

Sino-Myanmar Vocational Education Cooperation System and Talent Training Mechanism Based on Artificial Intelligence

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Abstract: In recent years, ASEAN (Association of Southeast Asian Nations) regions such as Myanmar and China have deepened their cooperation in the internationalization of vocational education and the construction of vocational education community. In order to accelerate the development of the “Belt and Road”, Guangxi and Yunnan have accelerated their cooperation in vocational education with Myanmar in recent two or three years. In the survey of learning expectations, the classes ranking “strengthening professional knowledge and improving professional skills” at the top can be seen that the higher the percentage, the greater the desire for classroom knowledge. The proportion of Sino-Myanmar cooperative automobile electromechanical classes reached 76.92%, and the proportion of non Sino-Myanmar cooperative classes in numerical control technology reached 69.57%; the first class of logistics specialty accounted for 63.33%, and the car marketing class of Sino-Myanmar cooperation accounted for 61.11%, which ranked in the top four. Such data showed that the development of Sino-Myanmar education cooperation system and talent training mechanism in China is relatively good.

1. Introduction

Vocational education itself can be divided into secondary vocational education, higher vocational education and undergraduate education. The goal of higher vocational colleges is to provide sufficient professional, technical and skilled personnel for the economy and society. Compared with general education and adult education, vocational education in China and other developed and developing countries in the world focuses on training students’ practical skills and abilities. Therefore, in developed countries such as Europe and the United States, China’s higher vocational

education system has formed a relatively complete service system of secondary vocational education and higher vocational education, and pays more attention to training highly skilled talents. By focusing on the needs of professionals in different industries, professional courses and vocational training directions have been set up, and a set of scientific training plans have been formulated. Of course, higher vocational education in some developed countries has a relatively strong orientation attribute, which is mainly due to the consistency of its teaching methods and training purposes, thus strengthening the guarantee of higher vocational education.

Research on Sino foreign educational cooperation is one of the hottest topics at present. By taking the opportunity of attending the special training on vocational education mode of NSW (New South Wales) College in Australia, Wu Yi studied the characteristics of NSW College's vocational qualification certificate and curriculum, and put forward some suggestions on the curriculum design of Sino foreign cooperative education [1]. Xiao Feng proposed a new era for Sino foreign cooperation in running schools. Specifically, it is necessary to formulate and implement relevant systems, and actively promote the development of Sino foreign cooperation in running schools from both legal and policy aspects [2]. Li Deyi combed the characteristic resources of high-quality teaching, and put forward countermeasures to introduce high-quality teaching resources on the basis of clarifying the current problems, so as to promote the progress of sustainable development [3]. Ma Yunfei studied the establishment of joint project management committee, the reform of traditional teaching mode, curriculum construction and teaching management, etc. through the analysis of the current situation of international talent training and Sino foreign cooperation in agricultural colleges and universities, combined with the construction of training objectives and models of Tianjin Agricultural University. He also discussed the cultivation of international applied talents in agricultural universities [4]. However, due to the lack of data sources, the above researches are only in the theoretical part and has no practicality.

It is innovative to use AI to conduct research on Sino foreign educational cooperation. Kostogriz Alex identified and discussed the tension between foreign teachers and local teachers by drawing on the practice architecture theory, because they are trying to establish a new professional cooperation culture, which requires changes in temperament, professional knowledge, action and judgment to "adapt" to international schools [5]. In combination with teaching practice, Zhang Man-xue analyzed the problems and reasons in the teaching of business administration in colleges and universities, and gave specific reform measures [6]. Wu Hantian studied China's current practice of using the internationalization of "export-oriented" higher education to improve its status and image, and the challenges it faces in dealing with this practice [7]. Welch Anthony starts with a review of China-EU (European Union) higher education relations and introduces a case study of a China Denmark cooperation project, in which cooperation and project quality are limited by different goals and quality assurance systems of both sides [8]. However, due to the traditional thinking and definition, the two cannot be highly integrated and play their advantages.

This paper is innovative in the following aspects: (1) Based on the reality of Sino-Myanmar cooperation talents in secondary vocational education, this paper took the Sino-Myanmar cooperation of Guangxi Economic and Trade Vocational Institute as an example. In order to better understand the cooperation between China and Myanmar in Guangxi Vocational and Technical College of Economy and Trade, this paper investigated the cooperation of Guangxi Vocational and Technical College of Economy and Trade at the level of students and teachers, so as to avoid bias towards Guangxi Vocational and Technical College of Economy and Trade. (2) The interdisciplinary research includes vocational education, management, economics and other fields, and the related disciplines have been systematically studied. (3) The research methods are diverse: literature research, questionnaire survey, case analysis and other methods were used for research. The qualitative and quantitative analysis was also carried out.

2. Exploration on Sino-Myanmar Vocational Education Cooperation System Based on Artificial Intelligence

2.1 Cooperation Background

In 2012, China put forward the concept of “working for the common future of mankind”. In such an environment, “building a community of vocational education” is not only of great significance of the times, but also an advanced form of the development of higher vocational education in the world. Guangxi Economic and Trade Vocational Institute has actively explored and practiced the establishment of a vocational education community with ASEAN countries. Its key point is that the internationalization of higher vocational education generally lacks the support of a platform with professional characteristics, and it is difficult to achieve effective docking between majors, industries, talents and markets. Secondly, there is no universal “mass” standard [9-10].

Dock with Sino-Myanmar textile and garment production capacity cooperation to create “Luyi Workshop”

A supply chain and an industrial chain have been established by relying on the national key professional clothing and clothing design, and by virtue of Myanmar’s transfer to China’s labor-intensive clothing industry and Guangxi’s ready to wear industry. With Guangxi garment enterprises entering ASEAN and serving the production capacity cooperation of China and Myanmar textile and garment, a cooperation agreement of “order training” was signed with the Myanmar Textile Enterprises Federation. The “Luyi Workshop” Youth Technician Training Center was established in Yangon, Myanmar, and Nanning, Guangxi. The “Luyi Workshop” of “World Trousers Capital” was established in Fumian District, Yulin, Guangxi, and exported the mechanical equipment, workflow, technical requirements, management specifications, etc. to the standards of Guangxi’s first-line textile enterprises. The apparel industry and education alliance was established, and 10000 employees of 1827 garment factories in Yulin, Guangxi, and 20000 employees of 733 garment companies in Myanmar were trained, which enabled Guangxi to participate more deeply in the transnational industrial chain and regional industrial chain.

