CSCanada
Canadian Social Science
Vol. 11, No. 3, 2015, pp. 244-248
DOI: 10.3968/6627

ISSN 1712-8056[Print]
ISSN 1923-6697[Online]
www.cscanada.net
www.cscanada.org

On the Relationship Between the Specialty Set-Up of Secondary Vocational Education and Regional Industrial Structure in Tibet

GUO Can[a],*; PENG Ou[b]

[a]Faculty of Education, Southwest University, Chongqing, China.
[b]Lecturer, School of Early Childhood Education of Chengdu University, Sichuan, China.
*Corresponding author.

Supported by Humanities and Social Sciences Planning Projects of the Ministry of Education "a Study on Adaption of Education in Tibet Under the Background of the Characteristic of Tibet—Based on Parsons's AGIL Model" (10YJA880040).

Received 18 October 2014; accepted 24 February 2015
Published online 26 March 2015

Abstract

The specially set-up of vocational education should meet the demand of regional economic development to adapt the requirement of adjustment, promotion and optimization of regional industrial structure. By investigation of the specially set-up of secondary vocational education and the regional industrial structure, we found that specialty of secondary education does not meet the demand of economic development. And the number of enrollments and the proportion of economic structure is uncoordinated, so it could not fulfil the talent demand for economic development. Therefore, it needs to optimize the structure of specially set-up to adapt the requirement of regional economic development. Therefore, it needs to change their adaptability and promote the development of vocational education and the economy in Tibet.

Key words: Tibet; Secondary vocational education; Specialty set-up; Industrial structure

Guo, C., & Peng, O. (2015). On the Relationship Between the Specialty Set-Up of Secondary Vocational Education and Regional Industrial Structure in Tibet. *Canadian Social Science, 11*(3), 244-248. Available from: http://www.cscanada.net/index.php/css/article/view/6627
DOI: http://dx.doi.org/10.3968/6627

INTRODUCTION

There is a close relationship between the specially set-up and regional industrial structure, so regional industrial structure is always a market indicator for specially set-up. Thus, the majors set-up of secondary vocational education always follow the steps of the regional industrial structure to train the professional and technical talents who can meet the demand of the local economic development. As a result, scientific and reasonable majors set-up are a cornerstone to the vocational education development and stability, which cause the trained talents whether be accepted by the market or not. In order to get well informed of the adaptation of majors set-ut of secondary vocational education to regional industrial structure in Tibet, the author of this paper analyzed the economic structure of Tibet and the specialty set-up to meet the talents' requirements as well as the relationship between them.

1. THE RELATIONSHIP BETWEEN REGIONAL INDUSTRIAL STRUCTURE AND SPECIALTY SET-UP

Different economic structures have different demands for education, and it also has different requirements on the quantity and quality of talent demand. As a junior and medium level talent training base, the secondary vocational school set up its majors should meet the demands of industrial structure. So the demand of the quality and the structure of the labor force must be integrated into the school's specialized training goal. The school must take the market's demand as its guide. Only the secondary vocational school which satisfies the requirement of industrial structure and fits the local industrial characteristic to set up specialties could train

talent who can meet social needs and promote the regional economic development steadily in a long term.

1.1 Industrial Structure Influences and Restricts the Majors Set-Up of Secondary Vocational School

The adjustment of specialty and curriculum at the school, to some extent, should meet the demand of economic structure, and it is also the response to the practical requirement. The students are "products" of school. If the students have been employed, it means the products are accepted by the market. However, if the students cannot be employed, it equivalent to the products is overstocked. So as a producer, the school should adjust the category of "products" or improve the quality of "products". Due to natural and historical reasons, the development of economic structure around the world is not balanced, and the characteristics of the industrial structure of different regions also have different requirements for the local labor force structure. Therefore, the specially set-up of secondary vocational school also must be adjusted according to the characteristics of the local industrial structure, so as to make the two closely integrated. For example, in Northeast China, its obvious advantage is heavy industry, so the schools should give priority to the development of heavy industry and set up relevant specialty; on the contrary, Guangdong province in south China, which carried Reform and Open-up Policy earlier, and it attracted more foreign investment and had more developed processing industry, so the schools should set up some majors of light industry. The characteristics of the industrial structure are not invariable. With the economic development and improvement of productivity, to some extent, there are some changes in the industrial composition. For example, China was a big agricultural country when the PRC was founded. Due to the second and third industry were underdeveloped, the primary industry occupied a leading position in the national economy. But with the passage of time our focus shifted to economic construction gradually and took an increasing emphasis on industry, then the proportion of the primary industry gradually declined and the second industry gradually occupied the economically dominant. This change would be bound to affect the specially set-up of schools. As market's demand for a labor force of agriculture gradually diminished, so the demand for labor forces of the second industry and third industry gradually increased. And vocational schools should meet the labor market's demand to adjust its specially set-up timely. It needs to reduce the proportion of agricultural majors and increase some majors of second industry or service sector in order to train different kinds of talents for the development of various sectors of the national economy.

