Analysis of Integration Strategies in Curriculum Development of Vocational Education in Schools and Enterprises

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Abstract

If we want to realize the industry-education integration in curriculum development, we will may encounter the various conflicts between industry and education in curriculum development, such as conflicts with technology choices, content bias, management processes, assessments, teachers of role positioning, etc. These conflicts will directly affect the formulation of curriculum objectives, the choice of course content, the effective implementation of courses, and the evaluation of courses. To solve these conflicts requires the joint efforts of enterprises and schools and actively adjust. In every aspect of curriculum development, you will have a deeply fusion with each other, which will be able to truly integrate industry and education from cooperation to integration.

Keywords

Industry-education integration, Vocational education,Curriculum development,Conflict and integration.

1. Introduction

With the promulgation of "several opinions on deepening the industry-education integration", it marks the arrival of the 2.0 era of industry-education integration. Vocational education as an important part of national education, which curriculum development also needs to completely reflect the spirit of industry-education integration, so that the industry-education integration can be truly implemented and deepened. The industry-education integration will suffer different choices of different stakeholders, cultural subjects and responsible subjects in industries, enterprises and schools. If we want to truly realize the industry-education integration in curriculum development, it is necessary to resolve conflicts, which will make different subjects reach a state of balance and achieve all-win. Therefore, we must first clarify the contradictions and conflicts between different subjects. Secondly, analyze what common appeals they have, and then point out how to resolve conflicts and achieve the goal of industry-education integration.

2. Conflicts in the Development of Vocational Education Curriculum under the Background of Industry-Education Integration

2.1. Technical Choice Conflicts in the Course Objectives

In the curriculum development of vocational education, although the focus of vocational schools and enterprises is the cultivation of students' skills, the schools and enterprises with different skills have inconsistent priorities. Specifically, the schools require systematic knowledge and skills, but enterprises emphasis on technical training for specific positions. Therefore, the school requires the systemic educated student, which has a strong conflict with enterprises that tend to the practitioner's skills. Specifically, from the perspective of cultivating a good craftsman, the enterprises require students to become highly skilled and skilled personnel with outstanding skills.[1] However, from the perspective of school education, it is more important

to make the students systematically grasp the experience gained by human beings and lay a good foundation for their sustainable development. Therefore, when the curriculum objectives are formulated, the problem of the choice between systematic and targeted selection of technical skills learning must be better solved.

2.2. Cultural Conflicts in the Selection of Course Content

In the course of curriculum development, if we expect to realize the industry-education integration. In the selection of course content, we need to combine the school education needs with enterprises characteristics. Furthermore, schools need to consider three main aspects when selecting course content. Firstly, they need to consider social needs. Not only the job requirements of this profession, but also the needs of the whole industry, related industries and the whole society. In addition to considering contemporary social needs, but the needs for the future. Secondly, we need to consider the law of students' physical and mental development, students' interests, cognitive ability, etc. These will affect the choice of course content. Thirdly, we need to consider the organization and construction of knowledge systems, knowledge Intrinsic logic, operability, etc., all of which influence the choice of course content in a vocational school. Vocational schools usually focus on professional courses, which are courses of "professional knowledge and specialized skills set by higher education institutions and various vocational and technical schools according to the training objectives". Their task is to enable students to acquire knowledge and skills in a particular field.[2] According to the scientific training goal, combined with the individual's cognitive rules, the relevant knowledge and skills are arranged in stages based on their internal laws, so the various courses are combined in an orderly manner to form a huge and independent system. The knowledge, skill learning system and the study of professional courses help to effectively master the human history and culture experience and develop students' international perspectives.

When enterprises choose course content, they will start from the interests of the company. They will mainly consider three aspects. Firstly, they will choose a unique corporate culture. In the process of enterprise development, they will form their own corporate culture, such as the brand image, the history, the corporate development strategy, corporate spiritual value, corporate management system, corporate famous sayings, corporate public welfare activities. These cultures will enhance the self-confidence and pride of employees and strengthen the cohesiveness. Secondly, companies will consider special job tasks, and students need to understand the specific job environment, operating standards, work processes, which will facilitate the future work as soon as possible. Finally, the enterprise will choose the tacit knowledge organization of the master in the enterprise to become a course. Some special experience of the master in the enterprise, development into a course will help the retention of invisible assets of the enterprise. Simultaneously, the promotion and dissemination of these experiences will enhance the overall quality of employees. However, in the actual course development process, corporate culture is often in a subsidiary position, which leads to overlook frequently. Corporate culture can often only be displayed through some slogans, pictures, etc. In a word, some corporate cultures have some conflict with school education or breaking, lack of specialized corporate courses, and disparity in corporate and professional courses.