Jointly establish vocational education standards for garment production according to the development needs of Myanmar’s garment industry

In cooperation with Myanmar Textile Enterprises Federation, the development of Myanmar’s textile and clothing industry, enterprise human resources and vocational education were discussed in depth. The Ministry of Industry of Myanmar, textile industry association, government officials, enterprise executives, and the person in charge of the training center visited the garment production base in Guigang City, Guangxi, and the garment production base in Fumian District, Yulin City, Guangxi. Through the investigation and research of Myanmar’s national conditions, the needs for textile and clothing technology and training were deeply studied, and a consensus was reached.

The two-way guarantee of internal and external links would stimulate the endogenous power of school administration, administration and enterprises

The university takes the international development, high-quality development and connotation construction innovation as the breakthrough to promote the reform of international school running mode and talent training mode. They should not only formulate special plans, but also have special funds and corresponding systems. Myanmar has introduced the cooperative operation mode of “Luyi Workshop” and the “Clothing Quality Management System”.

2.2 China’s Vocational Education Focuses on High-quality and Nationwide Development

First, vocational education is universal. The Ministry of Education and the Ministry of Finance jointly issued the Opinions on the Implementation of the High level Vocational Schools and

Specialty Construction Plan with Chinese Characteristics, which further clarified the development centered on “high-quality”, in which higher vocational education is an important part of “demonstration” [11-12]. Therefore, in the past ten years, higher vocational education has been expanding enrollment. With China’s increasing investment in the conditions for running higher vocational colleges, secondary vocational students have alleviated the shortage of learning resources in higher vocational colleges to a certain extent. The talent cultivation path is shown in Figure 1.

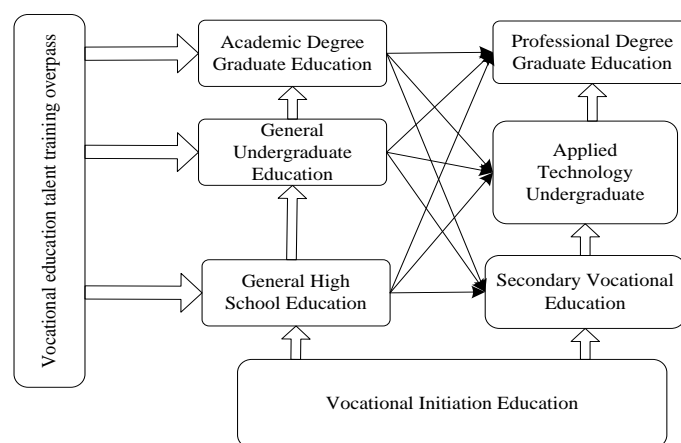


Figure 1. China’s vocational education talent training path in the new era

Since 2019, in the past two or three years, many places in China have been trying to adjust and optimize the system and resources of secondary vocational education, and transferred the surplus resources brought by students in the third year of junior high school to vocational education enrollment expansion, new era farmer education and other aspects. After the reform and opening up, rejuvenating the country through science and education has been established as a basic national policy. From 1980 to 2020, over the past 40 years, the Chinese government and provinces have been increasing their investment in primary and secondary education and personnel training in higher education. In particular, in the last decade, society is at a critical moment of development and transformation. The leaders of the Chinese Party and state have once again realized the necessity of developing vocational education. In particular, in some poor places, vocational education provides adequate guarantee for their learning, survival and career development. In addition, during the “13th Five Year Plan” period, the most prominent feature of the “13th Five Year Plan” period is that vocational education entered the countryside and developed modern vocational farmers. At present, by the first half of 2021, the number of potential users of vocational development training has exceeded 35 million, and the total market volume of various vocational schools and training institutions has continued to rise [13-14]. Many cities in China already have good practice models, which can create conditions for a learning society and universal community education.

Secondly, it is necessary to rely on vocational education and community education to build a learning society, including continuing education, school education and other education service systems. Theoretically, the core of a learning society is to establish a lifelong education system, which is all involved in the practice of community education development. Based on the sustainable development of the community, community education combines various types of education with the corresponding social development needs. The basic purposes of community education include educational volunteer service, cultural publicity, education for poverty alleviation, and the training of modern professional farmers. The concept of “learning society” came into being from the bud of the concept of “lifelong education” [15]. In 1965, the seminar held by UNESCO also laid the

foundation for lifelong learning of young people. On this issue, the consensus of the academic community is that it is far from enough to provide basic education for young people and provide specific and regular adult education. On the contrary, in the entire process of life development, students need to be learners and take learning, survival and development, and self-improvement as a whole. Therefore, under the leadership of the CPC, New China has constantly introduced relevant policies to create a good learning environment for the general public and promote the realization of educational goals. Therefore, the concepts of “learning society”, “civic vocational education” and “lifelong education” proposed from China are relatively abstract and vague.

2.3 Development of Vocational Education in Myanmar

Myanmar’s geographical location borders Yunnan Province of China, and it is similar to Southwest China in many aspects such as regional culture, customs, folk science and technology. Therefore, Myanmar, together with Thailand, is also an important reason for the cooperation between China and ASEAN in vocational education and even higher education, which can most effectively cooperate and promote regional service trade [16]. Compared with the vocational education in China, although the overall quality of vocational education in Myanmar is not high, its promotion and popularity is quite high. China has a vast territory, and the level of economic development and education development is uneven, so it is difficult to form a unified standard for a long time. These problems are not so prominent in Myanmar. Therefore, Myanmar’s education system is more efficient.

After decades of hard work in Myanmar, by 2021, the country’s literacy rate has reached 95%, and the penetration rate of junior high and middle schools has also increased from 58% in 2011 to 70% in 2021. Among these factors, the proportion of secondary vocational schools is the largest promoting factor. However, the penetration rate of vocational education in Myanmar is still limited. Although the Myanmar government has made efforts to develop public vocational education and farmers’ vocational education, due to limited investment and limited resources, vocational education in Myanmar has been in a slow development state in the past ten years, especially university education and higher vocational education [17-18]. For example, the Government of Myanmar reviewed and implemented the Technical, Agricultural and Vocational Education Law of the Union of Myanmar in 1974.

In the 1990s and early this century, during the development and construction of vocational education, the Myanmar government further developed a vocational and technical education and modern technical education system featuring “three pillars” of industry, agriculture and animal husbandry. All federations and provinces are relying on local universities to play their respective radiation effects, and building targeted vocational schools to promote vocational education for all. Although the current scale is still very limited, especially compared with China, remarkable achievements have been made in Myanmar over the past decade.

As far as the current situation is concerned, from the basic education framework and curriculum arrangement of Myanmar’s states and provinces in 2018 and 2019, it can be determined that Myanmar has basically established and established a continuous and transitional vocational education service structure, which is shown in Figure 2.

