

# Research on Higher Vocational Classroom revolution under the background of improving quality and cultivating excellence

Dinggao Sheng, Hongmei Yin, Yiqiao Shi, Jianying Li

Jiangsu Vocational College of Electronic and Information, Huai'an Jiangsu, 223005

**Abstract:** with the change of social environment and the change of information technology, promoting classroom revolution has become an important path for the reform and development of higher vocational education. Since the “action plan for improving the quality of Vocational Education (2020-2023)” was put forward, in order to adapt to the characteristics of students’ diversity, higher vocational colleges should implement reform actions from the perspectives of teaching content, classroom organization, curriculum evaluation, faculty, curriculum resources, curriculum ideology and politics, so as to create an efficient, personalized and intelligent classroom environment for students. This paper analyzes the research status and objectives of classroom revolution, summarizes the problems existing in Higher Vocational Classroom Teaching at the present stage, thinks about the basic motivation of classroom revolution, and then puts forward the implementation strategies of higher vocational classroom revolution under the background of quality improvement.

**Key words:** higher vocational colleges; Classroom revolution; Quality improvement and quality improvement

In the process of continuous reform of modern education, the problems faced by higher vocational education are increasing, such as the deviation of teachers’ role orientation, the lack of attention to teaching and research, the inability to adapt to the speed of technological and social changes, the lack of implementation of teaching standards, the backwardness of traditional teaching methods, the need to improve teaching quality, the low enthusiasm of students, the lack of personalized education. These problems greatly limit the development of talents in higher vocational education. Therefore, higher vocational colleges must adhere to the plan of improving quality and cultivating talents, so as to implement the classroom revolution and provide high-quality applied technical talents for the whole society.

## 1 Overview of classroom revolution

### 1. Research status of classroom revolution in Higher Vocational Colleges

In 2020, the Ministry of education of China launched the action plan for improving the quality of Vocational Education (2020-2023), in which classroom revolution was regarded as the core driving force to promote the development of vocational education, so as to deal with and solve the problem of increasing diversity of students in Vocational Colleges and effectively expand the depth of classroom teaching. In July, 2020, the Jiangsu Provincial Department of education subsequently issued the action plan for improving the quality of Vocational Education in Jiangsu Province (2020-2022). According to the current situation of Vocational Education in Jiangsu Province, it proposed to promote the implementation of classroom revolution by innovating the mode of vocational education. Therefore, the classroom revolution based on the quality improvement and excellence program has become the basic direction of the comprehensive upgrading and transformation of higher vocational colleges.

With the release of the above policy documents and educational theory, higher vocational colleges began to carry out the classroom revolution plan under the background of information teaching and double high construction, and made improvements from the following three aspects. First, classroom teaching reform has been carried out in view of the diversity of students. With the continuous enrollment expansion of higher vocational colleges, the types of students are increasingly rich. In addition to the college entrance examination and counterpart single enrollment, secondary vocational registration, social enrollment and other channels are also added. Through the implementation of classroom revolution, higher vocational colleges have a deeper understanding of improving the quality of classroom teaching. On the one hand, it strengthens the core position of classroom teaching, on the other hand, it promotes the implementation of “hierarchical and classified” teaching mode, which promotes the diversified development of teachers and students, and becomes an important means for higher vocational colleges to improve the quality of education. Second, information technology teaching reform based on the application of information technology has been carried out. Each higher vocational college has started the construction activities of smart campus and smart classroom, which not only provides convenient network platform and information-based teaching resources for teachers and students, but also promotes diversified teaching modes such as “online and offline Hybrid Teaching”, “ar classroom” and “online education” with the help of big data system and “Internet +” technology. Third, it promotes the exploration activities of updating classroom teaching methods. In view of the strong teaching method of knowledge imparting in traditional classroom teaching, higher vocational colleges began to change their educational ideas, mainly including promoting the transfer of Teacher centered to student-centered, from paying attention to knowledge base to ability literacy, from paying close attention to intellectual education to paying attention to the comprehensive development of morality, intelligence, physique, art and labor, from paying attention to average education to insisting on teaching students according to their aptitude, and then through the innovation of educational philosophy, It has brought new changes to higher vocational education.