2.3. Realistic Conflicts During Curriculum Implementation

Curriculum implementation is an important part of curriculum development. Curriculum implementation is often promoted by front-line teachers, which is inseparable from teachers' personal concepts and personal abilities. However, there are many problems in the implementation of the curriculum of vocational schools. Firstly, the practice of curriculum in vocational schools still has the phenomenon that the boundaries between theoretical and practical courses are clear. Most schools arrange freshmen for major theoretical courses,

sophomores major in practice class, which leads to the lack of specific links between the theoretical and practical courses. Secondly, the school's equipment is in short supply, and the existing equipment cannot be updated in time. It is lagging behind the latest equipment of the industry and enterprises for a long time, making it difficult for technical skills to be refined on old equipment. In addition, the number of integrated classrooms is small, and students in the theoretical class lack specific experience, which increases the difficulty to master. During the practice class, lacking the specific theoretical knowledge will be triggering the practice cannot be effectively realized. Certainly, it is difficult to meet the high demand for talent technology. Thirdly, the the dual-teachers in the school are relatively lacking. Specifically, in the course of the curriculum implementation, the teacher's personal ability will have a greater impact on the students' learning. Without the dual-teacher, it is more difficult to cultivate system expertise students with excellent professional skills.

From the perspective of enterprises, enterprises generally arrange for specific jobs for interns and equip them with corresponding masters. However, enterprises pay attention to work efficiency, and they need interns to complete work tasks efficiently in special jobs. The work content is single and the knowledge is too fragmentate. Students have to be limited in their learning and growth. The second teacher's professional guidance is less and theoretical is insufficient. Because the company's assigned master has multiple jobs and a large amount of work, compared with professional teachers, time, energy, and teaching level are obviously insufficient, making it difficult to give students better guidance.

2.4. Standard Conflicts During Course Evaluation

Course evaluation is an important part of curriculum development. It can check the realization of the course objectives, feedback on the content and the organization, which reflects the significance of the course development. To a certain extent, the evaluation of the course determines the focus of the teacher and the student's study. In particular, the students often choose the content related to the exam for the passing of the test. Nowadays, the assessment method of the vocational school is still carried out in the traditional way. The theoretical course is a paper test, the practice class is a simulation exercise, and finally the teacher performs a comprehensive score. However, the school's scores are related to the internship of the company. The company mainly evaluates the students' ability through three methods, one is the national or local vocational skill level identification, and the second is the comprehensive evaluation of the enterprise "master", the three are the results of the work of the students during the internship. There is a big difference between the evaluation criteria of schools and enterprises. Specifically, there is a great conflict between the choice of students in the study and internship.

2.5. Teacher Role Positioning Conflict

The role orientation of teachers in curriculum development will seriously affect the implementation of the curriculum, which will also have a certain impact on the formulation of curriculum objectives and the selection of content. In the context of the industry-education integration, although the school's full-time teachers and corporate masters jointly cultivate the students, the both are defined as teacher role, but their positioning of identity, tasks, responsibilities are different.

The difference in the role orientation between the school's full-time teachers and the company's masters is mainly reflected in the identity of the school's full-time teachers, who usually define themselves as the teacher's identity in teaching and learning, and define the students' professional knowledge and skills as their main work content. Therefore, in the face of students, teachers are often in a position of active inculcation. No matter what the students are, no matter whether the students' desire for knowledge is strong or weak, the full-time teachers will do their best to follow the example. At this point, it is easy for students to recognize learning as a passive acceptance process, and the process of curriculum implementation becomes the

content that students need to master under the leadership of the teacher. The enterprise master is usually defined as the identity of the manager in management and defines the high-efficiency task of completing the enterprise as his main work content. Therefore, when facing the students, the master is in a higher position to urge the learners to complete. Enterprise tasks, the technical skills and knowledge, some specific invisible knowledge require the learners to actively observe, take the initiative to think, and openly ask for advice. At this time, students will define students as the process of active knowledge-seeking. When the curriculum is implemented, students will combine their own interests and abilities to construct individual knowledge.