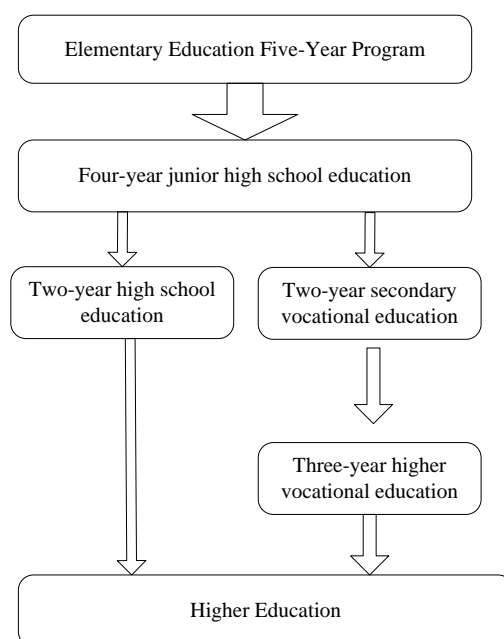


Figure 2. Myanmar's vocational and technical education and training system

It can be seen from Figure 2 that Myanmar's current vocational education system is very similar to China's local vocational education. For example, from junior high school to senior high school, on the basis of limited educational resources, it tries to meet the diversified needs of young people for knowledge, skills and learning. Junior high school graduates can choose different learning paths according to their own career development plans, family conditions and personal circumstances. They can choose to apply for the secondary school directly, or they can choose to train in the technical secondary school. At the same time, in terms of curriculum, the main cultural subjects of secondary vocational schools in Myanmar's provinces are basically the same as those of secondary schools at this stage, and a series of professional skills courses have been added or opened to varying degrees according to their school running characteristics and educational requirements.

2.4 Conception of Talent Training Mode of Sino-Myanmar Vocational Education Cooperation System

This paper discussed the above aspects, and discussed and ponders the problems in the current Sino-Myanmar cooperation model of Guangxi Economic and Trade Vocational and Technical School. This model is based on the selection of complementary companies and establishes the partnership between the two sides. On this basis, it would be implemented by formulating a special talent training plan and an all-round multi-level collaborative teaching system [19]. It would be elaborated from the following aspects: the construction of multiple cooperation training program, the integration of school and enterprise training, the involvement of third-party institutions, the four integrated training processes, teaching patterns, and construction principles.

The purpose of higher vocational education is to provide useful talents for enterprises, and the participation of enterprises is to return to the essence of vocational education. Only enterprises can truly understand the needs of enterprises. First, it is necessary to correctly handle the requirements of the education department and the policy documents and regulations of the education department. It is necessary to safeguard the legitimate rights and interests of students, physical health and mental health for the purpose, and to understand the needs of enterprises and respect the legal and

reasonable needs of enterprises, so as to communicate equally. By patiently explaining, so as to protect the legitimate rights and interests of schools, enterprises and students. The second is to deal with the relationship between the actions prescribed by the state and the actions independently selected by the enterprise. It is necessary to fully implement quality education and improve the comprehensive quality of students. Under the framework of laws, regulations, documents, and policies, and in accordance with the laws of education, schools and enterprises work together to discuss whether the behavior of independent choice is scientific, reasonable, and legal in order to deal with it scientifically. The third is to properly handle the relationship between the enterprise and the industry. It is necessary to have “dual certificates” and cultivate students’ professional abilities as the main purpose. When formulating a talent training plan, the training goals should be prevented from being narrow, and the training of professional abilities should not be biased towards one position and ignored. The fourth is to properly deal with the contradiction between “boss” and “teacher”. In communication, paying too much attention to one’s own advantages and ignoring the opinions of others can lead to contradictions. Fifth, it is necessary to establish the concept of quality improvement in terms of work standards, work processes, and process control. It is normal that the training plans of the same major and different companies differ greatly. However, in the implementation process, how to ensure the quality of the training plan requires strict specifications, strict processes and strict control. The key of talent training plan lies in the establishment of curriculum system. The curriculum system of Sino-Myanmar cooperation must be formulated with the participation of industry experts at the forefront of enterprises. The university and the enterprise jointly set up a professional construction steering committee with more than seven members. Among them, 3-5 are enterprise experts and 3-4 are senior backbone teachers of the school, who are responsible for discussing, formulating and revising talent training programs. As the format requirements and specifications of the program are familiar to the school, it is usually written by the school, but the source of the curriculum system is industry experts from enterprises. The talent training model is shown in Figure 3.

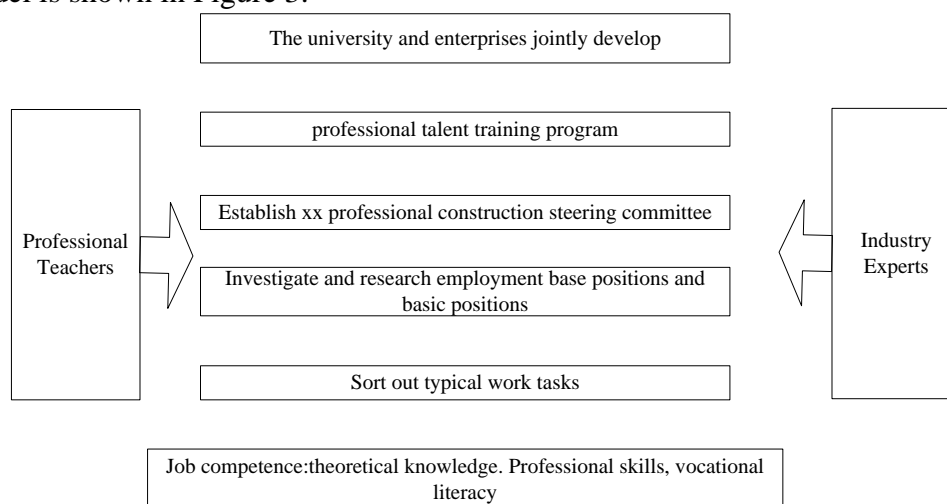


Figure 3. Talent training mode

Before starting work, teachers should go to the cooperative company to investigate their professional needs and work abilities, or expand to more fields. Generally, there are only 5-7 companies, which is to ensure employment opportunities for graduates. It is generally conducted in the form of group discussion. It is in the charge of each professional director, and is carried out according to the basic post, development post, typical work task, post competency, etc. Finally, 1-3 basic jobs and 2-4 development positions are determined. It is necessary to classify the typical work

tasks of each position and decompose the knowledge and skill points of each job. By integrating these knowledge and skills, a complete teaching system is formed. The construction of the curriculum system must firmly grasp the following three links, so as to ensure that the curriculum system originates from the enterprise, is in line with the job specifications, and is adapted to the needs of the enterprise.