### 2. The deep goal of higher vocational classroom revolution

According to the above analysis, it is not difficult to find that the classroom revolution in higher vocational colleges is a teaching upgrading activity of comprehensive reform from cognitive concepts to technical methods, and the core objectives are mainly reflected in

the following six levels.

First, build a new teaching model. Higher vocational colleges need to establish a student-centered, work integrated learning teaching mode in line with the characteristics of vocational education, so as to achieve multidimensional changes in teaching content, classroom organization, teaching evaluation, course teachers, teaching resources, course ideology and politics.

Second, create a new form of teaching organization. Higher vocational colleges should establish a granular teaching form based on engineering practice, change the traditional fixed 45 minutes as a class and two courses connected, and then carry out flexible course organization forms such as long and short courses, large and small courses, based on the law of education and according to the needs of course content and students' learning methods.

Third, establish a new learning paradigm. Higher vocational colleges should create corresponding learning paradigms according to students' role identity, main role and active learning needs, and guide all students to complete the transformation from traditional learning to individual thinking, team cooperation and on-site learning based on the paradigms, so as to promote students to enter the state of deep learning.

Fourth, establish a new relationship between teachers and students. Higher vocational colleges also need to promote the growth of teachers' professional level and teaching ability, and give full play to the guiding, organizing and encouraging role of teachers in teaching activities, so as to create an interactive and caring new teacher-student relationship, so that students can grow physically and mentally healthy.

Fifth, build a new teaching environment. According to the changes of teachers' teaching paradigm and students' learning paradigm, higher vocational colleges should create a more autonomous, open, flexible and perfect teaching environment, which should not only meet the needs of teachers' teaching, but also meet the needs of students' growth and practice, but also meet the interaction and communication between teachers and students, so as to promote the in-depth development of classroom teaching.

Sixth, establish new typical cases. Higher vocational colleges should extract a complete set of classroom teaching case models based on classroom revolution, and guide all teachers to learn, develop and innovate on this basis, so as to realize the effective combination of reform measures and teaching experience.

## **2 Problems existing in Higher Vocational Classroom Teaching at present**

### **1. The classroom teaching concept is conservative and out of touch with frontier education**

In the development of modern education for more than 200 years, classroom teaching has been constantly updated, and teaching problems have become increasingly clear, in which the solidification of teaching philosophy is the primary problem. In traditional classroom teaching, teachers, textbooks and classrooms are the three centers. Nowadays, they can not meet the learning needs of students, and show some teaching defects and problems, which greatly affect the classroom efficiency. On the one hand, it is reflected in the separation between teachers' teaching behavior and students' learning activities. Teachers often base on their own teaching design, and all teaching activities are not carried out around students. Whether students can keep up with the progress and whether there are doubts and problems has become the key content that teachers cannot take into account. On the other hand, students are in a weak position in the learning process, lack of opportunities for active expression and practice, and can only passively accept the knowledge given by teachers. The root cause of the above problems lies in the disconnection of teachers' educational ideas, so the classroom revolution is imperative.

### **2. Students' abilities are different and can not meet their needs**

Different from undergraduate colleges, the source of students in higher vocational colleges has the characteristics of diversification, which makes the differences of students' abilities more prominent, and is reflected in the cultural basis, knowledge structure, methods and skills, learning attitude and other aspects. Under the traditional teaching mode, teachers' teaching design is lack of pertinence, which makes some students unable to get effective guidance, and thus becomes the key problem affecting the overall development and diversified growth of students. Therefore, higher vocational colleges must establish a hierarchical and classified teaching method based on the structure of students through classroom revolution, so as to truly implement the goal of teaching students according to their aptitude and meet the growth needs of students with different abilities.

### **3. The course assessment is single and direct, and fails to show the true level**

Curriculum assessment plays an important role in modern education. It can not only show students' learning level and state, design personalized learning programs for them, but also improve teachers' cognition of their own teaching effectiveness, and carry out targeted reform and adjustment, so as to achieve the purpose of dynamic optimization. However, the traditional higher vocational education has big problems in the evaluation and assessment, and even the assessment mechanism of "one test paper determines the score" and "one ruler measures to the end" has appeared, which makes the students' test scores become the direct factor to evaluate their learning effectiveness, while ignoring the ability, literacy, skills and attitude of students in the learning process, It can not objectively present the students' ability level, but also cause some learning misleading, making students focus on the final assessment results, while ignoring the coordinated development of knowledge, skills, methods and thinking.

