hand, the third-and fourth-tier cities lack suitable partner enterprises; on the other hand, there is a regional gap between the third-and fourth-tier cities and the first-and second-tier cities [3]. There are many practical difficulties in bringing some high-end financial management talents from 4A companies to the school for lectures and teaching. To truly integrate into the forefront of the development of financial management industry, university teachers must also cooperate with large companies in first-and second-tier cities, and see higher-end companies and brands to bring knowledge to students in the process of research and teaching.

## **3. Online Teaching Curriculum Design**

### **3.1 Determination of Design Objectives and Contents**

First of all, we should combine the non-verification characteristics of financial management professional knowledge to clarify the research design objectives and contents. E-learning online learning theory is adopted in the online link, while the offline link refers to the face-to-face classroom teaching idea, which is combined with B-Learning blended learning mode to form the online teaching mode of local university of finance and economics based on Industry-University-

Research cooperation mode. This teaching mode is mainly designed for three points of financial management course [4-5]:

(1)The design of financial management hybrid learning resource library, which teaches the designed course content through the offline face-to-face mode, and designs the specific content flow of online course and online learning electronic portfolio through online online course resources;

(2)The mixed discussion design of financial management covers the mixed discussion environment and the construction of an integrated system of online and offline teaching resources.

(3)The mixed teaching evaluation design of financial management includes classroom teaching evaluation design and virtual classroom teaching evaluation design. At this stage, the students' learning achievements and teaching process are comprehensively evaluated, which mainly involves the mixed discussion and evaluation of their online and offline learning achievements, and the evaluation results should be objective and fair.

### 3.2 Learning Situation Design

Learning situation is to provide students with a complete and real problem situation, make students have learning needs, and drive learners to learn independently, so as to achieve the purpose of actively constructing knowledge meaning. Therefore, instructional design based on constructivism needs to concretize the design problems, restore the background of knowledge, and restore its original vividness and richness. This requires online courses to create this kind of virtual situation by various means to help students realize the meaning construction of knowledge.

At the beginning of teaching, teachers should play the role of disseminator of knowledge pursuit: sort out and explain the outline of the course, so that students can have a whole grasp of the content to be learned; Analyze the latest status of the industry, provide the latest industry information, and let students have a deeper understanding of the knowledge field; Showing and introducing outstanding works of art and design is mainly to arouse students' interest and desire for learning.

In the next stage, when members communicate online, they should first make students feel comfortable in this environment and communicate with other members freely. The cooperation and communication between students and teachers sparks, and these exchanges give new meaning and inspiration to information. At the same time, teachers should gradually reduce the role of leader and giver, and turn to provide stimulation and maintain the smooth progress of online teaching activities [6]. Students bring into the module in the scene, and have certain knowledge and interest in the content they are about to learn, which ensures the foundation of the course.

### 3.3 Change the Curriculum

The curriculum should reflect “precision” rather than “comprehensiveness”. Some majors in financial and economic colleges give people the feeling of “a panacea”, which is closely related to the curriculum. No matter what the major is, students should be required to learn several symbolic courses that reflect the characteristics of the major. These landmark courses should be strictly controlled in the selection of teaching materials, teachers, the use of teaching materials, teaching methods, class hours and other aspects, and make a fuss about “precision”. At the same time, after entering the professional course learning stage, each student can also consider providing professional “tutors” to guide professional learning, knowledge structure establishment, thought and thinking inspiration, and even career planning, so as to ensure professional learning and fully tap each student's personality, so that each student can find his own “good” direction.