First, it is necessary to strictly implement the procedures for formulating joint school-enterprise training plans so that the roles of enterprises and third-party institutions can be effectively utilized. After the school evaluates that the enterprise can cooperate and the employees of the enterprise can cooperate, the school and the enterprise jointly put forward the requirements and needs, and the professional steering committee would conduct the demonstration. After the review of the special committee, the school and the company would decide the teaching schedule of the public basic courses and submit it for review. After that, the teaching schedule of the major is determined and submitted for review, and the syllabus is finally formulated. After the review of the professional committee, the next step can be carried out. If it fails, it would be sent back for further research. During the evaluation in the process of implementation, those that meet the conditions can continue to implement, and those that do not meet the conditions can be submitted to the school and the enterprise for joint review and modification. The development process is shown in Figure 4.

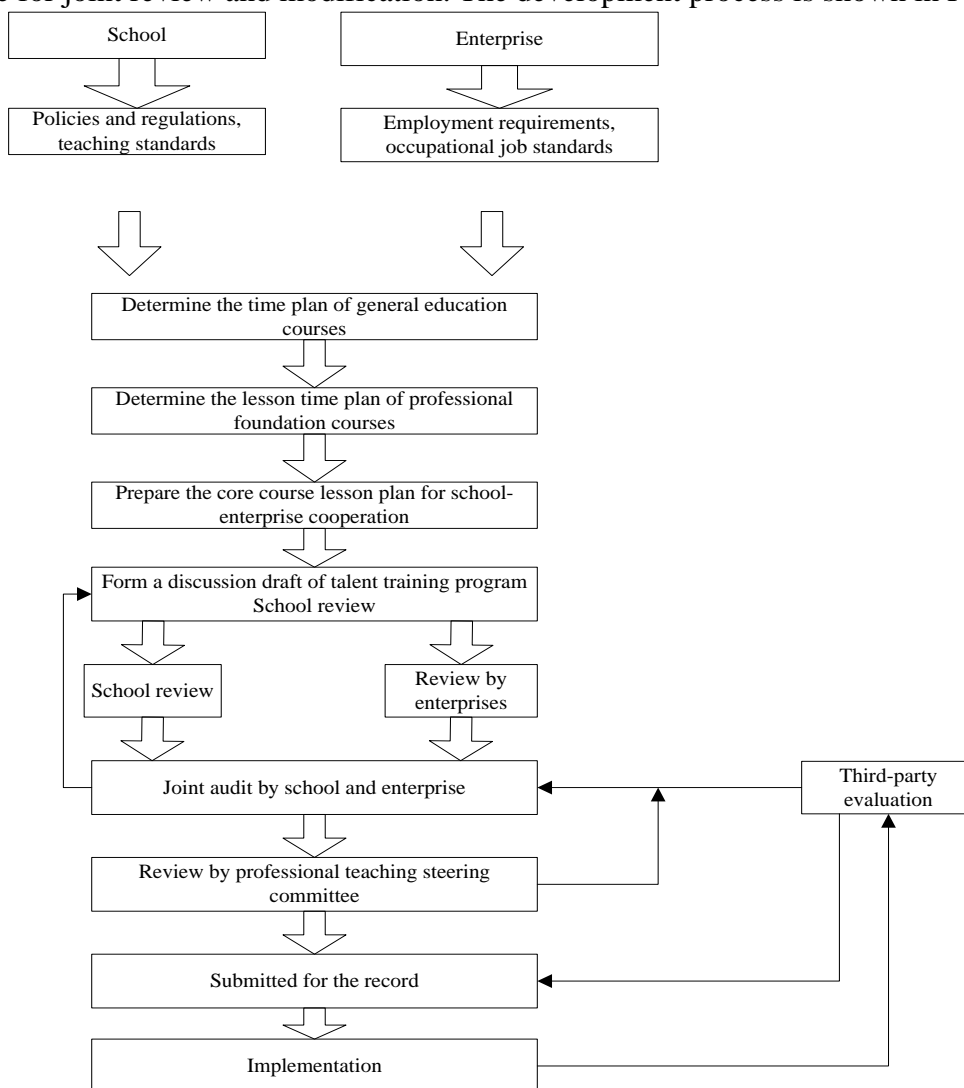


Figure 4. Reporting implementation flow chart

The second is that when formulating the curriculum system, the actual work experience of industry experts should be fully utilized in accordance with the job recruitment standards. The enterprise puts forward recruitment standards, basic posts and development posts, clarifies the typical work tasks of each post, and decomposes the knowledge and skills of each post. The core curriculum between the school and the enterprise is formed by integrating the knowledge and skills of each position. The developed curriculum system is submitted to the industry association and the professional construction steering committee to evaluate its correctness and feasibility. Figure 5 shows the flow chart of curriculum development.

