

# *Analysis of Vocational Education and Qualification Demand in Pakistan*

**Hao Zhang\***

*Business Management Department, Shandong Vocational College of Industry, Zibo 256414,  
Shandong, China*

*40676686@qq.com*

*\*Corresponding Author*

**Keywords:** Pakistan, Vocational Education, Qualification Requirements, the Belt and Road Initiative

**Abstract:** With the continuous deepening of the Belt and Road Initiative, China and Pakistan have not only cooperated economically. In order to promote education, they also learn from each other. Therefore, the purpose of this article, which studies the needs of vocational education and qualifications in Pakistan, is to discover the problems of vocational education in Pakistan and promote the further development of education in Pakistan through the understanding of education in Pakistan. This article mainly uses the questionnaire survey and the expert interview to carry out the correlation survey on Pakistan's education to obtain data. In the questionnaire, only a small part of people have received vocational education, accounting for only 10% to 20%. This extremely shows the lack of vocational education in Pakistan.

## **1. Introduction**

Vocational education is a basic and special profession, and its training objects are those who have certain qualifications and academic qualifications, and obtain the qualifications after obtaining the corresponding certificates when engaging in a certain job or activity. "Qualification requirements" refers to the qualifications required for a certain job in a certain industry or field. In order to strengthen the cultivation of talents, it is necessary to train students in various aspects. Facing economic tensions in Pakistan, talent training has become the hope of the future. Therefore, it is of great significance to study Pakistan's vocational education and qualification requirements.

There are many studies dealing with Pakistan's vocational education and qualification demand analysis. For example, Zhang Ying pointed out that with the continuous deepening of the "Belt and Road" country construction, the vocational training cooperation between China and Pakistan has gradually become closer. However, due to the different national frameworks of the two countries and the different status quo of vocational training, there are many problems and obstacles that need to be resolved [1]. Wang Hui believes that due to the differences in the education systems of the

two sides, the negative impression of vocational education in Pakistani society and the lack of awareness of the mode of education in our country [2]. Xie Qingsong said that the establishment of a qualification framework for mutual recognition and collection of various degrees and certificates at all levels was an important strategic measure for Pakistan to promote economic and social development and vocational education reform [3]. Therefore, this article intends to conduct a relevant study on vocational education in Pakistan. This is not only a product of the Belt and Road Initiative, but also the development of the education sector.

This article first studies the education cooperation under the "China-Pakistan Economic Corridor" project, and uses rule algorithms to explore the relationship between economy and education. Then the status quo of vocational education will be analyzed and needs of the teaching model described. Finally, the problems in the Belt and Road re-vocational education cooperation will be analyzed and elaborated, and 50 international students were selected to answer the questionnaires, and the results were obtained.

## 2. Pakistan's Vocational Education and Qualification Requirements

### 2.1 Educational Cooperation under the China-Pakistan Economic Corridor

The original intention of the "China-Pakistan Economic Corridor" is to strengthen China-Pakistan trade and cooperation in the fields of transportation, energy, and ocean, and furthermore, to promote the common development of the two countries. The construction of China-Pakistan Economic Corridor provides good opportunities for China-Pakistan cooperation in trade, logistics and education. The progress and development of science and technology are inseparable from education. The development of universal and high-quality vocational education is an important education issue in Pakistan today. Therefore, research on vocational education and training in Pakistan is of great significance to China-Pakistan education cooperation [4-5].

Applying association rules to China-Pakistan educational cooperation is conducive to exploring the relationship between China-Pakistan economic changes and education. Assuming that China-Pakistan cooperation is regarded as a set  $U$ , and  $A$  refers to economy and  $B$  refers to education, their relationship exploration support can be expressed as formula (1):

$$\text{Sup}(A) = \frac{\text{Total}(a)}{U} \quad (1)$$

Confidence degree indicates how often a specific rule appears in the transaction database. For confidence, its value represents the proportion of transactions that also contain  $B$  under the condition that  $A$  is included in the total transactions. The confidence is expressed as:

$$\text{Conf} = \frac{\text{sup}(A \cup B)}{\text{sup}(A)} \quad (2)$$

In this way, a minimum confidence value can be set on this basis. In practical applications, those rules that are greater than or equal to the minimum confidence are called meaningful rules.

