Research on Performance Evaluation of Guangxi Strong Foundation and Excellence Program

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Abstract. In order to comply with the national implementation of innovation driven development strategy, promote the comprehensive reform of Higher Education, Guangxi people's government decides to implement the Guangxi higher education foundation program and Guangxi higher education excellence program (hereinafter referred to as the Strong Foundation and Excellence Program). Guangxi Strong Foundation and Excellence Program is a new project of promoting innovation and entrepreneurship education in Colleges and Universities, at present, there are few scholars construct program performance evaluation system for Strong Foundation and Excellence Program. In order to evaluate project performance of the 16 programs of Strong Foundation Program and 10 programs of Excellence Program, referencing the performance evaluation of higher education funds and the performance evaluation of university scientific research projects, I construct the index system of performance evaluation of Guangxi strong Foundation program and the excellence program, and use analytic hierarchy process to weight the index system, which provides the theoretical basis for the classification support, classification construction and classification evaluation management system of Guangxi Autonomous Region.

1. Introduction

China's investment in education funds is increasing year by year, and the special funds of colleges and universities account for a large part of the education funds\cite{1}. The special funds for colleges and universities refer to the special funds designated by the relevant departments of the government and the annual budget arrangements of the universities, which have the specified items and purposes other than the basic expenditures. With the expansion of the scale and enrollment of colleges and universities, the government pays more attention to the investment and use of special funds for higher education\cite{2}. In order to strengthen the management of special funds, it is necessary to establish a sound performance appraisal system to ensure the effective use of funds\cite{3}. As a part of public finance, the special funds of colleges and universities accept the supervision and evaluation of the effect of the government and the public, linking the financial allocation to the performance evaluation of special funds for Universities is of great significance to improve the level of development of higher education and improve the efficiency and effectiveness.

In order to comply with the national implementation of innovation driven development strategy, promote economic quality and efficiency upgrades, promote the comprehensive reform of Higher Education, Guangxi people's government decides to implement the Guangxi higher education foundation program and Guangxi higher education excellence program (hereinafter referred to as the Strong Foundation and Excellence Program), promotes innovation and entrepreneurship education reform in Guangxi colleges and universities, and further enhances the level of development of higher education in Guangxi. In order to improve the guidance and leverage of financial capital, the special funds allocated funding level and grade performance associate with evaluation result of Strong Foundation and Excellence Program. Therefore, the performance evaluation of special funds becomes more and more important. This paper mainly evaluates university special funds...
performance of Guangxi higher education foundation program and Guangxi higher education excellence program based on the program.

2. Construction of Performance Evaluation Index System of Strong Foundation and Excellence Program

Strong Foundation and Excellence Program are divided into Strong Foundation Program and Excellence Program. Strong Foundation Program combines school support and school special, supports each university according to the school’s career development planning and positioning planning, and focuses on strengthening the construction of characteristic disciplines closed with the development of the economic locally, in order to promote the overall level of school education. Excellence Program guides universities to serve the country, autonomous region in demand, and builds a number of key disciplines professional, innovation platform, high level team sprint influencing at home and abroad to reach advanced level of region and domestic. In order to evaluate project performance of the 16 programs of Strong Foundation Program and 10 programs of Excellence Program, this paper establishes Strong Foundation Program performance evaluation index system and the Excellence Program performance evaluation index system.

2.1 Index Selection.

Many domestic scholars analyze the performance of college education funds and special funds expenditure, and establish the evaluation index system. In the background of higher education in Guangxi, Zhu Xia and Wang Huiling[4] construct the performance evaluation index system from three aspects: project decision-making, project management and project output and benefit. Xu Yun and Yang Jingyuan, Yang Lianfen and Tang Yun[5,6] from economy, efficiency, effectiveness, fairness four aspects and personnel training, project implementation, project funding and indirect social influence aspects to build the performance evaluation system of scientific research projects in Colleges and Universities, using the analytic hierarchy process to weight the index system. Liu Huahai, Chen Xiaofeng[7,8] construct the performance evaluation index system of scientific research projects in Universities from the project foundation, the project level, the effect of the project and the characteristics four aspects, and the basis of scientific research, scientific research input and output, research process four aspects, using the analytic hierarchy process and expert evaluation method to weight the index. At present, China's performance in higher education funds and special funds to construct evaluation index system has not formed a unified standard, various departments and schools choose different evaluation index to evaluate the performance of different projects, and there are some differences in the selected indicators. Most of the third grade indexes used to evaluate the performance of the project are qualitative, so the whole performance evaluation system is vague and inaccurate; in addition, Strong Foundation and Excellence Program is a new project of promoting innovation and entrepreneurship education in universities, there are few scholars construct the performance evaluation system for it. Referencing the performance evaluation of higher education funds and the performance evaluation of university scientific research projects, I construct the index system of performance evaluation of Guangxi strong Foundation program and the excellence program, and use analytic hierarchy process to weight the index system.