3. The Common Appeal Among the Subjects in the Course of Curriculum Development under the Background of Industry-Education Integration

3.1. Cultivation Of Professional Talents

An important link between enterprise and school is the supply of talent. The school trains outstanding talents for the society and replenishes the high-quality labor force for the market. The talents cultivated by the school must not only meet the current social development, but also meet the requirements of the future society. The enterprise needs a large supply of high-quality talents, not only to supply the necessary labor force for the enterprise at this stage, but also to provide outstanding talents with advanced professional ability and professional ethics for the sustainable development. In general, the demands of enterprises and schools for talents are basically the same. It is necessary to equip talents with relevant professional knowledge and skills, especially, the abilitiy such as talent learning ability and innovation ability. Certainly, it is also necessary to pay attention to professional ethics and professionalism.

3.2. Innovation in Technical Skills

Innovative technical skills are an inevitable requirement of social development. For the school, it is the innovation of the course content, which is the promotion of school education. Vocational education needs to be closely related to the society development. The technical skills are updated relatively fast. The content of the course needs to keep up with the development of the times, and even ahead of the times, let students walk in the forefront of the times and promote the innovation of technical skills. In the case of enterprises, the innovation of technical skills means that the promotion of production efficiency and the improvement of competitiveness. The innovation of technical skills plays an important role in schools and enterprises, which is an important factor that cannot be ignored in curriculum development.

3.3. Product Development

Product development is the best way to test school teaching results, which is an important prerequisite and guarantee for the company's interests. The most intuitive performance of school teaching results is the student's achievements, so the results of vocational school students are not only proved by paper theory, but also should be proved by technical achievements. Products are also an important indicator for the development of enterprises, and product development should be an important indicator for the evaluation of enterprises and schools.

4. Integration Strategies of Conflicts in Curriculum Development under the Background of Industry-Education Integration

Through the analysis of the main conflict of each link in the curriculum development and the common demands in the main body. Under the background of industry-education integration, the vocational education curriculum development enterprises and schools need to work

together to break the traditional curriculum concept, reshape the curriculum goal and curriculum content, change the original mode of curriculum evaluation, collaborate cultivating the excellent talents, improve the product development rate.

4.1. Determination of Course Objective: Knowledge System and Humanistic Connotation after Mining Technical Skills Objective

The technical skill goal is the common concern of the enterprise and the school. It can be based on the technical skills of a specific profession. The students can master the relevant theories from the point of view and combine the theory with the reality, combine the classic cases with the classic characters, promote the professional ethics behind the technical skills, cultivate the craftsmanship and professionalism, develop the key abilities, which promotes the objectives of the course become more dynamic and the goal of the text has a corresponding foothold.

4.2. Course Content Selection: Combination the Enterprise Courses with Professional Courses

The choice of course content is an important part of curriculum development. The realization of industry-education integration needs to fully consider the enterprise curriculum and professional courses. The implementation of the enterprise curriculum is conducive to students fully understand the corporate culture and prepare for future job hunting. The implementation of professional courses is conducive to the mastery of relevant theories and skills of the student system. The integration of corporate and professional courses helps to improve students' motivation, enrich students' knowledge and broaden their horizons. In the development of professional courses in schools, we should pay attention to the selection of classic cases, choose relevant cases with students in future internships, integrate corporate culture into the classroom, treat students' attitudes, treat employees' standards, and stimulate students' interest and motivation. In the practical class should pay attention to contact with the enterprise, not only focus on systemic, but also the latest developments of the enterprise industry and the research and development of new technology skills. The company should combine the school to develop its own unique curriculum and develop the tacit knowledge closely related to the post work, for example, the master's operation experience is presented through the action demonstration and language description in the real situation. Simultaneously, developing corresponding corporate courses with assistive technologies such as video animation virtual reality.[3] The development of corporate courses is not only a supplement to the vocational education curriculum, but also the inheritance and development of corporate culture, the inheritance and innovation of corporate wealth and helps students fully understand the enterprise, learn at a faster speed and meet a large amount of industry frontier knowledge.

The integration of professional courses and corporate courses can train students to become comprehensive high-quality talents with excellent professional knowledge and professional skills, good social adaptability, innovative creativity, and better promote the integration of production and education.