### 2.2 Status Quo of Vocational Education

Vocational education covers a wide range of professional skills, including professional education, training and promotion. The main function of vocational education and training is to improve the vocational quality of the trained labor force and directly develop the labor force into

various industries [6-7].

The balanced development of education is a dynamic theory. Higher vocational education can change the status of disadvantaged groups and promote the fair development of human society, thereby maintaining social equity, promoting social equality, and promoting social stability.

The main task of vocational education and training is to spread professional knowledge and skills, train skilled workers for the development of the social economy, and provide sufficient human resource for the further development. In today's society, human resource plays a very important decisive role in development and economic progress. The more human resource is developed, the faster the economy develops. The development of vocational training has a positive impact on economic development. Education is more humane. The more capital has advantages, the faster the economic development, the greater the social contribution of vocational training [8-9].

#### (1) Types of vocational education

##### Diversified supply entities

As early as the 1980s, the state first proposed to invest in the establishment of agricultural schools and a period of vigorous development started. Local governments also actively invested in the establishment of higher and secondary agricultural schools. Vocational education also boomed at this time. Starting from this period, Anhui Vocational Education has generally formed three educational models: One is government-led. The second is government-led, supplemented by schools. The third is the vocational education of civil behavior"[10-11].

##### 1) Government vocational education

The vocational training provided by the government refers to all the methods and methods for imparting and improving villagers' farming skills and knowledge organized by governments at all levels. It mainly involves the coordination and cooperation between government departments or departments [12].

##### 2) School vocational education

Whether it is a principal, a teacher or the general public, the school management philosophy of vocational training has changed. The vocational training programs of many vocational schools can actively adapt to the needs of development, instead of blindly following the trend, and focus on promoting talents demanded by the market, and the quality of talents is guaranteed; in the process of carrying out vocational training, further develop vocational training associations. The school management model, the strong alliance between schools and between schools and companies, pays attention to the combination of superior resources between schools, and the combination of theory and practice between schools and enterprises, bringing more talents to the company. On the one hand, we should do a good job in enrollment, adopt advanced enrollment methods, and do our utmost to expand enrollment benefits so that children who are willing to go to school can receive education. On the other hand, do a good job in the construction of experimental training centers, demonstration schools, and majors, expand nearby higher vocational colleges, and strengthen the construction of the teaching staff. More and more vocational schools integrate the vocational qualification level system into the concept of daily vocational training. In addition, the school has also integrated with government departments to actively implement the vocational qualification level assessment and certificate issuance work, and vocational qualification certificates have begun to be accepted by the market.

##### (2) Existing problems

1) Enrollment: Enrollment is difficult, and the quality of students is poor. The quality of the source of students is the foundation of the entire vocational education to train talents. If the quality of enrolled students is higher, the quality of training will be correspondingly higher. Since

vocational training is not the traditional concept of formal education, most students who fail high school diplomas or college entrance exams are forced to enter vocational schools. Therefore, the overall quality of admission is poor.

2) Teaching: insufficient teachers and single source. On the one hand, the lack of teachers has caused some teachers to be unfamiliar with their majors, and the quality of teaching cannot be guaranteed. On the other hand, a too low teacher-student ratio can not be solved well when students have difficulties and teachers do not have enough time to communicate with each student. This will of course affect the development of students. The source of teachers is mainly ordinary graduates, who are more likely to teach in cultural courses, while there are fewer teachers from actual locations such as companies. The problem of a single source of teachers is particularly obvious in the low quality of teaching.

3) Economic and social aspects: shortage of education funds, poor living conditions, and social instability. As the economy of Pakistan is in a long-term recession, the living conditions of Pakistani residents are not good and there is not enough funds for education and teaching. Therefore, even if there are students who want to go to school, they are discouraged by economic conditions.

