

The Innovation and Balanced Development Path of Education Management Mode in Remote Areas of Chongqing Driven by the Modernization of Vocational Education

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Abstract:

Remote areas are economically and educationally backward, with small populations, which leads to certain constraints on the development of vocational and technical education. However, remote areas also have certain advantages. With the promotion of precise poverty alleviation, education and various industries in remote areas have good development opportunities, which also provide effective resources for vocational education. At the same time, under the development of modern science and technology, vocational education can break the geographical limitations, access to distance education resources through information technology means, strengthen the innovation of teaching management mode, and realize the balanced development of education. This paper mainly analyzes the advantages of modern education means and summarizes the dilemmas in vocational education in remote areas of Chongqing, and finally puts forward an effective education management mode to provide certain reference for the optimization of education management in remote areas.

Keywords:

Vocational education
Modernization drive
Remote areas of Chongqing
Education management mode
Innovation

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1. Introduction

The development of vocational education in remote areas is conducive to enhancing the education level and cultural literacy of the workforce in remote areas, and promoting the simultaneous development of the economy and culture

in remote areas. At present, China is building a human resource power plan in talent cultivation, emphasizing the cultivation of high-quality technical talents and strengthening the emphasis on vocational education ^[1]. Therefore, the current education policy requires students

not only to complete nine years of compulsory education, but also to continue their education after nine years of compulsory education, at least to master a technology, to enhance their ability to survive, and employability. In particular, the work of vocational education in remote areas must be effectively implemented, combined with the current status of vocational education, to explore effective education management measures.

2. Advantages of modern educational means

The application of modern educational means in vocational education in remote areas is conducive to optimizing and enriching educational resources. The educational resources in remote areas are relatively poor, and the teaching materials, teachers and facilities are not perfect, affecting education development and improving teaching efficiency. Through the application of modernized educational platforms, the gap in educational resources in remote areas can be effectively bridged. Distance learning can be realized through information technology, and online education and special delivery classroom can also be used to break the limitations of geographic conditions ^[2]. At the same time, modern education means can provide students with a personalized learning experience, students can combine their own learning progress and learning needs to choose the learning content, while big data technology can also be combined with the students' learning foundation and learning interests to form an accurate algorithm to push the appropriate difficulty of the learning content to meet the personalized learning needs of all students ^[3], and provide feedback information based on the learning progress of the students and the accuracy of their online answers. The application of modern education is also conducive to eliminating the geographical barriers to student learning. The learning materials needed by students are delivered to students by remote means, and students can obtain learning resources at any time and from anywhere according to their needs. Modern education means are also conducive to reducing the cost of vocational education. The economy in remote areas is backward and investment in education is limited. Compared with the construction of professional teachers

and school facilities, modern teaching means have less investment and more preferential course purchase, which can effectively reduce the educational economic burden of students. Finally, modernized education can improve the quality of education. Modern education platforms provide students with richer learning resources and tools to expand students' horizons and enrich their knowledge, which is conducive to improving the quality of vocational education. Especially through the simulation laboratory and the application of multimedia technology, it is more conducive to students' understanding of various teaching concepts.

3. Difficulties of vocational education in remote areas of Chongqing

There are still some difficulties in carrying out vocational education in remote areas of Chongqing, mainly in the areas of infrastructure construction, teacher construction, integration of industry and education, and teaching quality.

3.1. Inadequate infrastructure

From the perspective of vocational education in remote areas of Chongqing, the problem of imperfect infrastructure exists widely, which is manifested in the fact that the school buildings of vocational colleges and universities are relatively old, and most of the majors are not equipped with corresponding practical training bases. For example, for specialties such as machining, tourism, hotel management and other operational specialties, the training bases and equipment are very limited and not updated in time, resulting in students not being able to improve their professional skills through practical training. In teaching, teachers can only explain various aspects of knowledge through classroom lectures, students lack practice and deep understanding of knowledge, and it is difficult to form a quick connection with the profession after graduation, which affects the employment rate of students. At the same time, the network coverage of vocational colleges is unstable, failing to effectively carry out courses requiring network teaching such as simulation laboratories ^[4].