Tibet is dominated by agriculture and animal husbandry. The unique natural environment forms its unique topography, soil and vegetation, climate and other natural conditions determine the unique mode of production in Tibet. Its kind of production makes its economic structure of the demand for labor also need some relevant primary and intermediate technical talents, for example, the nomadic herding on northern Tibet Plateau, the farming on southern Tibet Valley and the semi-farming and semi-pasture on the high mountains and deep valleys of eastern Tibet. Even if the regional economic structure in Tibet is dominated by agriculture and animal husbandry, but the gap of productive force is big in different regions, so the economic structure is quite different in different areas. Thus the demands for talents are also have some typical regional characteristics. Along with the Western Development Program in China, there are a large number of national investment to Tibet in transportation, communication, energy, environment and other infrastructure and all kinds of industries, commerce, service industry. Labor force of Tibetan market not only will be expanded rapidly in scale, but also will face major changes in the internal labor force structure. Especially during the 10th five year plan in China, Tibetan economic development put forward six pillar industry was put forward in Tibet: tourism, Tibetan medicine, characteristic bio-industry of plateau and green food industry, processing industry of agricultural and livestock products and folk handicraft industry, mining industry, building materials industry. Therefore, specially set-up of secondary vocational education in Tibet also should be adjusted.

1.2 Specialty Set-Up Affects the Formation of the Industrial Structure

Vocational education has characteristics of adaptation and advancement. On the one hand, industrial structure decides and restricts the specially set-up, on the other hand, the latter can also promote the optimization and upgrading of the industrial structure.

The effect of reasonable specialty structure on social industrial structure is not passive acceptance but positive adaptation. When productivity level increases gradually and the industrial structure changes, the specially set-up must be adjusted, so as to match with the industrial structure and to realize their positive interaction. Because the cultivation of talents has hysteretic nature, it takes a period of time for students of vocational schools enter the society. So in the process of adjustment in specially set-up, it is not only necessary to adapt specially set-up with the current industrial structure of society, but also moderate advance. Therefore, when secondary vocational schools set up specialty, it needs scientific analysis and forecast of the market.

Although the industrial structure determines the specially set-up of vocational school, but the latter also optimize and upgrade industrial structure, and then promotes the economic development. Specialty set-up restricts the formation of types and professional

quality of talent. If the specially set-up is reasonable and meets the needs of local economic development, the skilled person will be able to meet the needs of the local industrial structure and optimize and upgrade industrial structure. However, if the students cannot be employed, it is equivalent to the product inventory and backlog occurs. This is not only wasted educational resources, but also hinders the development of productivity and curb the optimization and upgrading of economic structure. For example, the world-famous American "Silicon Valley", which eventually became well-known electronic industrial base, has some professional supports by Stanford University in California, the California Polytechnic University, etc. If the specialty set-up meets needs of local economic development, the schools can not just pursuit some so-called "hot specialty" in a utilitarian way and ignore the needs of the local economy, the students would be able to put their knowledge to practice.