### (3) Vocational qualification certificate

Vocational qualification certificates prove that employees have the knowledge and skills required to engage in specific occupations. Professional qualification certificates are different from college diplomas. Professional qualification certificates are written evidence of specific professional qualifications. It reflects the actual work standards and standards of a particular occupation, as well as the actual skill level reached by workers in that occupation. The professional qualification certificate is composed of three elements: standards, modules and certificates. This standard involves the basic basis for the classification of professional qualification certificates. Standards reflect the knowledge that employees should know and be able to apply in professional practice.

Modules are the building blocks of training courses. By studying these modules, individuals may obtain professional qualifications officially recognized by professional bodies. As a proof that workers have a certain specific ability, and as a basis for recruiting and hiring personnel by employers, the vocational qualification certificate should have the following characteristics.

1) Professionalism. 2) Timeliness. 3) Authenticity. The professional qualification certificate, as a proof of possessing a certain ability, must be authentic. This feature mainly involves three aspects. One is that vocational education or training must meet the needs of social development for talents in terms of training objectives. The second is that vocational education or training must implement the people-oriented thinking in the process of achieving the training goals. Both the training content and the training methods must consider the effectiveness and authenticity. The third is to use "two hands" in the assessment of professional ability, that is, grasp the assessment of theoretical knowledge and grasp the actual operation ability. The close combination of the vocational qualification certificate system and the employment access system can fundamentally improve the ability and quality of our workers and provide a powerful impetus for the rapid development of our country's economy.

## 2.3 Vocational Education Needs

The personal needs of vocational education are mainly composed of three elements: ability to pay, intention to study and ability to learn. Based on Pakistan's current economic structure, science and technology, human resources and education development level, the status quo of personal needs

for vocational education in Pakistan, the following analysis from three aspects.

(1) Economic income

In most families, their economic income can only maintain basic living expenses. Some families can only learn through loans. If the family income is constant, the level of tuition will have different needs for vocational education for families with different incomes.

(2) Personal learning intention

A region is at different stages of social development and has different needs for different levels of education. This kind of social value orientation determines the individual's recognition of different educational levels, and objectively reflects a kind of educational demand.

(3) Personal natural ability

As the basis and prerequisite, personal intelligence directly affects personal educational needs, and even determines their educational needs. It is difficult for people with low intelligence to have high educational needs, while people with severe or severe intellectual disabilities cannot have any educational needs at all. People with normal or high intellectual development often have educational needs.

## 2.4 Difficulties Faced by Multilateral Cooperation in Vocational Education under the "One Belt, One Road" Strategy

The "Belt and Road" cooperation initiative is an initiative proposed by China to promote the common development and prosperity of all countries in the world in their own economic and social development. However, the "One Belt One Road" strategy spans dozens of countries and regions and involves many ethnic groups and populations. Different countries have different policies, religions, social cultures, laws and regulations, and different institutional mechanisms. Cooperation and exchanges in the education field are also different, and these challenges must also be solved. Therefore, vocational schools should conduct rigorous research in the collaborative process, and formulate school plans and emergency plans.

Part of the "Belt and Road" participating countries are in a "transition period", and the old and new political power subjects are replaced; the political turmoil in some countries is because their political systems are not sound, and the old regimes and systems are still strong. The foundation makes the implementation of the new system more difficult, and the frequency of regime changes is higher. Various factors make it difficult for countries and regions along the route to have a peaceful and stable environment, and tensions will inevitably arise. This poses a huge challenge to the smooth implementation of vocational schools. In addition, the political system and economic development of the country are different, and the education system, mechanism and model are also different. In the field of secondary vocational education, private schools still account for more than half. This educational policy and incentive model have had a significant impact on educational exchanges and cooperation.

## 3. Questionnaire Survey

### 3.1 Survey Objectives

The goal of the survey in this article is to analyze the vocational education and qualification requirements of the survey samples, and then find the gap between the status quo of vocational education and training needs, so as to put forward suggestions and opinions on vocational education and qualification training methods.

### 3.2 Survey Content

The purpose of this questionnaire is to grasp the status quo and needs of vocational education in Pakistan. The author divides the questionnaire into two parts. One part is the status quo of vocational education. The main target of the survey is Pakistani students who have participated in the training. The questions mainly involve the following aspects:

- (1) The completeness of Pakistan's teaching infrastructure
- (2) Number of enrollment in vocational education in Pakistan
- (3) The source of funds for vocational education
- (4) Demand for vocational education and qualifications
- (5) Intention to choose school for vocational education

...