### **4. Comprehensive application of information technology, teaching environment needs to be upgraded**

With the comprehensive promotion of education informatization 2.0 action plan, informatization teaching has become one of the important measures of classroom reform. But at present, there are still some defects in the information construction of higher vocational colleges, mainly reflected in the construction of teaching environment and hardware equipment failed to meet the needs of teachers

and students. On the one hand, higher vocational colleges have deficiencies in network coverage, network stability, teaching equipment construction, information equipment maintenance and repair, and simulation practice platform, which makes teachers and students prone to various technical problems in the implementation of information teaching. On the other hand, the lack of information-based teaching resources provided by higher vocational colleges for teachers and students also makes the information-based teaching design inadequate.

### **3 The basic motivation of classroom revolution in Higher Vocational Colleges under the background of improving quality and cultivating excellence**

#### **1. The type development needs of Vocational Education**

With the launch of the national vocational education reform implementation plan (hereinafter referred to as “20 articles of vocational education”), the status of vocational education has been significantly improved. The type of vocational education is an important goal of the development and transformation of modern higher vocational colleges, which has become one of the basic motivations for the implementation of classroom revolution under the background of improving quality and training excellence. The type of vocational education is the requirement of the times for the reform of modern vocational education. It should not only highlight the dominant position of students, but also adhere to the action oriented role, so as to form the ability standard, create the basic mode of “learning by doing” and “learning by doing”, and thus promote the in-depth development of the integration of industry and education, form a dual education system, and help students acquire craftsmanship spirit, vocational skills Comprehensive development of comprehensive literacy. As the core position of professional talent training, the classroom is also the basis of the type development of vocational education. Through the classroom revolution, the high-level construction and high-quality development of higher vocational colleges can be realized.

#### **2. The inevitability of the reform of "three educations"**

Teaching quality is the intuitive embodiment of the competitiveness of higher vocational colleges, and its essence comes from the results of classroom teaching. In view of the problems of marginalization, insufficient atmosphere and low efficiency of classroom teaching in higher vocational colleges, the final analysis lies in the lack of teachers' quality, outdated teaching materials, single and inefficient teaching methods, insufficient interaction between teachers and students, and unscientific evaluation methods. On this basis, the three education reform has become an important guiding concept to change this situation. Through the updating and upgrading of teachers, teaching materials and teaching methods, higher vocational colleges can meet the needs of students in the classroom, so as to solve the core problems in classroom teaching, and create a curriculum system with rich resources, diverse demands and flexible forms for students. Therefore, in the implementation process of the three education reform, classroom reform has become an inevitable result and a key way to improve the teaching quality of higher vocational colleges.

#### **3. Comprehensive application demands of Smart Education**

With the application of new generation information technology such as artificial intelligence in education and teaching, information-based teaching has become an important support for the strategic and critical reform of vocational education, and also the core driving force for the realization of higher vocational classroom revolution. Therefore, in order to ensure the effective application of information-based teaching in higher vocational classroom teaching, higher vocational colleges must establish the basic environment and conditions to adapt, support and serve the information-based teaching mode. Therefore, classroom revolution has become a reform measure that higher vocational colleges must promote. On the one hand, it can create a teaching concept with the goal of information integration, so as to rebuild the teaching path in line with the current teaching equipment and technology; On the other hand, we can pay attention to the cross-border development of teachers' ability, and better integrate teachers' educational wisdom and educational technology through the collaborative construction of information literacy and professional quality, so as to provide higher quality educational services for schools, students and even the society.

### **4 Implementation strategies of classroom revolution in Higher Vocational Colleges under the background of improving quality and cultivating excellence**

#### **1. Constructing the implementation plan of classroom revolution based on research**

Under the background of modern education, the implementation of classroom revolution in higher vocational colleges must be based on scientific planning. Therefore, before making the plan, higher vocational colleges must deeply understand the current situation and problems of classroom teaching through research activities, and then explore its internal causes, and put forward reliable and effective reform measures to ensure the effective implementation of classroom revolution.

