Design and construction of individualized learning model for finance courses

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Abstract: With the continuous advancement of vocational education reform, how to innovate teaching design and teaching mode and create a "personalized" learning atmosphere has become a problem that every teacher needs to focus on. For higher vocational finance courses, it has many knowledge points, strong practice and other characteristics, in the new era to actively carry out the design and construction of personalized learning mode is not only the need of its teaching reform, but also the only way to improve the quality of talent training. Based on this, this paper analyzes the teaching status of finance courses, and at the same time, analyzes the design and construction path of personalized learning mode for finance courses, which is only for teachers' reference.

Key words: higher vocational education; Finance course; Personalized learning model; Design and construction

Personalized learning is a new requirement for education put forward by social development, reflecting the need for personalized talents in the emerging stage of social development, and is also the general trend of vocational education reform today. As an important component of China's education cause and an important training base for professional talents in our country, higher vocational colleges and universities are of great practical significance for the development of higher vocational education and the improvement of the quality of personnel training.

1. Current Situation of teaching of financial courses

1. Single teaching mode, lack of student interest

Einstein once said that interest is the best teacher. For higher vocational college students, interest is an important driving force for their continuous learning and active learning. When they are full of interest in course knowledge, they tend to be more enthusiastic and active, and then get twice the result with half the effort. This also suggests that we should focus on interesting teaching and introduce some interesting teaching links, so that students can learn through fun and gain more knowledge and growth. However, according to the actual situation of the teaching of finance courses in higher vocational colleges, the problem of single teaching mode is more prominent. Some teachers pay attention to verbal explanation and lack diversified teaching design, which greatly affects students' learning interest and teaching quality. In this regard, how to solve this problem and effectively improve the interest of teaching is a problem worthy of our deep thinking and exploration.

2. There is a disconnect between reason and reality, and innovation is urgently needed

Higher vocational finance courses have strong comprehensive characteristics, which also requires the majority of teachers to do a good job in theoretical teaching, but also fully implement practical education links, only in this way can ensure the teaching effect and talent training quality. However, according to the actual situation, the disconnection between theory and practice in the teaching of financial courses is quite obvious. Some teachers have the problem of "emphasizing theory and neglecting practice" in the teaching process, and often ignore the guidance of students' practical activities, which also directly affects the cultivation of students' professional ability and comprehensive quality.

3. The application of science and technology is insufficient, which needs to be constantly improved

At present, with the development of science and technology, vocational education has also set off a wave of informatization reform. In this context, the teaching of finance courses has also ushered in a new opportunity for reform. However, in terms of the actual situation, the application of information technology and Internet in the teaching of this course is not enough. Some teachers do not pay attention to the use of modern means, and some teachers have the problem of "wearing new shoes and following the old road", turning professional courses into "video lessons", resulting in the reform of information-based teaching becoming a mere formality. It not only affects the students' interest in learning, but also affects the improvement of teaching quality. Therefore, how to effectively use technology such as information technology, Internet and even artificial intelligence to empower the teaching of finance courses is a problem that we need to focus on in the process of building personalized learning models in the new era.

2. The design and construction of personalized learning model for finance courses

1. Personalized learning model based on "Internet +"

At present, the continuous development of Internet technology also provides new opportunities for the teaching reform of finance courses in higher vocational colleges. In this regard, we should follow the idea of "new at the time" to make full use of the Internet in the teaching of finance courses, and create a new normal of finance course teaching based on "Internet +", so that students can learn individually and grow up in an all-round way under the support of modern teaching.

(1) Build a personalized platform of "Internet + education"

Many educational practices have proved that the improvement of the teaching effect of higher vocational education does not depend

on the classroom teaching effect, but also depends on the after-school learning and practice effect of students. In order to fully improve the teaching quality, we may wish to put the perspective of "Internet +" on the "Internet + education" platform to promote the reform and innovation of classroom teaching and after-class practice, so that students can get personalized learning experience, and get the earliest comprehensive growth. First of all, we can start from the perspective of "Internet + classroom teaching", combined with the teaching content of finance courses, introduce some audio-visual resources to help students understand the course knowledge more simply and profoundly, and comprehensively improve the teaching quality. Secondly, we can start from the Angle of "Internet + after-class practice", relying on Tencent classroom, Dingding and other platforms to carry out online teaching, break the shackles of traditional classroom teaching, so that students can learn and review anytime and anywhere. On this basis, we can also guide students to practice after class, use mobile phones and other ways to record relevant videos, and put them in the class group, analyze and evaluate together with everyone, and take this opportunity to point out the shortcomings of students, give them timely advice, so that the quality of teaching to a higher level.

(2) Rely on "Internet +" to carry out personalized evaluation

In the Internet era, the teaching of finance courses should also pay attention to relying on the Internet to innovate teaching evaluation and create a "personalized" teaching evaluation model, so as to promote the improvement of teaching effect and the development of quality. For example, in the teaching process, we can use wechat public accounts to guide students to carry out "digital" after-class exercises, and then combine relevant statistical software to evaluate students' practice results, and carry out accurate scoring and accurate analysis. On this basis, we can "target" education and teaching, help students break through teaching difficulties, and comprehensively improve their learning quality and effect.