The combination of corporate courses and professional courses not only reflects the comprehensiveness and long-term nature of students' learning, but also reflects their pertinence and flexibility. The combination not only lays a good foundation for the students' entire career, but also creates favorable conditions to find work after graduation. The cultivated talents not only provide a continuous source of power for the sustainable development of the industry, but also make up for the high-skilled talent gap in the industry.

4.3. Course Implementation and Operation: Systematic Work Process and Practical Teaching Process

The organization and implementation of the course means to transfer the specific course content to the students and achieve the specific curriculum objectives. The systematicization of the work process and the practicalization of the teaching process will help to better reflect the combination of theory and practice and achieve better industry-education integration.

Systematic work process. Students should have a certain difference between their work and formal work in business learning. Formal work requires workers to perform professional operations in their positions, which are uncertain and the operation is single. If students are allowed to study at a fixed position, it will hinder the development of students, so students should pay attention to systematic education in the work of enterprises. From a horizontal perspective, the "master" not only teaches the specific skills of a specific position, but also teaches the basic skills of the relevant positions. From a vertical perspective, the "master" education should pay attention to the gradual progress, neither neglecting simple operational skills, nor reducing the teaching of high-precision operational skills, but also combining practice and theory, which is attach importance to the law of education.

Practicalization of teaching process. The process includes the integration of practical elements in the teaching environment and the combination of theory and practice in teaching methods. The creation of the teaching environment is an important part of the teaching process. It is essential to create a pragmatic and integrated teaching place. On the one hand, the teaching place can be integrated into the enterprise elements in combination with the professional characteristics of the students. For example, the development concept of the enterprise can be posted, character image and representative operation tools can be integrated. On the other hand, modern methods can be used to move the classroom to the virtual simulation work scene, such as using multimedia to show the specific operation of the skilled workers or using the school's training room, practice base, etc. Combined with practice, students are in a professional environment full of corporate culture, teamwork and technological innovation.[4]

4.4. Course Evaluation Operation: "Docking" Between Course Evaluation and Enterprise Recognition

In order to realize the industry-education integration and promote its development. In the context of the industry-education integration, it is a good choice to achieve the integration of curriculum evaluation and vocational skill identification, course evaluation, comprehensive nature of theory and practice, which needs the level of vocational skills of students. In the course assessment of the school, the original examination structure is broken, and the theoretical and practical examinations are integrated into the requirements of the enterprise. For example, the speed requirements and quality requirements of the practice link refer to the standards of professional qualifications. The theoretical curriculum assessment not only involves professional theory, but also involves corporate culture, professional ethics and other matters that enterprises value. In the internship assessment of enterprises, we must not only pay attention to the mastery of single skills, but also examine their comprehensive qualities, such as innovative thinking, teamwork, professional identity, etc. The correlation of assessments reduces the subjectivity of the evaluation of the masters and builds more scientific evaluation criteria.

4.5. Repositioning of Teacher Roles: Guides in the Course

Teachers are both the guide for curriculum development and curriculum implementation. Under the background of industry-education integration, the role of teachers in curriculum development is also more important. School teachers need to consult with the masters of the enterprise on the basis of the realization of the theory and skills of the system, learn from the

masters of the enterprise, timely understand the technical skills of the industry frontier, actively strive to promote the development of technical skills, enrich the content of the curriculum, accelerate the development of the curriculum, promote the implementation of the curriculum and realization of the true meaning of the industry-education integration. Enterprise masters should also learn from the school's teachers on the advantages of existing technical skills, delve into the latest developments in theoretical development, develop an international perspective actively, systematically develop tacit knowledge such as embarrassment and experience. Forming relevant courses and entering a virtuous cycle of mutual promotion of theory and practice make school teachers and corporate masters become distinctive "double-type" teachers.

Teachers are the guides of curriculum implementation. Both school teachers and enterprise teachers are teachers in the curriculum. They should not be indoctrinators in teaching. Instead, they should guide students to seek knowledge and provide students with space for active learning, but not for students indulge in the initiative regardless of the individual dependence. The guiding nature of teachers is mainly to guide students to learn knowledge and to be a human being, which guides students to use existing conditions to construct their own knowledge system proactively. It is also necessary to strictly demand and pay attention to the results and learning efficiency.

5. Conclusions

Although the industry-education integration are different subjects, they have common goals. Each body resolves conflicts in all aspects of curriculum development, moves toward integration, jointly cultivates outstanding talents for the society, innovates the technical skills, promotes the social development, and realizes the industry-education integration with "all-win".

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