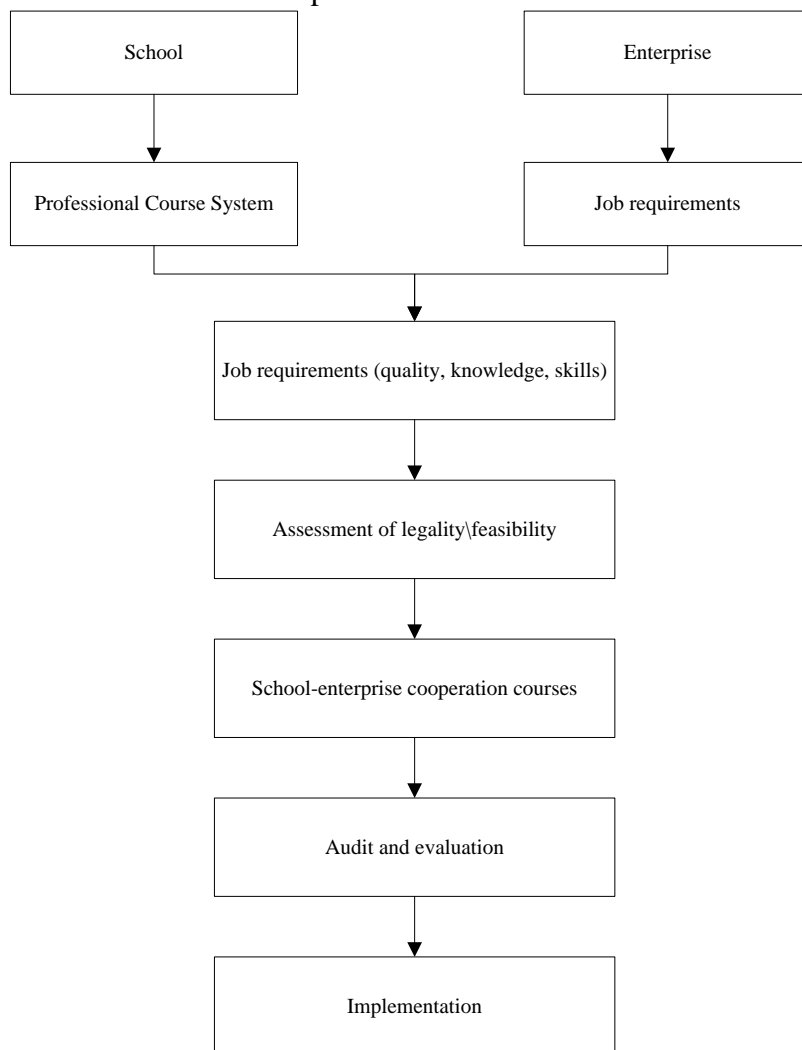


Figure 5. Flow chart of course development

The third is to be guided by typical work tasks and combined with the job needs of the enterprise. The curriculum project refers to the analysis of the company's work and curriculum by the company's teachers and school teachers after the development plan is formulated, so as to form a work oriented and work oriented project curriculum, which is approved by the Professional Construction Steering Committee. Those approved by the professional construction committee can be approved, and those unqualified can be analyzed. After that, the effect evaluation shall be carried out, and the nonconformities shall be analyzed again, so as to achieve the standard and sustainable implementation. The flow chart of project-based curriculum development is shown in Figure 6.

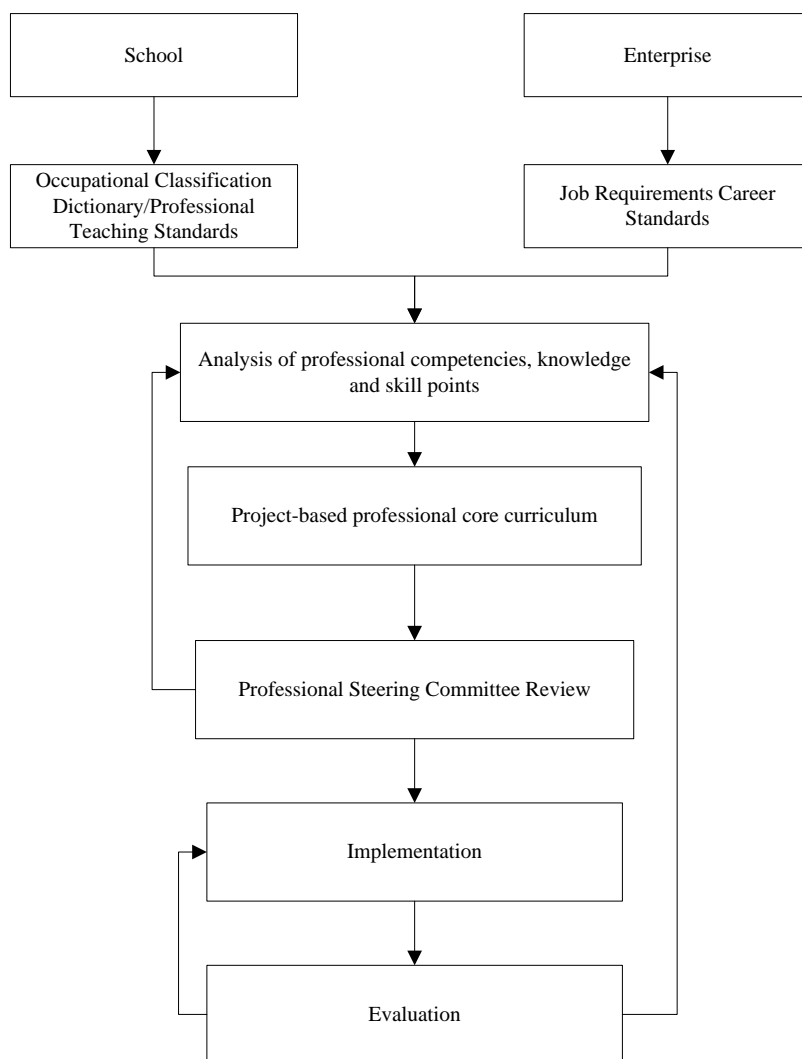


Figure 6. Project based curriculum development flow chart

2.5 Evaluation of Fuzzy Evaluation Algorithm for Sino-Myanmar Vocational Education Based on Artificial Intelligence

The fuzzy comprehensive evaluation method is to apply the fuzzy set theory to the comprehensive evaluation and decision-making of the system, and can obtain the ranking, sequencing and other information of various alternatives. Evaluation index F is used to describe the index or standard for comprehensive evaluation of multiple alternatives:

$$F = (f_1, f_2, \Lambda, f_n) \quad (1)$$

Among them, f_1, f_2, \dots, f_n are the evaluation indicators or criteria, and n is the number of evaluation indicators. The evaluation index set can also be a set of multi-level hierarchical structures. Different evaluation indexes shall be given different weights W , which is recorded as:

$$W = (w_1, w_2, \Lambda, w_n) \quad (2)$$

The evaluation scale set E is the scale describing the evaluation of each evaluation index, which is recorded as:

$$E = (e_1, e_2, \dots, e_m) \quad (3)$$

Within the assessment scale, m is the number of centralized assessments. Membership degree r_{ij}^k describes the possibility of using the e_i evaluation index to make the f_i evaluation standard in an alternative A . The subordination degree A_k of each evaluation index constitutes a fuzzy relation matrix R_k composed of the evaluation results of experts participating in the evaluation. The matrix is a fuzzy relation matrix. In matrix R_k , element r_{ij}^k can be calculated according to the evaluation results made by experts participating in the evaluation, that is:

$$r_{ij}^k = \frac{d_{ij}^k}{d} \quad (4)$$

Among them, d represents the number of experts participating in the evaluation, and d_{ij}^k represents the number of experts who have made evaluation criteria e_i for evaluation indicator f_i of item i of Scheme A .

3. Evaluation of the Implementation Effect of the Talent Training Mechanism of Sino-Myanmar Vocational Education Based on Artificial Intelligence

3.1 Introduction to Vocational Education in Myanmar

The population of Myanmar is about 53.71 million, and the gross domestic product (GDP) is 71.21 billion US dollars; the per capita GDP is US \$1255, the last in ASEAN. Myanmar has rich natural resources and cheap labor, which is very beneficial to the development of small and medium-sized enterprises. At the same time, it has become a new investment destination of China and an important goal of attracting international foreign direct investment (FDI). From October 2018 to June 2019, China's investment in Myanmar is second only to that in Singapore and is the largest among ASEAN countries. Due to the continuous influx of Chinese investment and companies into Myanmar, the shortage of technical personnel has become a bottleneck for development. The net enrollment rate of Myanmar's secondary schools in 2017 was 54%, which means that some students studied in some professional or technical colleges. According to the Department of Industrial Cooperation of the Ministry of Industry of Myanmar, there are 8 industrial training centers in Myanmar (currently under construction). The training contents include: lathe, mechanical fitter, die maker, automobile mechanic, electrician, modeling, mechanical drafter, computer aided design (CAD) drawing, welder, electronic mechanic, numerical control operator, casters, information technology, refrigeration and air conditioning technology, clothing manufacturing, rubber technology, etc. The duration of education is 2 years, 1 year and 3 months. The number of students is shown in Table 1.

