

Research on the Cooperative Education Mechanism of School-enterprise Dual Tutors Based on Micro-specialty

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Abstract: School-enterprise dual tutor mode is a characteristic type of collaborative education mode. It is of great significance to stimulate students' enthusiasm and initiative in learning and improve their comprehensive quality for realizing the connotative development of university education. Micro-specialty, a modern education and training mode, can make up for the shortcomings of traditional teaching, break through the "last mile" barrier between universities and enterprises, adapt to the rapid development and changes of information technology and social needs, and improve the competitiveness of learners. This paper puts forward a cooperative education mechanism of dual tutors between schools and enterprises based on micro-specialty, and puts forward new ideas and countermeasures from five aspects: innovative teaching organization form, interdisciplinary integration based on micro-specialty, strengthening the training of tutors, establishing and perfecting the guarantee system and establishing and perfecting the supervision mechanism, in order to provide reference for universities in the practical level of cooperative education construction between schools and enterprises.

1. Introduction

Facing the surging tide of scientific and technological revolution and industrial transformation and its new requirements for the quality structure of talents, universities must constantly promote the reform of education and teaching, innovate the training mode of talents, explore diversified collaborative training modes and effectively improve the quality of talents training. In the school-enterprise dual-tutor collaborative education mechanism, the construction of teaching staff is undoubtedly the key foundation to realize the high-level talent training mode, an important prerequisite to enhance students' innovative and entrepreneurial ability and post-employment competitiveness, and an important guarantee to comprehensively improve the quality of talent training [1,2]. School-enterprise dual tutor mode is a characteristic type of collaborative education mode. It is of great significance to stimulate students' enthusiasm and initiative in learning and improve their comprehensive quality for realizing the connotative development of university education. In this context, China's talent training and education model is bound to face a huge impact.

How to improve the intensity and depth of interdisciplinary integration under the micro-specialty mode, expand the coverage of interdisciplinary integration from the specialty, realize all-round three-dimensional integration of specialty, people and information from the object, and build a compound talent training mode with broadened knowledge, in-depth knowledge points and strong innovation in knowledge application from the goal to maximize the efficiency of interdisciplinary integration.

2. Connotation and Practice of Micro-specialty

The concept of micro-specialty was first put forward by foreign online education companies, which means that users take 5 ~ 10 core courses on the MOOC platform to achieve rapid employment. The research content mainly focuses on the research on the construction of micro-specialty

curriculum system for a certain discipline and a certain specialty in higher vocational colleges, and summarizes the practical experience of micro-specialty training mode in the fields of information science and computer specialty. The micro-specialty mode provides a new idea for solving the problem of decoupling university talent training from social needs [3]. This learning mode can enable learners to master the working skills and methods of a related post systematically and professionally in a short period of time, help learners meet the relevant job requirements, and achieve the purpose of rapid employment and professional promotion. Micro-specialty, a modern education and training mode, can make up for the shortcomings of traditional teaching, break through the "last mile" barrier between universities and enterprises, adapt to the rapid development and changes of information technology and social needs, and improve the competitiveness of learners [4,5].

As a systematic project, micro-specialty construction involves many aspects, including not only the cross-integration of professional fields, but also the organic integration of training objects, majors and industries, as shown in Figure 1.