First of all, higher vocational colleges should establish a teaching and research team, based on questionnaires, interviews, lectures and the analysis of the school's big data platform, in-depth investigation and analysis of the problems faced in the current higher vocational classroom teaching. For example, by analyzing the results of the questionnaire and students' learning data feedback, the teaching and research team can summarize the problems of conservative classroom teaching ideas, distinct differences in students' abilities, single and direct curriculum assessment, and analyze the direct causes of the problems, such as the lack of teachers' educational literacy, obvious differences in students' sources, and the failure to update the assessment and evaluation system. Secondly, the teaching research team needs to further refine its research results, put forward different reform and optimization strategies according to the possible causes of each point of the problem, and then coordinate the overall strategy to build a complete classroom revolution guidance scheme. Third, after the implementation plan of the classroom revolution is formulated, the teaching and research team can carry out pilot activities, and

some teachers of different majors can carry out practical exercises, and further find the direction of improvement through the problems encountered in the implementation of the classroom revolution and timely actual results, so as to form a unified and complete guideline. We can even summarize the guiding concept of the implementation of classroom revolution. For example, our school summed up the implementation principle of the classroom revolution of “people-oriented, student-centered and learning oriented”, and put forward the “one center and two basic points” of “student-centered, quality education in the curriculum, and teaching for learning service”, thus forming a perfect implementation scheme of “curriculum revolution”.

## 2. Taking students as the theme to promote the revolution of six dimensional elements in the classroom

Student orientation is the basic principle of modern education, and it is also the key concept of classroom revolution in higher vocational colleges. Therefore, in the process of teaching practice, higher vocational colleges need to carry out reform measures from the following six dimensions to ensure the dominant position of students.

### (1) teaching content reform: adhere to small projects and granulation

Teaching content is the basis of classroom reform. In the student-centered education environment, higher vocational colleges should establish a “6 + 2” teaching design mode in line with vocational education, and then take the combination of work and study and professional activities as the basic guidance to shape clear ability development goals for students, so as to achieve the effect of subject establishment.

Specifically, the reform of teaching content needs to be carried out from two levels, one of which is to optimize, delete and improve the content. Higher vocational colleges should be based on school enterprise cooperation, and the content should be reviewed by enterprise experts. The content that does not conform to the social status quo and is outdated should be deleted from the teaching materials. At the same time, the cutting-edge technology theory content of the major should be added, and the project-based teaching cases should be added based on the real projects of enterprises. Second, we should optimize the system of curriculum content and promote the design concept of small projects and granulation. On the one hand, the course content should be reasonably divided according to small projects based on the actual production activities of enterprises; On the other hand, it is necessary to design granular knowledge points based on the knowledge point assessment of small projects, and set up independent class hour plan, learning content and assessment design in each small project, so as to meet the current student-oriented teaching needs from the teaching content.

### (2) classroom organization reform: adhere to unit and dynamic

Classroom organization is the center of classroom reform. Under the support of granular small project teaching content, higher vocational colleges must establish the classroom organization form in line with the project mode. In this regard, higher vocational colleges can adopt the teaching organization model of the combination of unit and dynamic.

Schools should classify students according to their online assessment results, and then build two classroom modes for students, namely, question answering room and face-to-face room, and open them dynamically. For excellent students, they can complete their learning tasks through cooperative inquiry activities in the Q & a room. Teachers are responsible for guiding and removing doubts, and students independently complete the process of knowledge system construction. For the development level students, they can first establish knowledge cognition through the face-to-face teaching room, and then carry out practical training through the question answering room, so as to guide the students to develop in the excellent level first. For basic level students, face-to-face classroom teaching should be the main course. Teachers can emphasize students’ learning behavior through certain constraints, and then urge students to complete knowledge acquisition and smoothly participate in online assessment until they pass.

### (3) curriculum evaluation reform: insist on breaking the final examination and stratification

Curriculum evaluation is the key to classroom reform. In view of the huge defects existing in the traditional assessment and evaluation system, higher vocational colleges should get rid of the assessment mode of “one paper determines the score and one foot measures to the end”, and implement the independent scoring mode of “one project one assessment”. At the same time, students can set up independent evaluation activities according to their own learning plans through information resources, so as to detect their own learning situation and find knowledge gaps. Students who want to get higher grades can also carry out multiple assessments on low score items and choose the highest score for calculation, so as to further improve students’ learning initiative.