Table 1. Number of students

Academic year system	Number of students (unit: person)
Three-month system	570
One year system	342
Two-year system	113

In order to facilitate data collection and data analysis, this paper used the (questionnaire survey) system to push the questionnaire, and the 62 teachers of Guangxi Economic and Trade Vocational

Institute were from the Department of Automotive Application, the Department of Mechanical Engineering, and the Department of Electrical Engineering. The surveyed students were all from different majors of the above three departments, and the teachers and the surveyed students showed a corresponding relationship.

(1) Teacher dimension survey

The survey showed that among the 62 subjects, there were 6 middle managers, accounting for 9.68%; there were 52 full-time teachers, accounting for 83.87%; there were 3 teaching assistants, accounting for 4.84%. Specific information is shown in Table 2.

Table 2. Survey statistics on “what kind of posts do the subjects hold in the school”

Options	Subtotal	Proportion
School-level leaders	0	0%
Middle Management	7	11.29%
Full-time teachers	52	83.87%
Teaching and support staff	3	4.84%
This question is valid to fill in the number of times	62	

In the question of “what’s your attitude towards the prospect of Sino-Myanmar cooperative talent training in schools”, nearly 90% of teachers thought it is optimistic or very optimistic, and only 9.68% of teachers thought it is not optimistic. Specific information is shown in Table 3.

Table 3. Survey statistics on “what attitude do you have towards the prospect of school enterprise cooperation talents training”

Options	Subtotal	Proportion
Very optimistic	31	50.00%
More optimistic	25	40.32%
Not optimistic	6	9.68%
This question is valid to fill in the number of people	62	

As a secondary vocational school specialized in training technical applied talents, the level of its teachers is the key to determine its teaching quality. Within three years, students would be taught by 10 teachers. At the same time, Sino-Myanmar cooperation can rapidly improve the technical level of students. However, if teachers are not promoted during this period, they would return to the original point after the Sino-Myanmar cooperation. Moreover, in the process of Sino-Myanmar cooperation, teachers would find their own weaknesses. By helping teachers make up for their own shortcomings, they can improve their comprehensive ability and quality. Therefore, the success of Sino-Myanmar cooperation is bound to cultivate an excellent team of teachers, which is the common expectation of teachers and the point that schools should pay special attention to when choosing partners.

(2) Enterprise dimension survey

The questionnaire system was used to recommend to teachers in the automobile application, mechanical engineering, electrical engineering and other majors of Guangxi Economic and Trade Vocational Institute, so as to ensure that the subjects are accurately pushed to the test end through the questionnaire star. The subjects were all cooperative enterprises from relevant majors, which were corresponding to the students’ subjects’ majors and teachers’ sources. The enterprise survey results showed that the enterprises involved in the survey include 7 types: 6 (24%) automobile

production, sales and maintenance enterprises, 5 (20%) 3C product manufacturers, 5 (20%) electromechanical equipment and spare parts processing and manufacturing enterprises, 4 (16%) e-commerce and logistics enterprises and other types of enterprises, which basically cover the types of cooperative enterprises in all disciplines under investigation. The results are shown in Table 4.

Table 4. Survey statistics on the categories of enterprises under investigation

Options	Subtotal	Proportion
3C products production manufacturer	5	20%
Mechanical and electrical equipment, parts processing and manufacturing enterprises	5	20%
Automobile production, sales and maintenance enterprises	6	24%
E-commerce and logistics enterprises	4	16%
Retail trade enterprises	2	8%
Service enterprises	1	4%
Others	2	8%
This question is valid to fill in the number of people	25	

Through the analysis of the above situation, these companies are all production oriented, and their jobs are labor-intensive, mainly assembly line workers. There are few backbone enterprises. Therefore, internship and work are inevitable (Table 5).

Table 5. Investigation on main positions of employees with secondary vocational education recruited by enterprises

Options	Subtotal	Proportion
Production line operator	11	23.4%
Quality inspection personnel	5	10.64%
Equipment maintenance personnel	5	10.64%
Clerks	8	17.02%
Warehouse and distribution	6	12.77%
Sales and purchasing personnel	4	8.51%
Other	8	17.02%
This question is valid to fill in the number of people	47	

From all the Sino-Myanmar cooperation plans of Guangxi Economic and Trade Vocational Institute, there are two types of companies willing to cooperate with the school. One is a productive enterprise based on internships, which has a poor employment relationship with students, making it difficult to carry out in-depth cooperation; the other is an educational technology enterprise, which mainly provides teaching resources and teacher training, and cannot accept internships. In productive enterprises, the modern apprenticeship system of “master leads apprentice” can also be implemented. However, due to the scale of the enterprise and the consumption of human resources,

the production efficiency would be greatly reduced, so few enterprises are willing to participate. If it is an educational technology company, it is enough. The school does not expect such a company to provide students with internship and employment opportunities, but it must be reminded that the school classroom has changed greatly and the teaching method has become more flexible. However, whether employers would like them or not must continue to follow up in order to make a scientific assessment.

(3) Student dimension

Guangxi Vocational and Technical College of Economy and Trade has 25 majors, belonging to 5 departments (ministries), and nearly 5000 students. In order to better understand the impact of Sino-Myanmar cooperation in the region on each class, several of these majors have been investigated. Automobile marketing and service, automobile electromechanical maintenance majors belong to the automobile department. Guangxi Vocational and Technical College of Economy and Trade cooperates with the “Myanmar industry”, The logistics service and management specialty is a rookie express cooperation specialty that “introduces enterprises to the university”. There is no in-depth cooperation in other fields such as numerical control technology, electronic technology application, industrial robot application and maintenance, and only labor level cooperation with related enterprises. Student file survey: 280 questionnaires were collected from students in 10 classes of 7 majors, 273 of which were recovered, 15 of which were invalid and 258 were effective, with an effective rate of 94.51%. The results are shown in Figure 7.