2. Personalized learning model based on "project-style"

Project-based teaching method, as its name implies, refers to a project-based teaching mode. If it is infiltrated into the finance teaching of higher vocational colleges, it can not only innovate the teaching mode of finance courses, increase the interest and experience of course teaching, but also promote the integration of students' theoretical learning and practical learning, and provide effective help for the cultivation of their professional comprehensive ability. In this regard, in order to fully improve the quality of teaching and talent training, and strengthen students' professional comprehensive ability, it is necessary to introduce "project-style" teaching into the teaching of finance courses, create a personalized learning mode based on "project-style", and lead students to gain more knowledge and grow!

(1) Determine the project and promote cooperation

In the process of the application of project teaching method, project selection is the first link. In this regard, in teaching practice, it is necessary to select and propose some project tasks based on the teaching content and objectives of finance courses, and in line with the concepts of practical combination and innovative practice, so as to lead students to carry out project-based learning. For example, in the teaching process of finance courses, we can ask students to complete the corresponding goals based on the task of "financial scenario" in the job post, so as to clarify the project tasks. On this basis, we can combine the ability and foundation of students and divide the class into several groups of 4-6 people with balanced internal strength, so as to create a good learning atmosphere of mutual communication and competition among groups. Then, guide the students to communicate and think in a cooperative way, stimulate the enthusiasm of the students in the project learning, and promote their better learning and growth.

(2) Control the details and project review

In the process of guiding students to carry out the project practice, we should fully control the teaching details and actively promote their thinking and exploration. For example, in the teaching process, when students appear "stuck" situation, we can combine specific problems to give them some guidance, to help them solve the project problems. At the same time, we should also actively analyze the needs of students, enter the project practice of students, and give certain opinions and suggestions, so as to help them learn efficiently. Finally, when the students finish the new project tasks, we can create a "project sharing" link, guide the members of each group to explain their conclusions in turn, share their own experience, and then we can analyze the "bright spots", or guide the students to carry out group evaluation, mutual evaluation, so that they can better exchange ideas and communicate ideas. Fully promote the improvement of their quality of thinking and course learning, and lay the foundation for the cultivation of their competitiveness and cooperative consciousness, so as to help them better employment and development.

3. Personalized learning model based on "knowledge graph"

China's Education Modernization 2035 clearly points out that it is necessary to "accelerate the reform of personnel training mode by using modern technology, and realize the organic combination of large-scale education and personalized training." . Vocational education serves the economy and society, empowers teaching with intelligent technology, and trains personalized vocational skills talents with The Times, so as to adapt to the high-quality development of education. As for knowledge graph, as an "intelligent technology" with highly personalized characteristics, it can depict objective entities and their relationships in the form of a graph, and has powerful semantic processing and interconnection organization capabilities. When it is infiltrated into the teaching of finance courses, it can provide rich materials for this course and build a learning model that is in line with the needs of professional talents in the industry. Therefore, it is necessary to actively build a personalized learning model based on "knowledge graph" to promote the improvement of students' course learning effect and promote the cultivation of their innovation ability and comprehensive ability.

(1) Construct the knowledge graph of Fintech vocational skills and skill core courses

First, construct the Fintech career skill map. We can build the learning skill graph by combining StuQ, an open skill graph knowledge base, and systematically sort out the mechanical energy of professional skills by combining current financial related positions such as

investment and financing, precision marketing, insurance claims settlement and credit evaluation. On this basis, visualization technology can be used to display them in an image. So that people can "at a glance" to see the specific vocational skills content, comprehensively promote students' professional knowledge learning. Secondly, the knowledge graph of skill core curriculum is constructed. That is to say, while analyzing the structure of skill knowledge, it makes full use of "crawler technology" to extract the teaching resource information on the relevant online platform and extract the specific concept definition of course knowledge questions from it. On this basis, relying on the "five-step method" to obtain triplet course knowledge, and the core course knowledge can be well stored in the Neo4j graph database, so as to facilitate students' personalized learning and application.

(2) Design learner portrait model and skill learning path recommendation algorithm

Firstly, the portrait of learners is designed from the perspective of knowledge graph, and the specific portrait of learners of finance courses is constructed by combining CELTS-11 standards (including relationship information, performance information, personal information, academic information, portfolio information and safety information, etc.), and then the knowledge graph information is integrated. And by extracting features to dig the deep interests and needs of learners, in order to build a personalized learning model for the personalized learning of learners. Secondly, the calculation method of skill learning path is designed, that is, the learning situation of financial courses of learners is judged, the similarity before learning is compared, and the learning results are certified by relying on blockchain technology, so as to recommend appropriate resources and slots for them, so as to give better play to the intelligent characteristics of knowledge graph and promote students' personalized learning. Effectively improve their learning quality and promote their growth and development.

In a word, in the new era, the teaching of finance courses in higher vocational colleges is in urgent need of new changes. Teachers should grasp the practical problems of teaching, and constantly use the Internet, project-based teaching, knowledge graph and other methods to build personalized lecture halls of finance courses, effectively improve the interest and effectiveness of teaching, and promote students' personalized learning. Lay a solid foundation for their better employment and development.

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