An Evaluation Method of Strategy of Nationalities University

Dayun Chen¹ Yang Gao²

¹Institute of education science, Huazhong University of Science & Technology, Hubei, Wuhan, 430074,china ²College of management, Southwest University for Nationalities, Sichuan, Chengdu, 610041,china

Abstract

The Nationalities University is an important composition of the system of universities in many countries. In 21st century, the Nationalities University is faced with a good opportunity of development. This paper analyzes the location and major contents of strategy of the Nationalities University. An evaluation of strategy of the Nationalities University is presented, and this evaluation is considered as by adapting the external environment and applying the theory of comparative advantage in analyzing the rationality of strategy. The contents of this evaluation include location, subject construction, talent training, and scientific research, serve society and so on.

Keywords: Nationalities university, Comparative advantage, Strategy, Rationality, Evaluation

1. Introduction

The university plays a very important role in society development (Fredriksson, 1997; Johnstone, 2004). The strategy of university is governed signlly by the policy of government and the costs of education (Ehrenberg, 2000; Lowry, 2001; Johnstone, 2004). The national education is an important composition of the high education in many countries. For example, Chinese national high education began in 1940 in Yanan, Shanxi province, and the representative one is the central university for nationalities that is built in 1950. Since 1978, to meet the needs of training professional technical talent of minority and the developing society and economy of national area, the Nationalities University of China has improved very fast. Up to 2005, there are thirteen Nationalities Universities, and the number of student is from 7300 of 1979, increasing to more than one hundred and seventy thousands. Since 1950s, the Nationalities University has made important contribution for the steady and national area socioeconomic of the country. It's a research field that combines theory with practice of studying the evaluation of strategic option for the Nationalities University.

There are many dimensions and systems of evaluation of the reasonability. For example, As far the location of control, the evaluation can be divided into three levels, such as option reason evaluation, option course evaluation, and result evaluation and so on, in which the reason evaluation is helpful to prevent risk of strategy in advance.

This paper aims at reducing the risk of strategy of Nationalities University through the method of evaluation. After analyzing major contents of strategy of the Nationalities University, this paper studies the evaluation model of strategy of the Nationalities University according to the view of external environmental suitability and the theory of comparative advantage.

2. The major contents of strategy of the Nationalities University

The major task of strategy of the Nationalities University is to realize the comprehensive coordination of scale, quality, structure and benefit, improve the level of teaching, comprehensive ability and social reputation. The Nationalities University should stress the focal point of strategy, which is one process from coordination and balance to uncoordination and unbalance, from disequilibrium to a new coordination and new balance again. The strategy of the Nationalities University exists in the certain condition of environments which include legal regulations, university system, economic and social system, and the internal system of the university and so on

The strategy of the Nationalities University is concerned with overall development of the university. At present, the major function of each university is teaching, researching and serving society. In this paper, we mainly discuss the major functions of the Nationalities University.

Subject program and construction is not only the key of major functions of the Nationalities University, but also is the center of strategy of the Nationalities University. The clear concept is an important foundation of discussing the regularity of subject

program and construction. According to the literatures, there are three layers of subject program and construction.

- (1) Subject = university. The core of university program is subject; subject is the basic composition unit of university. The level of subject represents the characteristic of university; therefore the subject of university is very important for designing the strategy.
- (2) Subject = college or department. College or department is the major carrier of the subject of university, and carries out the organizations at the grass-roots level of subject construction. Therefore, subject program and construction is the key of development of college or department. The university should develop the creativity and enthusiasm of college or department.
- (3) Subject = teachers, professors and well-known professors. The level of one subject is usually to concentrate embodiment in teachers, especially in professors. Teacher is the foundation of subject program and construction. A good university must be with a lot of well-known teachers.

The relation between the task of subject construction and subject program and the essential factors can be expressed by the following two formulas.

- (1) Subject = scientific research + talent training
- (2) Subject =direction + talent + platform + system + achievement

The main contents of subject program and subject construction include three aspects that are as followings.

- (1) Scientific research direction and selection of subject, funds support and platform.
 - (2) Teacher troops and student troops.
- (3) Innovation accomplishment, evaluation system, management system of rewards and punishments and subject cultural (value orientation) etc.