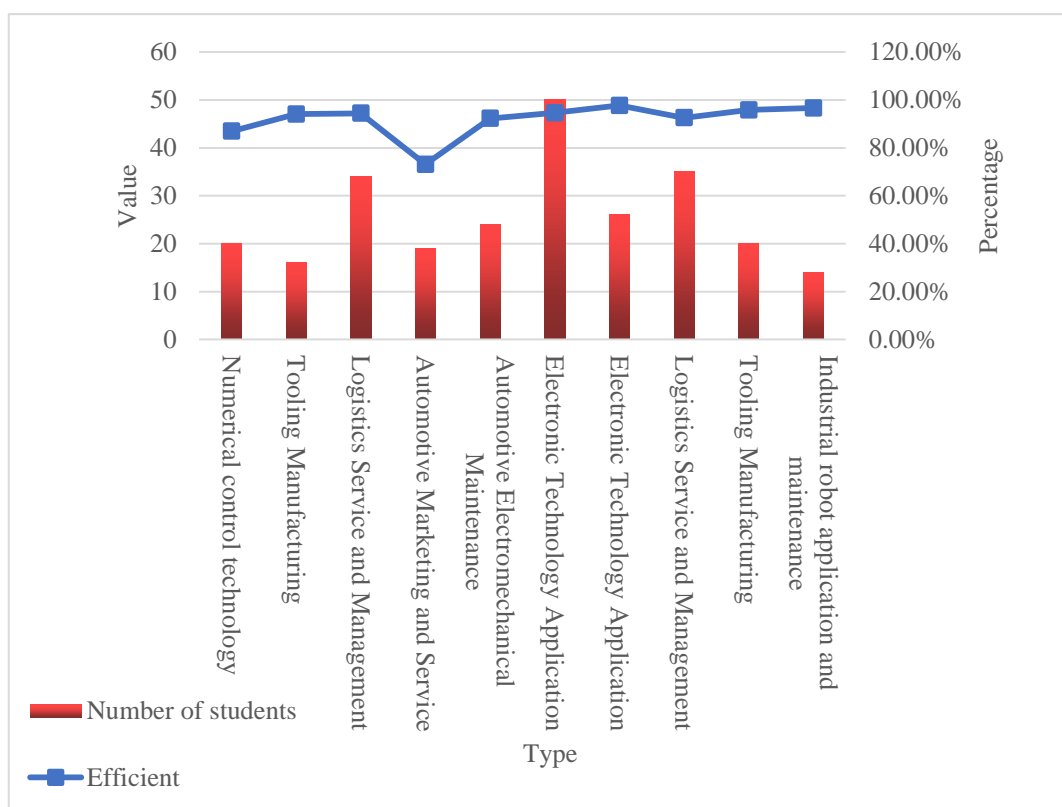


Figure 7. Statistics of the number of people surveyed in the research on the training mode of Sino-Myanmar cooperation talents (student questionnaire) of Guangxi Economic and Trade Vocational Institute

The student questionnaire survey showed that in the survey of students’ understanding of Sino-Myanmar cooperation, students in the NC technology class and the Myanmar industry

cooperation class of automobile electromechanical maintenance had the highest understanding, which was more than 90%. The results are shown in Figure 8.

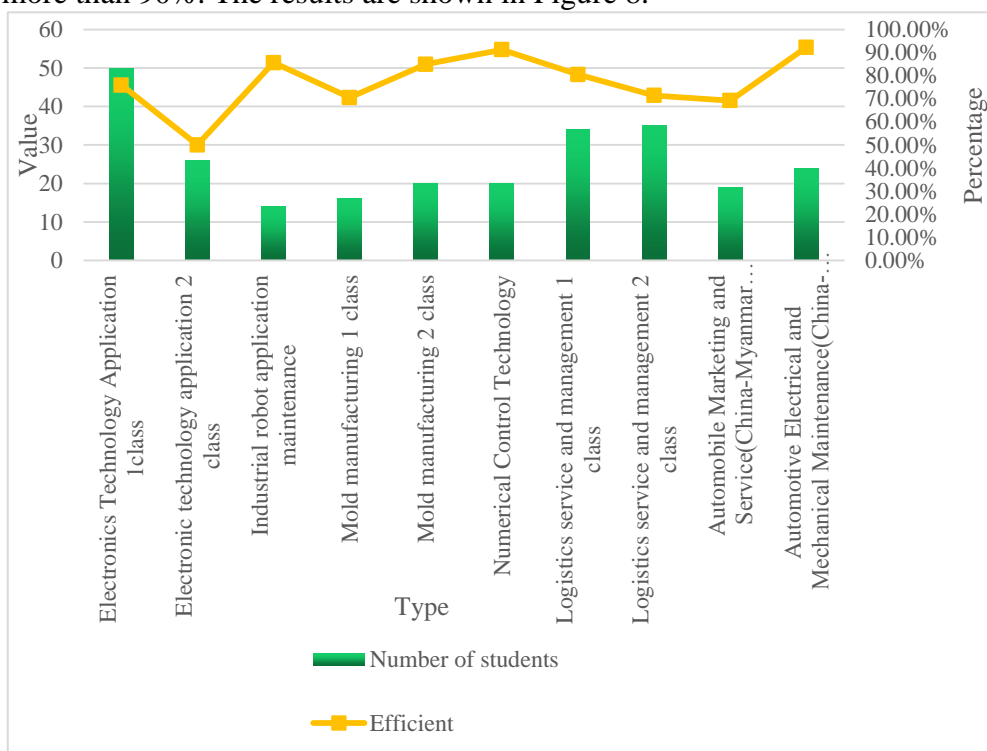


Figure 8. Survey and statistics of students' understanding of Sino-Myanmar cooperation

3.2 Implementation Effect of Sino-Myanmar Cooperation Talents Training Mode of Guangxi Vocational and Technical College of Economy and Trade

(1) Improve students' confidence in professional skills

It can be seen from Figure 9 that most students only master some of the professional skills of their own specialty, but are not skilled. Only a few students can practice and complete independently and skillfully, and only the students in the Automobile Electromechanical Maintenance Specialty of the Myanmar China Cooperative Class are more confident.

(2) Effectively improve students' learning expectations

In the survey of learning expectations, each class ranked first in "strengthening professional knowledge and improving professional skills". The higher the percentage, the stronger the class's thirst for knowledge. It can be seen that the 5 classes with cooperation occupied the top 4; the proportion of automobile electromechanical classes in Myanmar industry reached 76.92%, and the proportion of numerical control technology specialties in non Sino-Myanmar cooperation classes reached 69.57%; the first class of logistics specialty accounted for 63.33%, and the auto marketing class of Myanmar industry cooperation accounted for 61.11%, which ranked in the top four. On the whole, students in the Sino-Myanmar cooperative class have higher learning expectations than those in the non cooperative class. The results are shown in Figure 10.

