

Creative Research on Talent Developing Mode of Application-Oriented Universities---Taking Environment Design Major (Direction of Interior Design) as an Example

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Abstract. With the adjustment of industry structure and continuous change for the need of talents, the requirement for the developing of application-oriented talents updates continuously. Therefore, the reform of application-oriented talents developing mode becomes the most important task for universities. It becomes an urgent problem for application-oriented universities to solve how to integrate industry and education effectively to improve the practical ability of application-oriented talents. For that reason, a talent developing mode named “Project Teaching Package” comes into being. “Project Teaching Package” is a teaching reform based on practical projects, taking a double-teacher developing mode, putting the practical projects into the whole curriculum, realizing an effective integration of curriculum system. While driving the construction of teaching team, the talent developing mode of “Project Teaching Package” also promotes the reform and popularity of teaching mode and teaching methods, broadening the applying range of practical teaching, accelerating the further reform of application-oriented talent developing mode, which has significance for the creative reform of the talent developing mode of application-oriented universities.

In 2017, General Office of the State Council issued <Some Opinions on Deepening the Integration of Industry and Education>, pointing out that “it is an urgent requirement for promoting the supply-side structural reform of human resource to deepen the integration of industry and education and promote the organic cohesion of education chain, talents chain, industry chain and creation chain, which has significance to improve education quality, expand employment and entrepreneurship, promote economic transformation and upgrading, and develop new motivation of economic development under the new situation.” In summary, as an important part of national education, application-oriented universities should implement carefully the policies of national education reform, practice the talent developing mode of integrating industry and education, improve education level and quality of talent development continuously, make the talents adapt to the need of society, and provide high-level talents for local economic development.

Problems in the Talent Development of Application-Oriented Universities

Ambiguous Orientation

Local universities of our country do not have a profound understanding for the development of application-oriented talents. Nominally, they are practicing in an application-oriented way, but in fact it doesn't have so much difference from traditional universities which take the development of application-oriented talents simply as training skillful workers, thinking less about the standard of talent development, effect of subjects and research, setting of majors, curriculum system and the construction of teaching team, and their education level and quality of talent development need to be improved.

Imperfect Setting of Curriculum System

In the curriculum system aiming at the development of application-oriented talents, the main problem is showed in the percentage setting of curricula. In most universities, practical lessons are less than 30%, and students cannot apply theoretical knowledge into social practice, which ignores the organic combination between theoretical knowledge and social practice. Besides, the curricula

are always insubstantial and old in content, which cannot keep the pace with the times. The curricula are not set according to the direction of students' employment. Different subjects cannot integrate and combine with one another effectively, which doesn't meet the basic requirement of application-oriented talent development.

Incompact Combination between University and Enterprise

Nowadays, most universities do not have a good foundation in the cooperation with enterprises, lacking effective strategic approach and education system, and the cooperation between university and enterprise is still in a primary stage. Enterprises do not really take part in the talent development or curriculum setting of universities. Taking the practice base out of school as an example, because of the limitation of time, place and major, students can only complete the basic parts of the practical project in the enterprise, and some enterprises do not even provide related practice opportunity. Teachers invited from enterprises can only give several lessons because of their uncertain time, which leads to unsatisfied effects, and the teachers from enterprises cannot play their role in practice teaching or employment guidance.

Imperfect Evaluation System of Talent Development Quality

Some universities use old evaluation system of talent development quality without combining with practical situation, not reforming aiming at the developing mode of application-oriented talents, adopting old evaluation index, mainly the school evaluation index, lacking the evaluation index of enterprises or society. The evaluation system of talent development quality lacks periodic examination, still adopting traditional form of final examination. Therefore, there is an urgent requirement in integrating the quality evaluation indexes of different links in social practice of talent development to form a complete quality evaluation system of talent development.

Construction of Curriculum System of Environment Design Major of Application- Oriented Universities

The curriculum system of application-oriented universities is different from traditional teaching mode. It optimizes curriculum system thoroughly, strengthens the construction of curriculum resource, optimizes curriculum structure, redesign and adjust the curricula, and focuses on ability development. The education of environment design is based on the need of market and employment, taking creation as a core, developing application-oriented talents with professional theoretical knowledge and skills on interior space design, landscape space design and material construction. The talents should be able to be engaged in public building interior design, living space design, city environment landscape design, and community environment design.

Project teaching is the most direct way to develop students of different type, but due to the change of society demand, the requirement for students is higher and higher, and simple project teaching is not enough for the storage of knowledge or improvement of skills. Developing modes of studio, module and project package are proposed gradually, and most universities are exploring better developing ways.

What is the Developing Mode of “Project Teaching Package”?