In order to guarantee the validity, economy and efficiency of the performance evaluation of Strong Foundation and Excellence Program, we set up the index system of performance evaluation from the process of the project management, output and benefit three aspects. The performance evaluation index system includes project approval, project management and project performance three first grade indexes, on the basis, selecting the corresponding indicators of second and third grade indexes.

First of all, the first phase of the project is proposal stage; the establishment of each project must go through the declaration, screening approval to approve the project process. The rationality of the project objectives includes the rationality of performance objectives and the clarity of performance indicators, the rationality of performance objectives is used to evaluate whether the performance goal setting is reasonable and objective, and whether it is consistent with the actual situation of the
the clarity of performance indicators is used to evaluate whether the performance indicators based on performance objectives are clear, detailed and quantitative. The standardization of decision-making process includes the material compliance and the standardization of the procedure, the material compliance is used to evaluate whether the documents submitted by the project meet the needs of the province's economic and social development and education reform and development plan; the standardization of the procedure is used to evaluate whether the application of project and the establishment of the process are in line with the relevant requirements, to reflect and assess the proposal stage.

Secondly, the second stage is the management process; the project management process reflects the project capital investment, the use and control of the situation, the organization, the construction and implementation of the management system and so on. Financial personnel should shoulder the project funds in place, the use of progress and expenditure range of real-time control, timely grasp of the use of funds and properly arrange capital expenditure, we can use rate of funds in place in time, the rate of capital in place, the utilization rate of funds and the efficiency of funds, the rate of illegal funds and the sound management system and other indicators to evaluate the fund management. The organize implementation of the project includes staffing rate and equipment on time rate to evaluate the impact of the project in time; Compared with the Strong Foundation Program, Excellence Program is more focused on the discipline construction and scientific research performance evaluation, therefore, the organization and implementation of the Excellence Program also include scientific research indexes to reflect the level of the overall quality of teachers.

Finally, the project performance evaluation is the last stage, assessments implementation process, project output and project results three aspects. The output of the project reflects Project output, Strong Foundation Program focuses on school teaching, Excellence Program is more focused on the discipline construction and scientific research performance evaluation, therefore, the output of the two programs are different.

2.2 Index Weighting.

The analytic hierarchy process is to decompose the elements related to the decision problem into the target, criterion, scheme and so on, on this basis, the decision making method combines qualitative and quantitative analysis. This method is based on the analysis of the nature of complex decision problems, the factors and their internal relations making use of less quantitative information to make decision process, thus, the method is provided for the complex decision making problem with multiple objectives, multiple criteria or no structural characteristics, and the utility model is especially suitable for occasions where the decision result is difficult to be measured accurately. Therefore, this paper uses AHP to determine the weights of indicators at all levels. The weight of the index system is given by using the method of analytic hierarchy process, as shown in Table 1.

<table>
<thead>
<tr>
<th>First grade indexes</th>
<th>Weight</th>
<th>Second grade indexes</th>
<th>Weight</th>
<th>Third grade indexes</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set up the project</td>
<td>0.25</td>
<td>Project objectives</td>
<td>0.5</td>
<td>The rationality of performance objectives</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Decision-making process</td>
<td>0.5</td>
<td>The clarity of performance indicators</td>
<td>0.5</td>
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<tr>
<td>Project management</td>
<td>0.25</td>
<td>Money management</td>
<td>0.6</td>
<td>Material compliance</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The standardization of the procedure</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Rate of funds in place timely</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The rate of capital in place</td>
<td>0.1</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>The utilization rate of funds</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>The efficiency of funds</td>
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<td>The rate of illegal funds</td>
<td>0.2</td>
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<td></td>
<td>The sound management system</td>
<td>0.2</td>
</tr>
</tbody>
</table>
3. Conclusion

The study on the performance evaluation system of Strong Foundation and Excellence Program is in the exploratory stage. Due to the lack of system and unified standard, there is no reference to the index system, the consciousness of choosing subjective is strong, therefore, and the scientifcity and rationality of the evaluation indexes are still to be tested. In this paper, when we use analytic hierarchy process to calculate the weight of the index, the subjective judgment of the judgment matrix may affect the objective justice. Fully consider human factors, strive to establish a more objective and fair evaluation system, and minimize the impact of subjective opinion on the evaluation results will be the focus of the future research work.
4. Acknowledgment

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5. References