### (4) curriculum teacher reform: adhere to large team and division of labor

Course teachers are the backbone of classroom reform. Higher vocational colleges should reasonably allocate according to the assessment results of teachers’ ability and literacy, combined with the basic characteristics of the teachers’ team to be constructed. For example, select experienced teachers to assist students in completing inquiry learning activities in the Q & a room; Teachers with higher practical level are responsible for students’ practical demonstration teaching; Teachers with strong expression ability and humorous lectures can be responsible for the knowledge and theory explanation in the face-to-face teaching room, so as to fully show the teachers’ strengths and advantages through team design and division of labor arrangement.

### (5) curriculum resource reform: adhering to living resources and informatization

Curriculum resources are the conditions of classroom reform. Whether it is the granular small project teaching content, the dynamic classroom organization of the unit, or the layered curriculum evaluation and the division of teachers, it needs perfect teaching resources as the basic support. In this regard, higher vocational colleges should also establish a perfect information resource base to improve the effectiveness of classroom reform through the flexible application of resources. For example, in the granular project resource module, schools should produce micro online resource content, mainly including micro lessons, micro project assessment question bank, project guidance manual and other resources. At the same time, we should also provide diversified media materials, such as video, animation, test

question bank, courseware, test papers, cases, literature, problem solving, resource catalog, online courses, etc., so as to ensure the smooth implementation of the classroom revolution.

(6) curriculum ideological and political reform: adhere to strengthening ideological and political education and orientation

Curriculum ideological and political education is the inevitable demand of classroom revolution. Under the fundamental educational task of moral education, higher vocational colleges must implement the curriculum ideological and political education to the end. First, we should establish a comprehensive ideological and political education system, and implement ideological and political education in the process of classroom teaching. Teachers can strengthen students' Ideological and political literacy through career planning education, entrepreneurship and innovation education, patriotism education, self expectation education and other activities. Second, we should rely on school enterprise cooperation to promote the ideological and political construction of the curriculum, guide students to inherit the corporate culture, uphold the craftsman spirit, and have good cooperation ability and competition consciousness, so as to form a better value orientation.

3. To improve quality as the goal, explore effective methods of education and training

In the context of improving quality and cultivating excellence, the implementation of the classroom revolution also needs to further adjust the relationship between the subject and object of teaching, and provide services other than classroom teaching for teachers and students, so as to indirectly improve the ability of teachers and students and make important contributions to the realization of the goal of classroom revolution. In this regard, higher vocational colleges should also optimize from the following four levels.

(1) establish a new type of teacher-student relationship

Teacher student relationship is one of the important factors affecting classroom efficiency. The relationship between teachers and students is not only based on pedagogy, but also has emotional connection, which has a direct impact on students' learning attitude, enthusiasm and thinking divergence. In the process of implementing the classroom revolution, higher vocational colleges should promote the construction of new teacher-student relationship.

First, we should optimize the teaching environment for teachers and students. With the support of information technology, all kinds of information equipment provide necessary services for teachers' teaching, forming an audio-visual and intelligent classroom form. At the same time, it also provides convenient contact tools for teachers and students, which provides an important basis for teachers and students to build a learning community. Second, we should optimize the sharing and acquisition of teaching resources. Under the information-based teaching, students' access to resources is gradually separated from the dependence on teachers, but teachers can also strengthen resource sharing and provide students with better resource services, so as to form an interactive relationship based on resource carriers. Third, the concept of "student-centered" should be strengthened. Teachers should pay attention to students' learning status and provide help according to their needs. Fourth, we should reshape the role of teachers and let teachers become the cooperators and guides of students. Fifth, we should emphasize the custom of respecting teachers and valuing education, improve students' respect and love for teachers, and actively carry out recreational activities between teachers and students to ensure the benign development of the relationship between teachers and students.

(2) carry out new teacher training

Teacher training is not only a direct way to improve teachers' ability and quality, but also a key strategy to ensure the sustainable development of teachers' professional ability. In view of the teacher training activities in the new era, higher vocational colleges should open up diversified training mechanisms and methods.