A “Project Teaching Package” is consisting of several projects, and one project is for one semester with systematic developing and examining standard. There are six parts in a “Project Teaching Package”, including teaching target, teaching standard, practical skill training, and position corresponding, developing specification, and teaching evaluation.

The “Project Teaching Package” is based on the analysis of the developing target of professional talents, profession feature, and the present market demand for talents. It takes project teaching as a carrier and typical task as a direction, making up for the shortage of simple subject knowledge or skill training, from concrete work, focusing on the development of application ability, designing and arranging general knowledge and professional knowledge reasonably, developing students' synthetic ability and quality, improving teaching effect.

The “Project Teaching Package” is throughout the whole cycle of talent development, adopting a double-teacher teaching mode. The teachers from school and enterprises are in charge of the theory teaching and practical guidance separately to develop students’ ability of adapting quickly to the requirement of related enterprise position, making students develop their vocational ability in the period of school education, becoming the application-oriented talents who are suitable for the demand of fast development of times creative industry. The “Project Teaching Package” drives the construction of teaching team and promotes the reform and creation of teaching mode and teaching methods, which is significant for the improvement of teaching quality.

Bring “Project Teaching Package” into Curriculum Teaching Unit

The so called “Project Teaching Package” is actually a combination of special teaching theme and teaching unit, which is both a course and a combination of the knowledge of several courses, both a practical course and a combination of theory and practice. The curriculum is designed on the basis of ability, and after the study of a module, students can obtain related abilities. It is also a teaching concept taking knowledge output as its direction, making talent developing target and constructing curriculum module according to the demand of knowledge, ability and quality of students for future vocational positions, constructing a module teaching system. A “Project Teaching Package” is consisting of one project core course and one to four project assisting course. All the courses should be related and supported one another. The knowledge and skills of a course are taught from easy to hard, and the theoretical knowledge and practical skills integrate and support each other. The project core course is generally theory course with concrete teaching target.

Curriculum System Construction Taking Projects as Carrier, Guided by Work Tasks

Project teaching is guided by typical work tasks, conversing products into position work tasks, conversing work tasks into learning tasks, conversing producing projects into teaching projects. “Project Teaching Package” is consisting of several project modules arranged in the 3rd, 4th, 5th and 6th semester, which can be increased or reduced according to practical situations. The 4 projects should be both independent and related to perform their effect.

Optimization and Integration of Curriculum Content

“Project Teaching Package” needs to optimize the selection of curriculum content, paying attention to the teaching order of all the curriculum content, obeying the regulation of production, knowledge teaching and ability training of students. The content of all the courses should scientifically connect, cooperate and support one another without deficiency, repetition or overlapping. Theoretical knowledge and practical skills need to be set reasonably, and the theoretical knowledge should be chosen according to the products to be completed by the “Project Teaching Package”. Practical skill targets need be confirmed. Teaching content is arranged according to the selected theoretical knowledge, and skill training content is arranged according to the selected practical skill targets.

Construction of Double-Effect Evaluation Mode

The Standard of project teaching products comes from the demand of industry, proposed according to the regulation of professional standard, which is conversed into the standard of “Project Teaching Package” (conversing industry standard into teaching standard), according to which the teaching content are set, such as knowledge, skills and synthetic quality. Different standards are made for different positions. Each project needs a concrete teaching standard, which is not only a standard for industry and major but also an evaluation standard for teaching.

Taking the Curriculum of the 6th Semester of Environment Design Major as an Example

The curricula of interior design studio of the 6th semester of environment design major include “Interior Project Design”, “Design and Performance of Construction Drawing”, “Design and Performance of Effect Drawing”, and “Budget Estimates for Decoration Work”. The course of “Interior Project Design” is to complete the analysis, arrangement, research, and plan design of the project. “Design and Performance of Construction Drawing” is to complete the design of

construction drawing of the project, including the related knowledge of specification and fireproof. “Design and Performance of Effect Drawing” is to complete the design and performance of the project, solving the problems of software operation and performance. “Budget Estimates for Decoration Work” is to complete the material application and construction quote of the project. When all the courses are finished, the budget, design and construction of the project will all be completed, and the courses realize the operation of the project together.

After the curricula are finished, both the teachers from enterprises and school will examine the work of students together, evaluating synthetically the project completed by students according to industry standard, and the students themselves need to state their own design ideas, design course, and the feeling after design. Teachers will know about students’ situation through the reply, which can improve their abilities of expression, cognition and teamwork.

Teaching Problems Solved by Project Teaching Mode

Solve the Problem of Simple Curriculum

In the past, project teaching curricula only added real projects in teaching to develop students while completing projects, and all the curricula and projects were set independently without relationship. When the curricula were finished, students only mastered the ability and quality of one course, lacking the integration and system of talent development. The curricula of “Project Teaching Package” set in the same semester are related with one another, and through the close relationship between curricula and projects, students can master all the professional knowledge and abilities, which solves the problem of simple curricula at the same time of completing teaching task.