### 3.3 Method and Process of Investigation

This article mainly focuses on questionnaires, supplemented by expert interviews. In this paper, 50 Pakistani friends from the International Students College were selected to fill in the questionnaire and three experts were interviewed to conduct a relevant research on vocational education. A total of 50 copies of the questionnaire were printed and distributed, and the whole process was answered in English. One day later, the questionnaire was recovered, 50 questionnaires were recovered, and the effective questionnaire rate reached 100%.

## 4. Result Analysis

### 4.1 The Situation of Teaching Infrastructure in Pakistan

According to the answers filled in the questionnaire, we can get the following data after sorting. This article analyzes the completeness of the country's educational facilities from the number of potable water supplies, toilets, electricity, blackboards, computers, desks and classrooms, as shown in Table 1:

*Table 1: Pakistan's Teaching Infrastructure*

	Sufficient	Generally	Rare
Drinkable water supply	4	3	4
Toilet	2	5	3
Electricity	3	4	3
Blackboard	3	2	1
Computer	3	2	2
Desks and classrooms	2	1	3

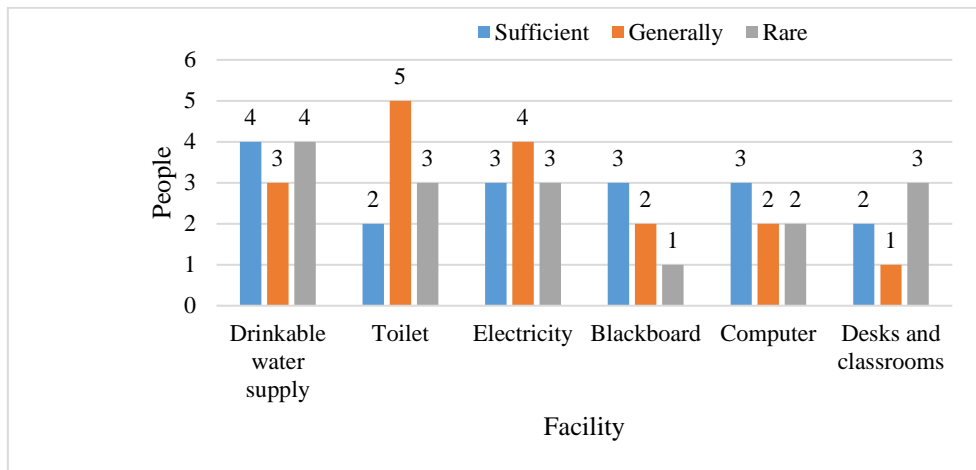


Figure 1: Pakistan's Teaching Infrastructure

As shown in Figure 1, we can see that a total of 17 people feel that teaching facilities are adequate, while 16 people feel that there are few facilities. In addition, Pakistan is relatively short of water, not many toilets, and few desks and classrooms.

#### 4.2 The Enrollment Rate of Different Gender Vocational Education in Pakistan

Based on interviews and questionnaire data surveys, this article concludes that the vocational education enrollment rates of different genders are different, and the specific conditions are shown in Table 2:

Table 2: The Enrollment Rate of Different Gender Vocational Education in Pakistan

	Male	Female	Average admission rate
2016	16%	6%	11%
2017	17%	6.8%	11.9%
2018	19%	7.1%	13.1%
2019	20%	8%	14%
2020	22%	9%	15.5%