Subject is healthy to develop the coordination that needs each aspect of system inside with harmonious. Now in subject system pay more attention to teacher troops and the subject directions such as project and accomplishment, however, it's necessary to strengthen the option of significant scientific research direction, encourage students, especially graduate students participate in the course of scientific research.

3. The model of evaluation of strategy of the Nationalities University

The evaluation of strategy of the Nationalities University belongs to social problems. In general, an evaluation system includes three parts, i.e. goal, criterion and index. This paper presents four aspects of the rationality evaluation of strategy of the Nationalities University, i.e. model construction, model explanation, index and the method of calculation etc.

3.1. Model construction

According to essential factors of the system of evaluation, a model structure of evaluation of strategy of the Nationalities University is built that is shown as Fig.1.

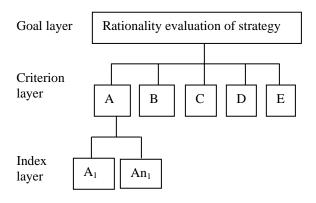


Fig.1: A model structure of evaluation.

The model of evaluation of strategy of the Nationalities University is a three layers model, and the goal layer is to evaluate the rationality of strategy, and the criterion layer includes five aspects, and the index layer will be discussed in the section 3.3.

The symbol of A, B, C, D and E in Fig.1 stands for university position, subject construction, talent culture, research and service society respectively, and the symbol of A_1 and A_{n1} stands for the factors of the index layer, i.e. the 2^{nd} index of evaluation.

The power weight of the criterion layer and index layer is one of key problems of the model also, and it's necessary to determine the power weight using a method, such as AHP, Delphi, and so on.

Because there exists much fuzzy information of the index layer of the Fig.1, the method of fuzzy comprehension evaluation is suitable to calculate the result of evaluation of strategy of the Nationalities University.

3.2. Model explanation

We built a model structure of evaluation of strategy of the Nationalities University in the section 3.1. The explanation of the three layers of the model structure is as following.

- (1) Goal layer. The goal of evaluation is to determine the reasonability of strategy of the Nationalities University, in other words, to realize the location goal of the Nationalities University that is determined by the country, and rational know with expressing the actual condition of the Nationalities University.
- (2) Criterion layer. Criterion layer includes two aspects of content, the first one is to determine the major factors that affect the strategy of the Nationalities University, which includes school location, subject construction, talent training, scientific research and service society, and these factors forms a level index of appraisement system. Another is how to definite the power weight of index, i.e. determine the relative importance of five the first level evaluation indexes with expert consulting or other methods.
- (3) Index layer. The index system of evaluation of strategy of the Nationalities University is formed by multilayer structure, and the first level index system which is called criterion layer can be divided into the second level index systems, in the same way, the second level index systems can be still divided into the third level index systems also.

3.3. Index analysis

The major discussion content of this paper is that the first level index is divided into the second level index. For evaluation index, such as school location, subject construction, talent training, scientific research and service society index, we build the second level indexes.

- (1) The second level indexes of school location. The location of the Nationalities University is the major difference of the Nationalities University and other ordinary university; therefore it's necessary to build the second level indexes corresponding to explain the characteristic of the Nationalities University. The second level index of the Nationalities University location is shown as Table 1.
- (2) The second level indexes of subject construction. Firstly, subject construction should embody the subject characteristic of the Nationalities University. Secondly, subject construction is helpful to raise the needs of service minority talent training and national area socioeconomic development. The second level index of subject construction of the Nationalities University is shown as Table 2.
- (3) The second level indexes of talent training. The student of the Nationalities University is minority mainly, and it's necessary to develop according to the

characteristic of minority student, at the same time, the talent trained wants to be able to be qualified for the needs of national area socioeconomic development. The second level index of talent training of the Nationalities University is shown as Table 3.