First, we should optimize the school training mechanism. Higher vocational schools should establish special training courses, expert lectures and other learning activities for teachers, so as to solve various problems faced by teachers in the teaching process. Second, we should build an online teaching and training platform. Higher vocational colleges can establish online teacher training courses, and set up training course modules for the understanding of educational concepts, the interpretation of educational policies, the application of teaching methods, the implementation of teaching strategies, etc., so as to provide teachers with ways to continuously improve their ability. Third, teachers' organization activities should be increased. Schools can actively carry out activities such as teachers' golden class competition, teaching design competition, topic paper competition, etc., strengthen teachers' ability and literacy through participation, and further innovate teaching methods. Fourth, teachers' teaching and research teams should be established. Higher vocational colleges should promote the construction of collective lesson preparation mechanism, set up teachers' teaching and research groups for teachers of the same discipline or specialty, put forward the problems and difficulties encountered in teaching through daily interaction and meetings, and then achieve the effect of teaching complementarity through mutual sharing and exploration.

(3) create a new classroom culture

Classroom culture refers to the general concepts, behavior habits and system norms formed in the process of classroom teaching. In the process of classroom revolution, higher vocational colleges should build a new classroom culture from four levels.

First, we should recognize and respect the dominant position of students. The implementation of the student-centered principle must be established at the cognitive level, that is, teachers should fundamentally respect the main role of students, and then set up students' learning activities on this premise; Students should also be aware of their dominant position, and be able to actively participate in learning activities and put forward their own personalized views. Second, we should pay attention to ideological and political education and student behavior management. Higher vocational colleges should strengthen the management role of counselors, not only respect students' choices, but also form the supervision and management effect, and standardize students' daily behavior. At the same time, based on school enterprise

cooperation, we should promote the educational concept of cultural people, so that the craftsman spirit and corporate culture can form a good guiding role. Third, we should pay attention to the development of students' innovation and practical ability. Higher vocational colleges should build a perfect training course system and education base to provide students with a more convenient practical learning platform. At the same time, they should also actively carry out the second and third classroom activities and community activities, so that students can have an expansion platform for innovative development and practical training. Fourth, cooperation and competition should be the development thinking. Schools should encourage students' sense of competition and strengthen their ability to cooperate. They can not only integrate into the collective to make contributions, but also work hard through competition to make students have a positive learning attitude.

#### (4) cultivate new students' character

Students' personality is the thinking characteristics and Ideological Expression of students' learning process. Higher vocational colleges should create better conditions for classroom revolution by changing students' character.

First, students' ability of self planning and development should be cultivated. Overall planning is not only the key quality of students' learning process, but also an important factor affecting students' learning evaluation. Teachers should strengthen students' self cognition concept, and guide students to carry out long-term planning of academic development from the level of positive self expectation. At the same time, teachers should also make use of evaluation activities and consultation activities to let students know their own learning status and achievements, so that they can adjust their expected goals in real time and dynamically adjust their development plans. Second, students' ability of resource internalization and integration should be strengthened. Learning resources are an important basis for students' learning and growth, and the internalization of resources is the direct embodiment of students' learning objectives through learning activities, which plays a direct role in the development of students' ability and literacy. In this regard, teachers should pay attention to the change of students' learning attitude, let students take the initiative to learn and use resources; We should give full play to the function of entrance education and help students master the skills of academic planning; Students should also be familiar with the forms and values of various resources that the school can provide, and then master the methods of resource application. Third, students' ability to create autonomous learning environment should be improved. The independent support effect of the environment can effectively improve students' learning motivation, and then improve students' enthusiasm and emotional cognition from the psychological level, so as to strengthen students' learning effect. Therefore, higher vocational colleges should also cultivate students' ability to create an independent environment. On the one hand, teachers should be supportive teachers to guide students to establish the consciousness of autonomous learning. On the other hand, students should be good at starting from the environment and creating an atmosphere with the effect of encouraging themselves, so as to form a good effect of self supervision.

## 5 Conclusion

To sum up, under the background of improving quality and cultivating excellence, higher vocational colleges should adhere to the classroom revolution to the end. As the main front of talent cultivation in higher vocational colleges, classroom education concept, classroom organization, teaching content, teaching resources, education evaluation, teacher-student relationship, teacher literacy and other factors are important factors affecting the quality and effect of classroom teaching. Therefore, higher vocational colleges should build the implementation plan of classroom revolution. We should promote the revolution of the six dimensional elements of the classroom and explore effective methods of education and excellence to provide a good environment and conditions for the implementation of the classroom revolution, so that students can obtain better growth space.

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