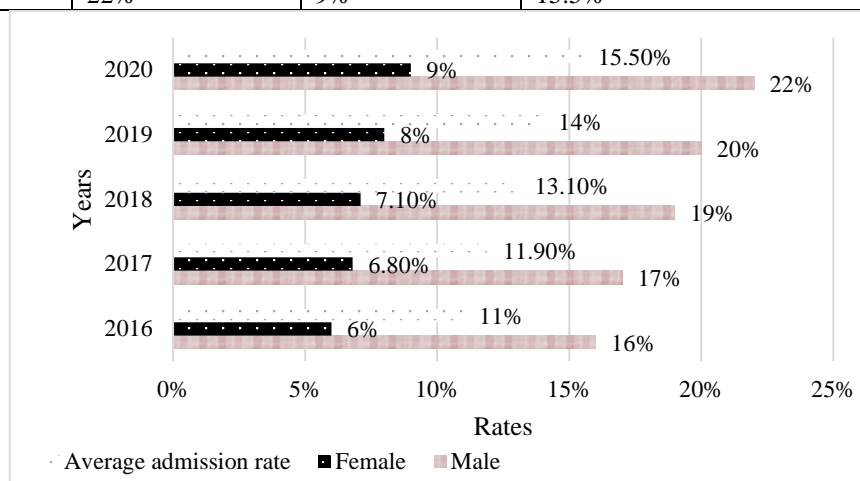


Figure 2: The Enrollment Rate of Different Gender Vocational Education in Pakistan

As shown in Figure 2, we can know that the enrollment rate of vocational education is generally low. And the enrollment rate of men is generally higher than that of women. However, the proportion of women enrolled in school is gradually increasing. These data generally show that there are still big problems in Pakistan's education, which need to be paid attention to.

## 5. Conclusion

Vocational education refers to the use of workers to engage in a specific job and obtain the corresponding professional qualification certificate, so that they can become a specialized talent with a certain social status and a certain working ability. The vocational education and training in Pakistan is facing various problems, which has also caused many people to join the vocational training. Faced with many problems in vocational education due to Pakistan's economy and various intricate relationships, this article proposes that the development of vocational education should be emphasized. The need for vocational education and qualifications in Pakistan is to improve the quality of the people, increase talents and create wealth, so as to improve the overall economic level.

## Acknowledgements

This work was supported by Shandong-Pakistan Communication Center Project of Shandong Vocational College of Industry (Ref. No. 2021GJL04).

## References

- [1] Zhang Ying, Chu Qi, Wang Dan. *Problems and Analysis in the Process of China-Pakistan Vocational Education Cooperation*[J]. *Economic Management Digest*, 2019, No.730(16): 185-186.
- [2] Wang Hui, Zhai Fengjie. *Research on China-Brazil Vocational Education Cooperation under the Background of "One Belt One Road"*[J]. 2021(2019-4):10-13.
- [3] Xie Qingsong. *Analysis and Enlightenment of Pakistan's National Vocational Qualifications Framework*[J]. 2021(2019-6):162-169.
- [4] Zhao Xun, Zhang Lingyan. *Review of Pakistan's "National Vocational Qualification Framework"*[J]. 2021(2020-1):71-75.
- [5] Zhang Lingyan, Zhao Xun. *A Study on the Types of Chinese Learning Motivation of Pakistani Native College Students*[J]. 2021(2019-10):38-41.
- [6] Yu Mei. *Suggestions on the establishment of a national special fund for vocational education (training) of the "Belt and Road"* [J]. *China Economic and Trade Guide*, 2019(6): 26-28.
- [7] Zhao Jing, Chang Feihua. *Under the background of the "Belt and Road" initiative, China and Pakistan can carry out international cooperation in vocational and technical education.* [J]. *China Economic and Trade Guide*, 2018, 911(28): 16-18.
- [8] Wang Xiaoming. *A Review of the Research on Chinese International Education in Pakistan in the Past 50 Years*[J]. *Journal of Dali University*, 2019, 004(011):108-112.
- [9] Anonymous. *"One Belt One Road" creates huge opportunities for China-Pakistan vocational education cooperation* [J]. *Guangdong Education: Vocational Education*, 2017(9): 136-136.
- [10] Yifa, Xu Xiaozhou, Dahai, et al. *Analysis of the entrepreneurial education system in Pakistani universities—a case study based on the perspective of students*[J]. 2021(2017-1):38-46.
- [11] Chen Jiawen. *The Higher Education Commission of Pakistan held a seminar on capacity*



*building for doctoral students[J]. 2021(2017-3):75-75.*

[12] *Chen Hengmin. The development and evolution of higher education institutions in Pakistan and the analysis of their types and characteristics[J]. South Asian Studies Quarterly, 2018, 000(001):53-60.*