No.	2 nd level index	Index explanations
1	Policy request	Coincide with the law and government' policy
2	School direction	Insist on the correct school direction
3	School type	Accord with the university condition
4	School characteristic	Include minority education and serving national area
5	Strategic step	Divide into step to implement strategy
6	Resource supply	Guarantee all kinds of resource supply

Table 1: the second level indexes of the Nationalities University location

	ı	1
No.	2 nd level index	Index explanations
1	Subject	Embody subject
	characteristic	characteristic, develop other
		subject with key subject
2	Subject of	Guarantee the research of
	nationality	national subject in the
		aspects such as person,
		wealth and thing
3	Subject	Develop the subject
	specialty	specialties of meeting
		national area socioeconomic
4	Subject	Have a long-term program
	program	of characteristic subject and
		advantage subject
5	Subject self-	Subject construction is
	indent	identified and accepted
6	Teachers	Teachers troops
	troops	construction meets subject
		construction

Table 2: the second level indexes of subject construction of the Nationalities University

(4) The second level indexes of scientific research. Firstly, the scientific research of the Nationalities University should face with the needs of national area socioeconomic development. Secondly, it will be helpful for training minority science talent. The second level index of scientific research of the Nationalities University is shown as Table 4.

No.	2 nd level index	Index explanations
1	Training	Higher education based
	characteristic	minority student
2	Training link	Talent training link of
		innovation
3	Campus	Effective management and
	culture	campus culture
4	Training	Talent training social
	quality	identification level is higher

Table 3: the second level indexes of talent training of the Nationalities University.

No.	2 nd level index	Index explanations
1	Research topic	Accord with the needs of
		national area socioeconomic
		development
2	Research talent	Do good training minority
		scientific research talent
3	Research	Put forward and solve the
	content	overlapping scientific
		program
4	Policy consult	Put forward the policy of
		science and technology

Table 4: the second level indexes of scientific research of the Nationalities University.

(5) The second level indexes of service society. The major task of service society of the Nationalities University is to help the government of national area to solve the technology and management problems that are faced with in the course of development. The second level index of service society of the Nationalities University is shown as Table 5.

No.	2 nd level index	Index explanations
1	Service goal	Help the government of
		national area to solve the
		technology and
		management problem
2	Service way	Investigation, forum,
		consulting, science and
		technology lecture etc.
3	Service benefit	Serve in every cause of
		national area, produce better
		socioeconomic benefit
4	Service value	Helpful for solidarity and
	of outside	the understanding of each
		nation

Table 5: the second level indexes of service society of the Nationalities University

3.4. The method of calculation

In this paper, we put forward a method of calculating the result of evaluation strategy of Nationalities University based on the fuzzy comprehensive evaluation.

The main steps of the method based on the fuzzy comprehensive evaluation are as follows.

Step 1, the term sets of evaluation is established by the experts or evaluators, and set up to adopt five levels quantity table, such as very good, good, general, bad, very bad.

Step 2, the experts or evaluators according to the section 3.3 give the matrix of single factor of each criterion layer. There are five matrixes of single factor in this paper.

Step 3, the experts or evaluators establish the matrix of power weight of each evaluation factor through different methods. The matrixes of power weight include one matrix of the criterion layer and five matrixes of the index layer.

Step 4, to calculate the result of evaluation, the key problem in this step is to choose the fuzzy operand according to the application.

Step 5, the result of evaluation is obtained according to the principle of the most membership.

4. Conclusions

It's helpful to reduce the risk of strategy of the University Nationalities by evaluating reasonability. After analyzing the strategic location and major contents of Nationalities University, This paper discussed the evaluation model of reasonability of strategy of the Nationalities University. According to the concept of reasonability and the theory of comparative advantage, we established the structural model, model explanation and index of evaluation strategy of Nationalities University. It's useful to explain Nationalities University making development strategic decision accord with objective conditions. The work of this paper is helpful to research the strategy of the Nationalities University also.

Acknowledgment

We gratefully acknowledge the support of National Social Science Foundation of Sichuan (SC06A013).

References

[1] R. G. Ehrenberg, *Tuition Rising: Why College Costs So Much.* Harvard University Press, Cambridge, 2000.

- [2] P. Fredriksson, Economic incentives and the demand for higher education. *Scandinavian Journal of Economics* 99:129-142, 1997.
- [3] D.B. Johnstone, The economics and politics of cost sharing in higher education: comparative perspectives. *Economics of Education Review*, 23: 403–410, 2004.
- [4] R.C. Lowry, The effects of state political interests and campus outputs on public university revenues. *Economics of Education Review* 20: 105-119, 2001.
- [5] D. W. Surry, D.C. Ensminger, and M. Haab, A model for integrating instructional technology into higher education, *British Journal of Educational Technology*, 36 (2): 327-329,2005.