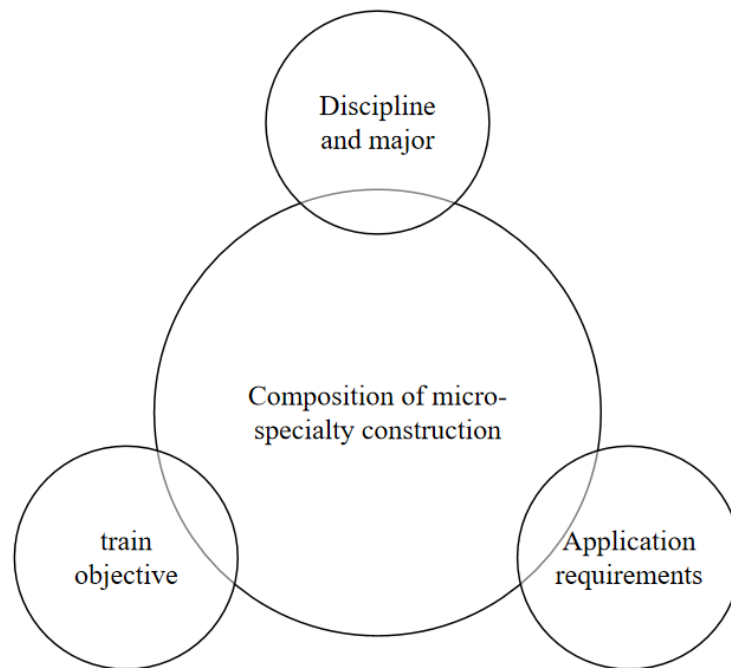


Figure 1 Composition of systematic micro-specialty construction.

The organic integration between specialty and industry, one of the main goals of micro-specialty is to empower the industry, help the industrial transformation and upgrading, and give birth to new kinetic energy. Teaching under the micro-specialty curriculum system usually involves multi-disciplinary knowledge. In order to meet the professional teaching requirements, relevant teachers must constantly improve their own requirements, constantly improve teaching preparation, teaching content and teaching methods, and constantly innovate to promote and stimulate students' enthusiasm and initiative in learning [6]; Multi-disciplinary and multi-professional course study can better expand students' knowledge, systematically and comprehensively improve their personal abilities in theory and practice, and make more adequate preparations for employment.

3. Problems Existing in the Construction of Double Tutors between Schools and Enterprises at Present

3.1. The Construction Mechanism is not Perfect

In order to cultivate suitable talents, in addition to updating the training objectives, setting graduation requirements and reasonable curriculum system, reforming teaching and assessment methods, and improving teachers' teaching level, students' learning process and the training process of all aspects of quality and ability also need timely follow-up guidance and reasonable evaluation. At present, the teaching staff of school-enterprise cooperation is generally composed of professional

backbone teachers of schools and technical backbone or grass-roots management backbone of cooperative enterprises. School instructors can only simply participate in the whole process of student internship management, but can not provide on-site practical guidance, and the enthusiasm of guiding students to participate in practical activities is not high [7]. In addition, there is a lack of a comprehensive and reasonable assessment system for school-enterprise tutors. In-school tutors only complete the established tasks on time, and off-campus tutors only symbolically carry out some practical work, which leads to the failure to improve their practical ability and teaching ability.

3.2. Imperfect System Construction

The dual tutorial system not only requires off-campus enterprise tutors to "walk into the school", participate in practical projects, practical courses, professional design, thesis writing and other links, and provide practical guidance to students, but also advocates and requires on-campus tutors to "walk into the enterprise". However, in the implementation of the dual tutorial system, the problems of lack of effective management and vague responsibilities and rights in the appointment of corporate tutors are generally prominent [8]. The lack or lack of clarity of such system norms not only leads to the problems that it is difficult for enterprise tutors to grasp the guiding standards and strictly demand students, but also leads to the difficulty in effectively stimulating the enthusiasm and enthusiasm of enterprise tutors to participate in student training, which affects the full play of the role of enterprise tutors and the final effect of the implementation of the dual tutorial system.

3.3. The Construction of Teaching Staff is not Perfect

Tutorial system can better implement the modern educational concept of educating people in all staff, in the whole process and in all directions, and better adapt to the requirements of quality education and the transformation of personnel training objectives. This system requires the establishment of a "learning guidance" relationship between teachers and students, aiming at students' personality differences, teaching students in accordance with their aptitude and guiding students' thinking, study and life. Professionalism is the quality and ability of a professional to do his best to do a good job in his career, and it is the key factor for the success or failure of a professional in his career [9]. The professional quality of school tutors has an important influence on the collaborative education of double tutors. In the training of teachers, the training process takes a long time, so it is difficult to meet the urgent demand for teachers' practical ability at this stage. I hope that through cooperation with enterprises, we can seek ways and means for universities to improve teachers' practical ability and provide more space and opportunities for teachers to improve their practical ability.