### 3.4 Collaborative Communication

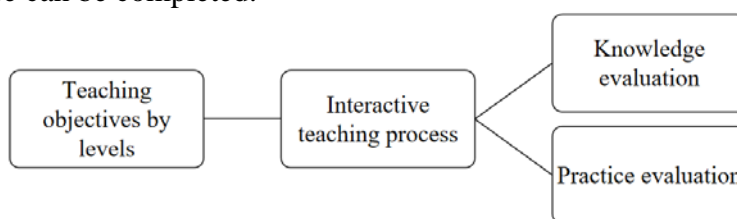
In the collaborative communication module, students submit homework online, and teachers comment collectively through the Internet, such as publishing videos; Email reply; Remote display and other forms of homework evaluation. Collaborative communication module mainly realizes the functions of asking questions, communicating, posting and discussing after students receive the operation explanation module. This module is convenient for students to ask teachers for questions that they are confused about after the last stage of study. They can send difficult questions to teachers, give hints after the questions are answered, and students can also check all the questions and solutions put forward by everyone.

In this open form of question answering, students can see all the questions and answers, and get more needed knowledge conveniently and quickly. On this module, the platform provides teachers, counselors and students with real-time or non-real-time network interaction forms such as BBS, chat rooms, announcements, short messages, etc., and provides perfect communication and answering feedback functions.

### 3.5 Course Achievement Evaluation Method

Theoretical study is mainly through offline teaching, combined with online classroom for video learning and classroom performance assessment; Practical investigation requires students to carry out social investigation around hot issues in finance, publish investigation tasks and requirements through the platform, and submit corresponding results; Several topics are given in the special seminar, and PPT reports and defenses are conducted in several groups offline. When facing social learners, PBL group discussions are completed through online classes; The course papers mainly focus on the hot issues of finance, and they are published, submitted and evaluated through the online course platform.

After completing the study of knowledge theory and practice, teachers will judge learners' comprehensive learning level according to their professional ability and knowledge level. Graded evaluation is the summary and completion of the whole graded teaching link. The results of this grading evaluation will be divided into three categories: “primary”, “intermediate” and “advanced”, which correspond to different teaching objectives and have corresponding teaching means. Finally, with the help of diversified evaluation methods, the conversion of learners' individual “ability” to “degree” in this course can be completed.



*Fig.1 Design Drawing of Teaching Framework for Grading Evaluation*

Through the six key links (Figure 1) of the teaching framework system based on grading evaluation, the online course of financial management can give full play to its advantages, and help learners to better build subject knowledge from all aspects.

## 4. Problems in the Implementation of Online Teaching

### 4.1 Online Teaching Management Problems

Transformation of supervision and management: although information such as whether teachers start classes on time, how to start classes, whether teaching materials are complete, and the

attendance rate of students in live classes can be obtained through technical statistics, excessive intervention and the requirement of “one size fits all” will make teachers feel dancing in shackles, which will affect their enthusiasm for trying other teaching modes. Change supervision into encouragement, and formulate corresponding online teaching hours identification, student credit identification policies and teachers' online teaching incentive policies.

## 4.2 Inadequate Technical Preparation

The first is the lack of preparation of development documents. The appearance of user problems often needs to find the deep-seated reasons, especially the docking between multiple platforms, and it is necessary to trace the root of the problems, such as platform function problems, user rights problems, or browser display problems. At this time, if the platform requirement document is unclear or even missing, it is impossible to trace the cause of the problem.

User problem records need to be improved. Daily question answering on the platform is often a system in which many people take turns on duty, so it is necessary to record the problems in the process of answering questions in detail. The lack of records causes the problem to be repeatedly solved by manpower when the problem reappears, and the solution is not timely enough, which affects the user experience.

Problems occurred during platform operation need to be solved in time to eliminate hidden dangers. In this large-scale online teaching, the remaining problems that appeared before but were not solved in time are highlighted, such as the problem of external teachers' authority, the problem of uploading video plug-ins, the problem that resource servers can not personalize and open user space, etc., which are put on the agenda again and need to be dealt with in a short time, which also increases the working pressure of technicians.