3.2. Inadequate teaching staff

In the survey of vocational education in remote areas of Chongqing, it can be found that there is a serious shortage of professional teachers in vocational colleges and universities, especially the number of teachers in agriculture and intelligent machinery is very small, and the teacher-student ratio is low, which makes it difficult for teachers to take care of the learning of individual students. The insufficient number of teachers in some majors has forced them to use interdisciplinary teaching, which affects the efficiency of teaching. Meanwhile, in the survey of teachers' strength, 35% of the teachers said that they entered the teaching position directly after graduation and did not experience the internship in the enterprise, so they have more theory than practice in teaching and it is difficult for them to carry out the integrated teaching of theory and practice for students, and it is difficult for students to improve their practical skills. In addition, the problem of unbalanced distribution of teachers in remote areas of Chongqing is also widespread. Vocational education areas such as Jiangjin and the southeast of Chongqing have unequal opportunities for vocational teachers in terms of education and training, and the ratio of teachers with high technical skills reaches a huge gap of 4:1.

3.3. Unreasonable integration of industry and education

In the development of vocational education in remote areas of Chongqing, the cooperation between schools and enterprises is seriously formalized. Most of the vocational colleges and universities have not formed effective cooperative relationships with enterprises, and enterprises have not formed workstations or training bases in schools, so students have few opportunities to participate in internships in enterprises. Most of the enterprise cooperation takes the form of visits, students can not participate in the process of enterprise operation. At the same time, leading enterprises in remote areas are relatively rare, and most of them are small-scale or family workshop-type model. equipment technology, production technology and service concepts are not advanced enough, so it is difficult for students to grasp the most advanced knowledge even if they enter the enterprise internship. In addition, the school's ability to connect with

external enterprises is limited, and it is difficult to use big data technology to understand the current situation of the employment site. Moreover, due to the remote location and the relatively small number of students, some vocational skills assessment has to go to a more distant place to participate in the examination, which also affects the motivation of students to learn ^[5].

3.4. Teaching quality is not up to standard

In the teaching of vocational colleges and universities in remote areas of Chongqing, due to the imperfect construction of training bases and educational facilities, most of the courses can only rely on teachers to teach in the classroom. At the same time, the faculty strength of professional teachers is insufficient, and most of them have not participated in enterprise practice, which makes it difficult to improve teaching efficiency. In addition, vocational colleges still focus on traditional specialties in their professional design, such as electromechanical maintenance, computer, hotel management, kindergarten teachers, etc., which have not been combined with the characteristics of the Chongqing region. In recent years, eco-agriculture, non-heritage handicrafts and other industries in the Chongqing region have been developed rapidly and gained certain achievements under the vigorous development of culture and tourism ^[6]. However, vocational colleges and universities have not realized docking with these emerging industries, which will also affect the development of vocational education work. Although some vocational colleges have set up new energy vehicles and artificial intelligence majors, due to the remote geographical location, inadequate allocation of resources in vocational colleges and other reasons, there are many obstacles to curriculum development, which is not conducive to the improvement of teaching efficiency.

4. Path of innovation and balanced development of education management mode in remote areas of Chongqing driven by modernization of vocational education

Playing the role of multiple parties and strengthening the construction of facilities

With the modernization of vocational education, the

importance of vocational education has been increased further. However, from the perspective of vocational education in remote areas of Chongqing, the problem of reduced teaching efficiency due to the imperfect construction of educational facilities has not been effectively solved. In order to ensure the teaching efficiency of vocational colleges and universities, it is necessary to strengthen the improvement of teaching facilities. However, the economic capacity of vocational colleges and universities is limited, and it is difficult to meet the demand for educational facilities. Therefore, it is also necessary for the government to take the lead and unite enterprises to form a multi-party joint force to build a multi-party cooperative management mechanism for vocational colleges and universities to strengthen the construction of educational infrastructure^[7].

First of all, the government takes the lead in building a three-level linkage guarantee mechanism. For example, in southeast Chongqing, the government constructs a special management fund for vocational education, which is mainly used for the construction of training bases of vocational education colleges, while implementing the digital infrastructure of vocational colleges, and allocating corresponding virtual experimental equipment according to the teaching needs of schools. The governments of the districts and counties where the vocational colleges are located prioritize the allocation of land for the construction of school buildings and training bases by the development needs of the vocational colleges. In order to encourage external enterprises to participate in the construction of vocational colleges, they can be provided with preferential treatment by way of tax exemption and a green channel for project approval, to form an effective cooperative relationship with the schools. And focus on the integration of resources around the school site, such as ecotourism. The school cannot build a large tourist base, but it can cooperate with the surrounding cultural tourism attractions and ecological agriculture parks, and move the internship to the off-campus.

Secondly, as the main body of the construction of teaching facilities, vocational colleges and universities should do a good job of integrating the construction of facilities. For example, using the existing resources of the school to carry out a major transformation, avoiding the waste of resources, can also effectively save funds.