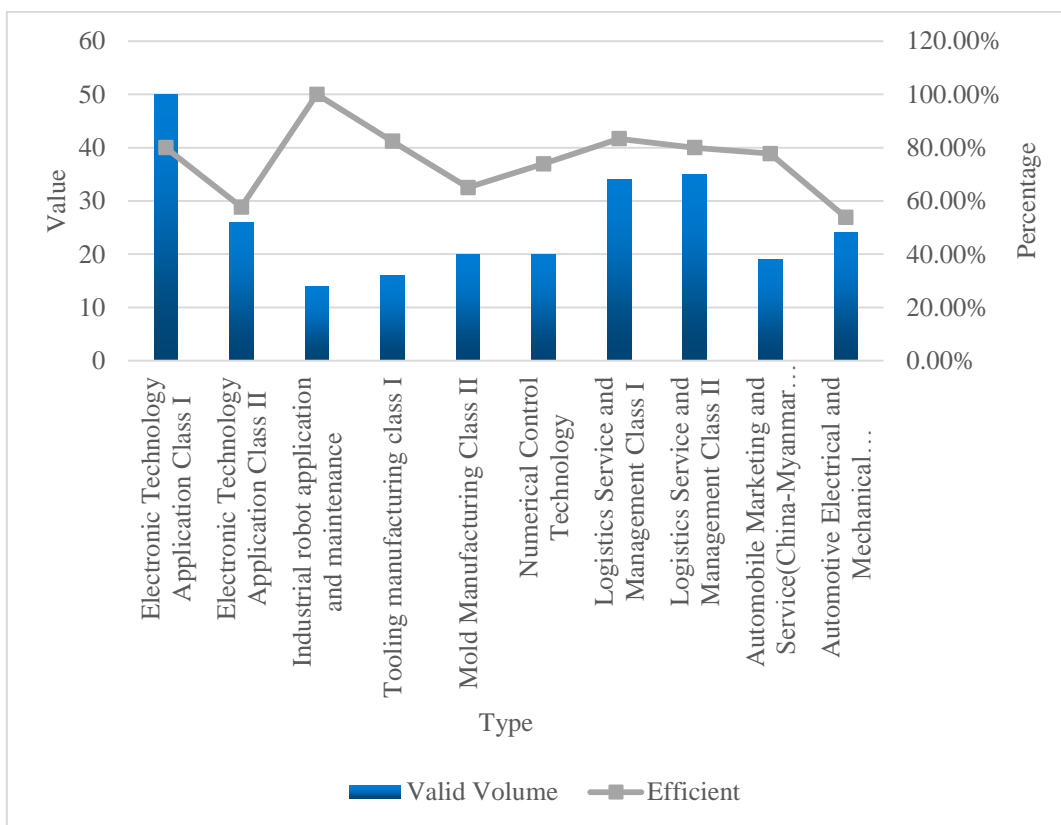


Figure 9. Investigation and statistics on whether students have mastered their professional skills

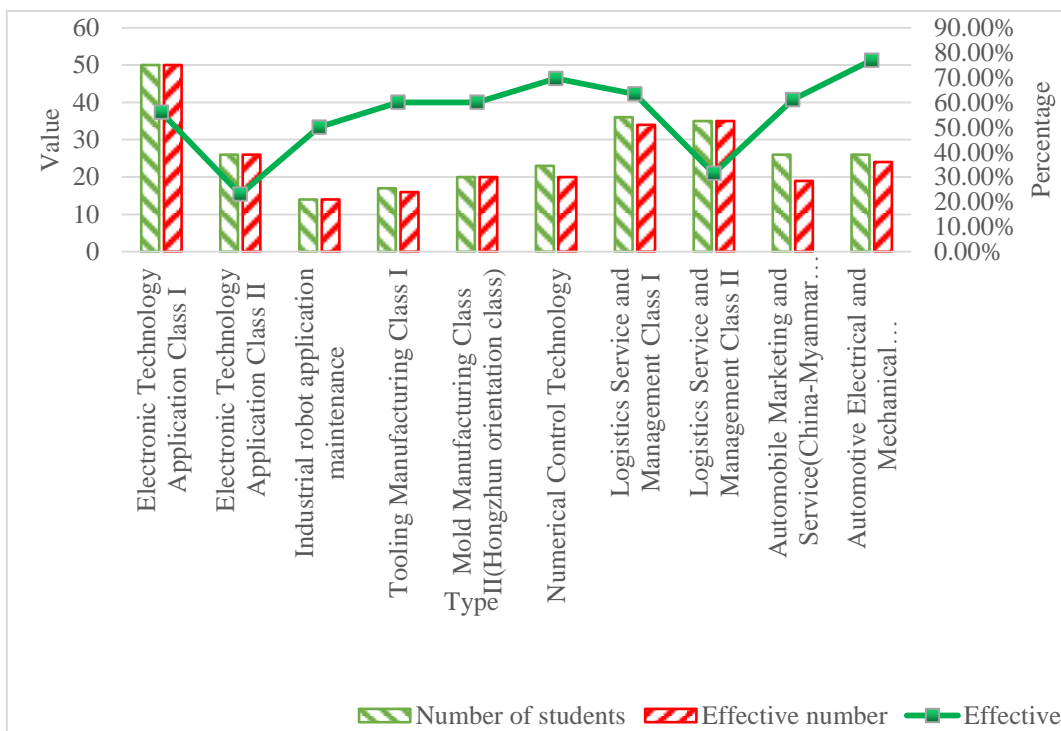


Figure 10. Survey statistics of students' expectations for learning

4. Conclusions

By taking Myanmar's local vocational education as the starting point, combining the local teachers and training conditions and the different cultural backgrounds of Myanmar, this paper brought the ideas and methods of China's higher vocational education into the construction of Myanmar's vocational education standards. According to the thought of "career analysis, expert argumentation, framework compilation" and the needs of Myanmar's industrial development and vocational posts, this paper probed into the "localization" and re innovation of China's higher vocational education. This paper argued that the secondary vocational schools represented by Guangxi Vocational and Technical College of Economy and Trade cannot provide effective services for regional economic development under the influence of many factors. Sino-Myanmar cooperation is to meet the needs of the development of higher vocational education. It objectively stimulated the potential of teachers and mobilized the enthusiasm of enterprises, which made the characteristics of higher vocational colleges fully play. At the same time, the equipment and resources of the enterprise also objectively reduce the financial input of the school, which alleviates the burden of the school and makes up for the shortage of teachers and teaching resources. When conducting this research, although sufficient preparations were made, when analyzing the data, it was found that the representation of the enterprise was not sufficient and could not accurately reflect some specific problems. Although some quantitative analysis questionnaires were used in this paper, the data obtained could not support the regression analysis due to the restrictions in the Sino-Myanmar cooperation of Guangxi Economic and Trade Vocational Institute.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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