4. Construction of Cooperative Education Mechanism between School and Enterprise with Dual Tutors Based on Micro-specialty

Tutorial system for college students is a system in which, on the basis of two-way choice between teachers and students, tutors communicate with students to guide their learning methods, scientific research ability, practical ability and career planning, and finally improve their comprehensive quality and employment competitiveness. The dual tutorial system for college students is an effective way to improve the practical education mechanism of win-win cooperation and open sharing, and it is also an important starting point for deepening teaching reform around stimulating students' learning interest and potential. This paper constructs a collaborative education model based on the dual tutorial system (Figure 2). This model is based on quality education and innovation education of college students, with teaching courses, simulation experiments and enterprise post practice as carriers, with double tutors as the way of linkage training and project management as the driving force.

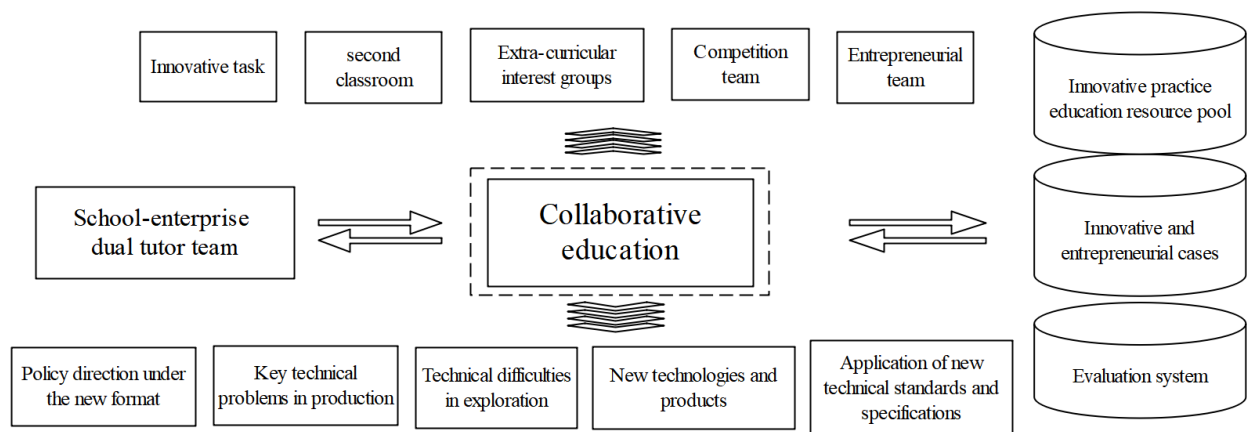


Figure 2 The cooperative education mechanism of school-enterprise dual tutors based on micro-specialty.

4.1. Innovating teaching organization form

The traditional talent training mode restricts the further development of accounting specialty in local universities. However, the employment-oriented talent training mode of micro-specialty makes up for the shortcomings of the traditional education mode, and students will also get professional certification jointly issued by schools and enterprises after passing the examination, which greatly improves the social recognition of the micro-specialty training mode. When the curriculum system and content of micro-specialty are mature, the teaching form gradually changes to live teaching, recorded teaching, online practice, classroom guidance, paid internship and other forms. This mode not only improves the teaching effect, but also increases the flexibility of learning, which significantly promotes the realization of the training goal of micro-specialty.