At present, some occupations have been reformed and good teaching results have been achieved. For example, Pengshui Vocational Education Center has changed the local Miao village into a training base for non-legacy professional education. There are also some vocational schools to upgrade existing outdated facilities. For example, in the case that the traditional CNC machine tool has not passed the service period, it can be connected with modern science and technology by replacing the CNC kit, and effectively reduce the cost of equipment application.

Finally, there is also a need to call on the power of social organizations to intervene in the construction of vocational college facilities. For example, schools can apply for donations of intelligent teaching equipment from social public welfare organizations, or call on outstanding alumni to donate equipment construction funds to optimize vocational education resources, and also give play to community power. For example, students majoring in agriculture can participate in farmers' agricultural production on weekends to expand teaching resources^[8].

4.1. Optimize the teaching staff and enhance the teaching motivation

The problem of teacher shortage in the teaching of vocational colleges and universities in remote areas of Chongqing still exists widely, and is also a key factor restricting the smooth development of vocational education work. In order to ensure the quality of vocational teaching, it is necessary to strengthen the construction of teachers. First of all, the professional characteristics of vocational colleges and universities and the shortage of teachers are precisely introduced. Teacher channels can be enriched through directional training with colleges and universities, enterprises and special recruitment. For example, special post-teacher training programs can be established with colleges and universities such as Yangtze River Normal for majors in which teachers are in short supply, such as ecotourism and modern agriculture. Graduates need to sign five-year service contracts with vocational colleges to solve the shortage of teachers in vocational colleges. It is also possible to introduce enterprise technical backbones to provide technical guidance to schools on a

regular basis. In addition, vocational colleges in remote areas can consider rehiring old teachers and industry experts to serve as the leaders of the teaching team and strengthen the construction of teachers. For the problem of insufficient practical ability of teachers in vocational colleges and universities, we can try to build a three-level training system for teachers at the municipal, district and school levels, to provide special training for teachers' professional skills, to carry out regular vocational education teaching and research activities, and to form a form of pairing of old with new to promote the rapid growth of teachers^[9].

4.2. Strengthening regional cooperation to promote the integration of industry and education

Vocational colleges in remote areas of Chongqing are limited in educational resources due to their geographic remoteness, resulting in the development of industry-education integration being restricted. In order to enable students to obtain more learning resources, relying only on the single strength of vocational colleges is far from enough, and it is necessary to try to adopt the way of regional integration to build a collaborative development model of vocational education. Specifically, vocational colleges in well-developed areas are the core colleges, and colleges in remote areas are alliance colleges, so as to realize the sharing of teaching resources such as teachers and practical training. Students can take cross-school classes during the way of day. Training centers should be set up according to the professional advantages of different regions to reduce capital investment^[10]. For example, the shipping as well as intelligent manufacturing majors of Wanzhou Vocational and Technical College are relatively strong, and specialized training bases can be built according to these two majors, and other schools can study across schools. Qianjiang Vocational and Technical School, which is stronger in elderly care and cultural tourism, can build a practical training base from these two specialties. In cooperation with enterprises, we can adopt the method of integration of industry and education, and build the docking mechanism between the industrial chain and professional groups. For example, in the Wuling Mountain area, the more distinctive specialties include non-inheritance and tourism industries, so in this area, the

school can be combined with local key enterprises, such as Gongtan Ancient Town. In the northeastern region of Chongqing, where agriculture is more developed, the corresponding specialties should be based on agricultural product e-commerce as well as modernized agriculture, so we can try to cooperate with the Three Gorges Citrus Group.

4.3. Strengthening policy support to improve teaching quality

The improvement of teaching quality of vocational education in remote areas of Chongqing is the core goal of vocational education management, in order to ensure the effective realization of this goal, the government can formulate the "High-Quality Development Plan for Vocational Education in Remote Areas of Chongqing" to determine the goals and directions of vocational institutions in the next few years, and set up a special fund to ensure that vocational colleges and universities improve their teaching facilities. At the same time, technology is used to empower schools to build smart education platforms and obtain high-quality teaching resources from provinces and cities. It can form a special delivery course model with colleges and universities to narrow the education gap. In addition, schools can build virtual simulation laboratories to carry out teaching work through virtual simulation laboratories for experimental content that cannot be participated in on the spot. The integration of educational resources and the improvement of teaching facilities introduce a variety of high-quality courses for students and improve the quality of teaching.

5. Conclusion

In summary, in order to ensure teaching efficiency and improve teaching quality in the development of teaching work in remote areas of Chongqing. It is necessary for the government, society and schools to work together, strengthen the improvement of vocational education facilities, optimize teachers and teaching resources, form a multi-dimensional cooperation model, ensure the richness and high quality of teaching resources, and improve the quality of vocational education in remote areas.

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