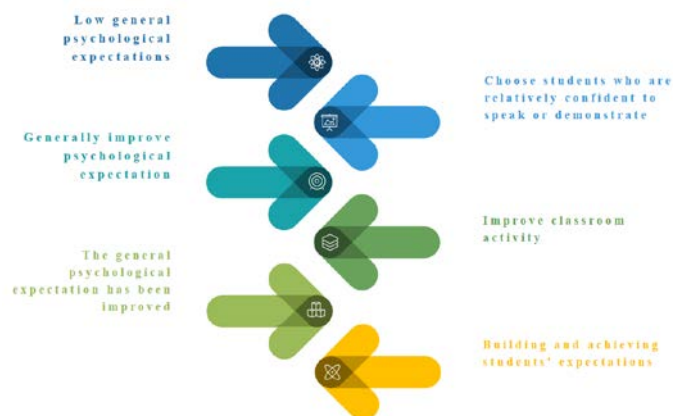
## 5. Reflection and Suggestion

### 5.1 The Key Factors of Giving Play to Teachers

The key factor for the success of online teaching is the deep participation of teachers. According to the types of knowledge points, select appropriate technical means to present. For example, for the knowledge teaching type, you can choose to play massive open online course resources or build your own video resources; The seminar type can design topics and problems, and combine offline data self-study with online group discussion; The operation skill type can arrange virtual experiment exercises; For the important and difficult problems that need to be emphasized, live broadcasts can be set up to teach and answer questions.

Curriculum expectation, as a teaching strategy, exists to achieve the goal [7]. Before the start of learning activities, learners have a certain expectation of learning results through a clear classification of teaching objectives. Therefore, the rational use of this expectation can help the smooth development of teaching activities.

When students' general psychological expectations are low, the opposite result will be produced, and teachers can deal with it through three steps (Figure 2):1. In this general lack of confidence, choose relatively confident learners to speak or demonstrate, and play a good leading role; 2. After that, through the performance of the learner, the classroom activity is improved and the self-confidence of all students is generally improved; 3. In this way, build and achieve the expectation of learning oneself and successfully achieve the teaching goal.



*Fig.2 How to Deal with Students' Psychological Expectation*

Technical means include: the breakthrough activities of teaching platform are conducive to stimulating students' learning motivation; Adaptive publishing and group function are helpful to individualized teaching and guidance; The reusability of video resources and online materials can help students learn repeatedly; The automatic scoring function of test and question bank is helpful to liberate teachers and help students diagnose themselves in the learning process. Students' learning track, learning record, speech and discussion process can be recorded completely, which is convenient for students to make process evaluation.

## 5.2 Strengthen Technical Support

Enrich the teaching designer team, increase student teaching assistants and form echelon construction. Students' teaching assistants should be on duty to answer common problems in platform application, study new technologies and applications, study and popularize teaching methods, form a team with the college and provide fixed-point technical support.

Do a good job in the construction and management of requirement documents, development documents and function delivery documents. For the docking of multiple platforms and the modification of functions of a certain platform, it is necessary to hold a seminar in advance and inform relevant personnel. Make detailed problem records for the daily maintenance of the platform, and constantly improve the service mechanism.

## 6. Conclusion

The online teaching mode of local university of finance and economics based on Industry-University-Research cooperation mode pays attention to practical, general and abstract teaching process, which coincides with the basic characteristics of financial management course. Therefore, this paper also comprehensively designs the teaching scheme around them to ensure the scientific and effective advancement of the professional course teaching. In view of the problems in the existing online courses, the teaching framework of the online course of financial management is designed by using the core of the grading evaluation system, and the teaching process and steps are defined. The combination of Industry-University-Research has become an important part of the national innovation system, and the three functions of talent training, scientific research and social service in colleges and universities must be closely related to the market. Further vigorously promote the construction of financial management Industry-University-Research, integrate innovative resources, innovate working mechanism, and strive to cultivate more financial management practical talents with trinity of knowledge, skills and quality needed by the society.

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