2. THE CURRENT SITUATION AND TENDENCY ABOUT THE DEVELOPMENT OF ECONOMIC STRUCTURE AND ITS REQUIREMENTS FOR TALENTS

There is a close relationship between students' employment of vocational school and the requirements of local economic structure to talented person in Tibet. Along with continued investment by our country to Tibet, especially during the 10th five year plan in China, it economic development put forward six pillar industries: tourism, Tibetan medicine, characteristic bio-industry of plateau and green food industry, processing industry of agricultural and livestock products and folk handicraft industry, mining industry, building materials industry. Economic industrial structure optimization and upgrading can accelerate gradually, and the output in the second and service industry and the ability to absorb employment would rise constantly too. So the specially set-up of vocational secondary vocational school in Tibet needs to make some appropriate adjustment. However, at present, from the number of enrollment, the number of teacher, student-teacher ratio and professional point of industrial subjects of vocational school in Tibet, the relationship between vocational specialty set-up and economic structure is not close, and it can not adapt to the demands of talents for economic development well.

With the Western Development Program in China, the pace of modernization also accelerated in Tibet, and the productivity level has been constantly improved, the industrial structure has been continuously optimized and upgraded to. Especially during the 10th five year plan in China, the primary industry, secondary industry and tertiary industry of Tibet in the proportion of GDP are constantly changed. It promoted different demands of labor structure in Tibet. Analysis of the trend of the gross production of the three major industries in the proportion of GDP and the absorbing ability of employment in Tibet in recent years would be conducive to understand the trend of economic development and the change of talent requirements for labor market, to guide the specialty set-up and the arrangement of enrollment pertinently.

To grasp the trend of economic structural development in recent years in Tibet, the author analyses its statistics of the proportion of the three major industries in GDP since 2006 to 2012 and the its changes at a number of related employment. According to the Tibet Statistical Yearbook （as indicated in Figure 1), the output of the primary industry in Tibet accounts for the proportion in GDP was continuous declined, which from 17.5% in 2006 to 11.5% in 2012 and declined 6 percent; The output of the second industry accounts for the proportion in GDP was gradually increased, which from27.6% in 2006 to 34.6% in 2012 and rose 6 per cent; The third industry in a stable trend in GDP, had been fluctuating around 54%.

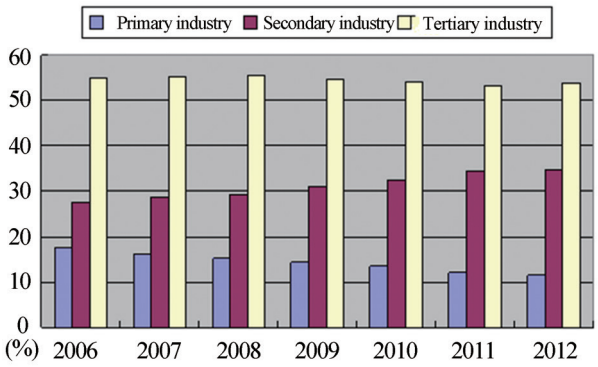


Figure 1
The Proportion of Tibetan Different Industriest in GDP From 2006 to 2012

Three major industries accounted for different proportion in GDP, so there are some changes about the ability of absorbed employment and the number of employment. First of all (as indicated in Figure 2), on the whole, the total employment in Tibet increased continuously. It benefited from the rapid economic development in Tibet. The relative number of employment and the proportion of employment of the primary industry declined year by year, the proportion ,from 58.9% in 2006 to 46.3% in 2012, had decreased 12.6 per cent; The proportion of employment of the secondary sector had also increased with the increased share of production of the secondary industry in GDP, which had risen to 3.8 per cent from 9.6% in 2006 to 13.4% in 2012; The share of number of employment of the tertiary industry had risen to 8.9% from 31.4% in 2006 to 40.3% in 2012. This fully shows that the ability to absorb employment of the second and tertiary industries in Tibet is growing, and the labor force transfers from the primary industry to the secondary and service industry. With the development of the

secondary industry and the tertiary industry, the quality and quantity of the required relevant professionals will also continue to improve, which indicates a direction way to personnel training in the secondary vocational school in Tibet.