Solve the Problem of Disjunction between Reality and Teaching

Different from separate design of project curriculum teaching, the “Project Teaching Package” connects all the courses organically and orderly, setting project teaching task according to the positions and work tasks regulated in professional talent developing target, and the projects are from easy to hard in each semester. The integration of projects can synthetically improve the vocational knowledge, ability and quality of students, which is a complete development system.

Solve the Problem of Obsolete, Routinized and Modularized Subject System

Traditional teaching mode doesn’t get rid of routinized and modularized design. The theory and practice fall behind the demand of society development, and the development of students’ abilities of operation, creation and social adaptation are not perfect. Therefore, “Project Teaching Package” reforms and perfects curriculum system, starting from work tasks, integrating practice, project and curriculum, breaking the enclosed situation of traditional education, transforming teaching into an open teaching mode of undertaking the design of social practical projects, based on theoretical knowledge of curricula, taking professional skills as a core, guided by enterprise designers, industrial experts and professional teachers, taking the teaching design of “Project Teaching Package” as a task, combining social practice and theory teaching organically, making students complete the synthetic training of professional technology while completing social practical design projects.

Solve the Problem of School-Enterprise Cooperation Form and System Construction

The cooperation form of school and enterprises in “Project Teaching Package” solves the problem of simple, inflexible, incoherent, instable, and inactive cooperation between school and enterprises, constructing related management system, solving a series of problems of no legal protection, lacking complete system, unclear definition of basic problems, and lacking supporting measurement. It is necessary to define the responsibility, right and benefit of enterprises in their cooperation with school.

Advantage of the Developing Mode of “Project Teaching Package”

Improve Students’ Abilities of Practice and Social Adaptation

“Project Teaching Package” is on the basis of enterprise application projects, constructing a tridimensional teaching mode of multiple curricula, which has strong pertinence, practicality and interaction. In addition, the projects are involved in a wide range of professional field, which can effectively solve the problems of one-sided curriculum content, and loose connection among curricula. In the course of teaching, aiming at practical projects, combining the development target of each curriculum, tasks are decomposed and divided for the students of different majors and grades. The design is carried out around the same project module, integrating the independent curricula, which are related and supported one another, making the students form an overall design concept in the system formed by curricula and projects and master comprehensive operating skills.

Promote the Development and Construction of Subjects

“Subject Contest” can be added into curricula as a complete curriculum project, the purpose of which is to make students train themselves in contests. Using the result of contests to examine students’ execution of the projects can promote the development and construction of subjects. The research department of a college and is in charge of the selection of contesting projects, taking a team or a class as a unit to take part in the contest. The college and department carry out an award system to arouse the enthusiasm of students, and the result of the contest will be taken into the examination. The selected contesting project should be connected with curricula, related to practical working position, and in accord with professional core ability. Students design their works under the guidance of teachers, and the design thinking course is a necessary stage for students to become a designer.

Improve Professional Skills and Abilities of Students

“Project Teaching Package” uses informational teaching methods with the association of activity and inertia, realizing an effective connection of theoretical knowledge and practical projects, actively promoting the deep integration of information technology and education. Teachers use informational technology to teach, assign homework, check homework, answer questions, and construct MOOC. Comprehensive mega data analysis can figure out the work and study of all the teachers and students of a college and department, providing teachers and students with data analysis from different dimensions. The theory foundation and practical abilities of students are improved effectively. Paying attention to the development of social practicing ability of students shortens their vocational adapting period after graduation.

Conclusion

The creative research of application-oriented talent developing mode under the integration of industry and education has further effect on university education, which not only provides practical talent developing strategy for practical education but also is in accord with the demand of local economic development for talents. As main places of talent development, universities and colleges have the responsibility to provide high-quality talents for the society. “Project Teaching Package” improves the professional skills and practical abilities of students, realizing a seamless connection between university education and social practice, making students become the application-oriented talents who are in accord with social demand, improving the teaching level and quality of university teachers, transforming university education and subject development advantage into the development of creative talents, continuously broaden the applying range of practical teaching, accelerating the further reform of the developing mode of application-oriented talents, examining the creative achievement continuously in teaching practice.

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References

- [1] Da-ren HUANG, Transformation of Universities, The Commercial Press, 2017.
- [2] Teng HUANG, Research on the Developing Mode of Foreign High-level Application- -Oriented Talents, East China Normal University Press, 2015.
- [3] Zhong WEI, How is Education Reforming Silently, East China Normal University Press, 2016.
- [4] Lan-lan ZHANG, Optimization Research on the Integration of Industry and Education of Application-Oriented Universities and Colleges, Modern Business Trade Industry, 2018, 39(18): 99-100.