4.2. Interdisciplinary integration based on micro-specialty

Interdisciplinary integration refers to building a coordinated and sustainable discipline system, breaking down the barriers between traditional disciplines, promoting the cross-disciplinary integration of basic disciplines and applied disciplines, setting up emerging interdisciplinary disciplines according to the needs of economic and social development, and cultivating compound high-level innovative talents to meet the needs of national social development. Micro-specialty construction is mainly oriented to the needs of industrial development, and it can be considered to combine with the construction of industrial colleges to carry out systematic design and planning at a deeper and larger level. In the process of planning and construction, the characteristics and interdisciplinary advantages of this specialty are highlighted, and the resources inside and outside the school are comprehensively utilized to realize the practice mode of multi-disciplinary three-dimensional intersection and deep integration [10]. In the process of implementation, credit replacement and other methods can be appropriately adopted to bring students' practice into the training system substantially, to avoid one-sided compression of practice time due to limited class hours and other factors, and to give full play to the advantages of off-campus high-quality resources in talent training.

4.3. Strengthen the training of instructors

Universities should take practical measures to strengthen the training and quality improvement of tutors in off-campus enterprises. The key to the teacher training mechanism of micro-specialty lies in cultivating double-qualified teachers, creating teachers with technical level and industry experts with teaching level. Schools should introduce policies to encourage teachers with outstanding teaching level to take up posts in enterprises and institutions, and at the same time attract industry experts to receive teaching and training in schools. According to the tutor's major and research direction, school should arrange the tutor to contact directly with the corresponding department of an enterprise, encourage the tutor to take up his post in the enterprise, and provide convenient conditions for the

tutor to participate in the production, design, management, construction and research and development of the enterprise. First, school should strengthen the understanding and grasp of the relevant laws and characteristics of education and teaching; second, school should let enterprise tutors know about the relevant policies and regulations on personnel training; third, school should train the basic teaching ability; fourth, school should introduce the frontier dynamics and development of disciplines. Through regular targeted training activities, we can broaden the knowledge horizon of enterprise instructors and effectively improve their practical guidance ability.

4.4. Establish and improve the security system

In order to meet the continuous expansion of social application demand and the rapid development of scientific and technological innovation theory and technology, all walks of life put forward higher requirements for the comprehensive application of knowledge. Some universities adopt the combination of specialty and industry, deeply analyze the needs of specific industries, and combine the advantages of specialty training with the needs of industrial practice to cultivate talents with stronger application ability and better adaptability. The cooperative education guarantee system should guarantee the conditions needed by enterprises to cultivate the practical ability and innovation ability of undergraduate talents in terms of fund system reform and social benefits; The state should give preferential policies to universities from the aspects of per capita funding standards, social contributions of universities, and policy support for university construction, so as to improve the enthusiasm of universities to carry out the construction of dual tutorial system. School should formulate relevant policies to encourage university teachers to participate in practical training activities in enterprises, and encourage enterprise teachers to impart on-site management experience and experience to students.

4.5. Establish and improve the supervision mechanism

The teaching objectives and contents of micro-majors can promote the interdisciplinary development of universities, help local universities to break down discipline barriers, break through ideological constraints, improve the level of disciplines, and lay a solid foundation for their construction of first-class disciplines. We should supervise the construction of double tutorial system from the aspects of teacher selection, teacher management, teacher assessment and teacher personal development. We should evaluate the effectiveness of the construction of dual tutorial system from the aspects of the workload, work results, student satisfaction and tutor interaction of tutors inside and outside the school.

5. Conclusions

In the school-enterprise dual-tutor collaborative education mechanism, the construction of teaching staff is undoubtedly the key foundation to realize the high-level talent training mode, an important prerequisite to enhance students' innovative and entrepreneurial ability and job competitiveness, and an important guarantee to comprehensively improve the quality of talent training. As a systematic project, micro-specialty construction involves many aspects, including not only the cross-integration of professional fields, but also the organic integration of training objects, majors and industries. School-enterprise dual tutorial system is an attempt of teaching reform in the university education system in the new era, and it is a flexible training mechanism that comes into being to teach students in accordance with their aptitude in order to solve the strong demand of the country and society for the return of the quality of university education talents under the background of popularization of university education. Local universities need to constantly build and improve the micro-professional ecosystem, cooperate with top enterprises in the industry and other excellent universities for joint development, and build a regional and national micro-professional platform to provide strong support for the healthy and rapid development of micro-specialty.

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