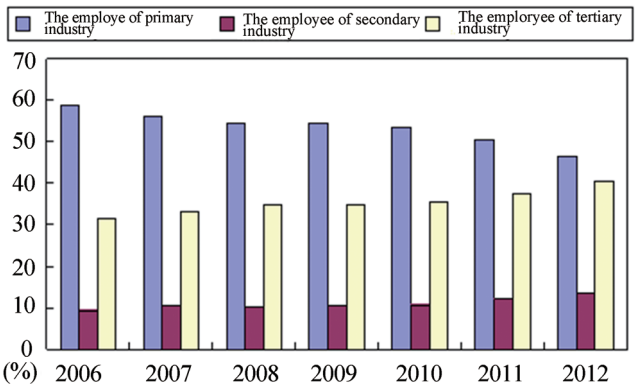


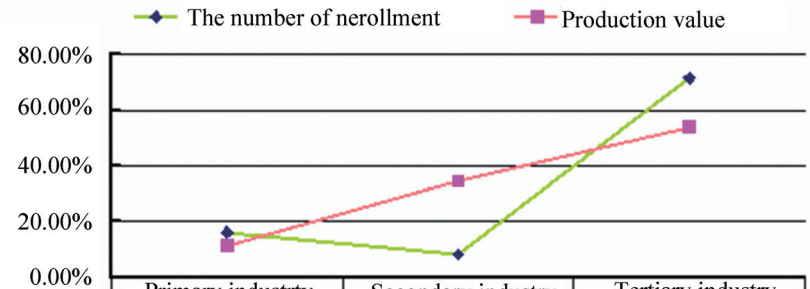
Figure 2
The Composition of Employee in Three Industries From 2006 To 2012

3. ANALYSIS OF THE RELATIONSHIP BETWEEN SPECIALTY SET-UP OF SECONDARY VOCATIONAL SCHOOL AND THE REQUIREMENT OF TALENT IN TIBET

In order to analyze the specially set-up of secondary vocational school and regional economic structure whether reasonable or not, it is necessary to understand the situation of specially set-up of secondary vocational school in Tibet. The author respectively analyzes four aspects of the secondary vocational school: the enrollment of each subject, the number of teacher of each subject, the student-teacher ratio of each subject and the specialty of each subject. First, understand the subject division standard, according to new his catalog of specialty set-up of secondary vocational school, classified the specially set-up of secondary vocational school as its corresponding industry. The classification standards of specialty are: the primary industry mainly relates to the class of animal husbandry and fishery; the secondary industry includes 6 categories, such as the resources and the environment, energy and new energy, civil engineering, manufacturing, petrochemical engineering and light textile food; the tertiary industry involves 11 categories, such as transportation, information technology, medicine and health, leisure health and financial trade, tourism services, culture and art, physical education and health care, education, legal service, public management and service(other categories of the Specialty Catalogs are not included in any industry).

3.1 The Economic Structure and Number of Enrollment of Each Industry Are Uncoordinated

The size of the secondary vocational school in Tibet remained stable in the recent years. The number of enrollments in the region from 2010 to 2013 was 7,319, 5,368, 7,901 and 7,901. In order to facilitate the analysis of the relationship between the enrollment and the structure of the economy, the author only analyzes the number of secondary vocational schools' enrollment in 2012 using the relevant data of *Tibet Statistical Yearbook (2013)*. Overall, to a certain extent, there are misplacement of the proportion of talent training for each major of secondary vocational school and personnel structure required for economic development in Tibet (as indicated in Figure 3). So these schools need to constantly adjust their talent training programs to meet the needs of economic development in Tibet.



	Primary industrty	Secondary industry	Tertiary industry
The number of enrollment	16.39%	8.30%	71.60%
Production value	11.50%	34.60%	53.90%

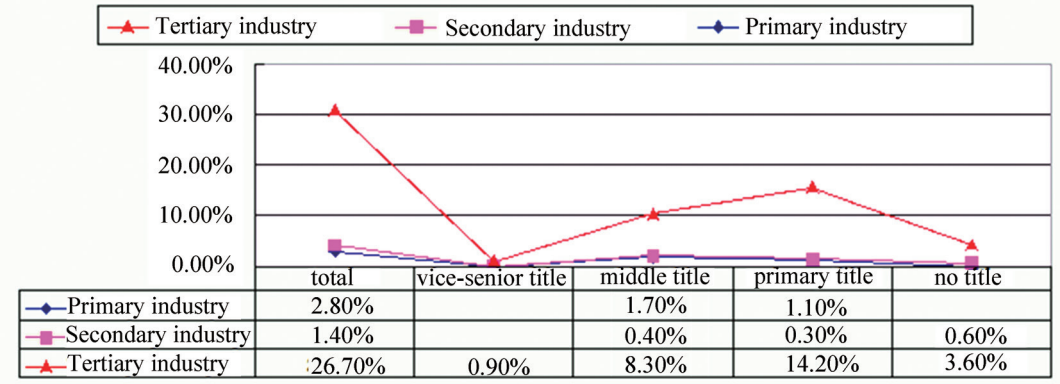
Figure 3
The Number and Proportion of Enrollment About Each Industry of Secondary Vocational School in Tibet in 2012

3.2 Faculties Can Not Satisfy Requirements of Talent Training

Secondary vocational schools shouldered important mission, it should train junior and medium skilled talents for production, construction, management and service. The level of personnel training not only related to the survival and development of the school, but also related to a regional modernization. High qualified teachers are

the basis of secondary vocational education and safeguard the quality of it. It is also the key of teaching reform and principal part of teaching implementation, and its quality determines the quality of teaching.

Through the analysis of secondary vocational school of different majors, such as the teacher ratio, positional titles, etc. (as indicated in Figure 4), the overall quality of teachers of secondary vocational schools in Tibet are relatively low, only 84 people have middle and over middle titles, it just 10.4 % of the entire teacher. It can not meet the needs of the construction of secondary vocational schools in Tibet, and can not reach the requirement put forward by the Ministry of Education which stipulates that the proportion of faculties with professional qualifications or vocational qualifications should be more than 50% during the "Eleventh Five-Year". At present, There are 632 teachers and 196 full-time instructors in secondary vocational schools in Tibet. Among them, 18 teachers' profession concerning with primary industry, accounted for 2.8% of total teachers, and just 1.7% of total have middle title; there are 9 teachers with the secondary industry, accounted for 1.4% of the whole teachers and only 0.4% of total have middle title; there are 169 teachers about the tertiary industry, accounted for 26.7% share of total teachers, and only 0.9% teachers have vice-senior title and 8.3% teachers have middle title. The proportion of teachers in various industries is low, and the proportion of positional titles is low too. It does not have the requirement for training highly qualified person and does not meet the demand of the entire economic structure of talent.



	total	vice-senior title	middle title	primary title	no title
Primary industry	2.80%		1.70%	1.10%	
Secondary industry	1.40%		0.40%	0.30%	0.60%
Tertiary industry	26.70%	0.90%	8.30%	14.20%	3.60%

Figure 4
The Proportion of Teacher's Positional Titles in Various Industries of Secondary Vocational School in Tibet

CONCLUSION

By analyzing the economic structural development and the investigation of the current situation and the tendency of development of the requirement for talent in Tibet, we found that the relationship between specialty set-up of secondary vocational school and regional economic structure is not close. Therefore, the secondary vocational school in Tibet should take the initiative to adapt to the needs of development of pillar industry, advantage industry and characteristic industry. It is also necessary to optimize the gradation of skilled talent training in the region, and construct a number of key specialties with good basic condition, distinct characteristic, high employment rate and the level of running school. It should closely adapt to the regional industrial structure, labor flows and the standard of school's specialty set-up. At the same time, it is urgent to adjust the structure of specialties reasonably, and vigorously developed the specialty of the excellent traditional handicrafts, modern agriculture and animal husbandry and modern service industry.

(a) Training talent for "six characteristic pillar industries" of Tibet is the fundamental purpose of vocational education in Tibet.

(b) Combining with industrial structure and social need, adjusts and set up a new specialty. The specially set-up of secondary vocational schools in Tibet requires detailed knowledge of Tibetan economic development and the evolution of industrial structure, social occupational distribution and the supply and demand of the labor market. It also needs deep investigation, argumentation, consultation, taking in the evaluation and test of the society. The specially set-up need developmental insight, superior consciousness and forward – looking, so as to avoid its hysteresis quality and parallelism.

REFERENCES

Li, Y. E., & Wu, Y. (2007). Study on the adaptability of higher vocational school specialty structure with regional industrial structure. *Vocational and Technical Education*, (31).

The Statistics Bureau of Tibet Autonomous Region, NBS Survey Office in Tibet. (Ed.). (2013). *Tibet statistical yearbook.* China Statistics Press.

Wang, F. (2010). *Research on the relation between the China's foreign trade structure and the industrial structure.* Huazhong University of Science and Technology, 2010.