A Comprehensive Quality Evaluation System for University Students Based on Teacher Performance Coefficients

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Abstract: The comprehensive quality assessment of university students is an important method to promote the comprehensive development of the moral, intellectual and physical qualities of university students. There are many shortcomings in the current comprehensive quality evaluation of college students in China. In this paper, after the introduction of teacher performance coefficient in the comprehensive quality evaluation system of students, the theoretical framework of the system is more complete, and students' performance in school is more positive, which has achieved better results.

Keywords: Tertiary education, Comprehensive assessment, College students

1. Introduction

At present, more and more universities realize that comprehensive assessment of college students is an important way to promote the overall development of college students and cultivate excellent students [1]. They are actively trying to construct and improve the comprehensive quality assessment system for college students in theory and practice. However, the current comprehensive quality assessment system of college students is difficult to reflect the real situation of students' knowledge, morality, ability, physical and mental quality comprehensively, which also has a negative impact on the function of the comprehensive quality assessment system of college students.

The United States is a typical country in the world that implements comprehensive quality assessment for university students, and the American system of comprehensive quality assessment for university students has had an important influence on the direction of basic education. Under the guidance of this system, students are generally able to organise their educational and teaching activities in accordance with the essential laws of education, and their development is more comprehensive and balanced. In May 2000, the QAA published its Code of Practice for the Assurance of Academic Quality and Standards in Higher Education, Part 6 of which provides guidance on the assessment of the overall quality of students and their practice. In May 2000, the QAA published its Code of Practice for the Assurance of Academic Quality and Standards in Higher Education [2].

In this paper, with the aim of comprehensively examining students' learning, stimulating their enthusiasm for learning and promoting their all-round development, the exploration and practice of the comprehensive quality assessment system for students based on teachers' performance coefficients is carried out. At present, the comprehensive quality assessment of students is mainly based on the evaluation method of students' performance and students' mutual evaluation results, and the evaluation index is relatively single, which cannot accurately reflect the comprehensive quality of students and adapt to the education policy of the new era [3]. The assessment of students' overall quality should be based on three dimensions: knowledge and skills, process and methods, and emotions, attitudes and values, of which students' daily performance is an important indicator, such as students' life performance and classroom performance. Based on the above-mentioned problems, this paper carries out the exploration and practice of a comprehensive quality assessment system for students based on the performance coefficient.
2. Theoretical framework of the system

2.1 Diversity of evaluation subjects

In the traditional comprehensive quality evaluation system for university students, students are the main subject of evaluation. The teachers and counsellors have the most say in the students' performance in school, so this system proposes a teacher performance coefficient to increase the evaluation of academic performance and learning attitude of students by the teachers in charge of classes, and the evaluation of daily performance of students by the counsellors. This will give a fuller picture of the students' attitude to learning and their daily performance in school.

2.1.1 Teacher assessment

Teachers' assessment of students is an important task, and the results are directly related to students' growth and development. Teachers are required to grasp the assessment standards and methods and focus on teaching according to students' abilities, as well as to communicate fully with parents and students to promote the improvement and upgrading of education and teaching. Teachers' assessment should be objective, fair and scientific, and at the same time should be tailored to the needs of the students.

**Assessment content:** Teachers should assess students in a number of areas, such as academic performance, overall quality, practical ability and creative awareness. At the same time, the content of assessment should vary according to grade, major and course, reflecting the principle of teaching according to students' abilities.

**Assessment methods:** Teachers can assess students in a variety of ways, such as oral assessment, written assessment, examination assessment and homework assessment, which can be chosen according to different teaching contents and assessment purposes.

**Assessment criteria:** The criteria used by teachers to assess students should be clear, specific and operational, avoiding ambiguity or subjective assumptions. At the same time, assessment criteria should be in line with relevant national laws and regulations and the school's educational and teaching requirements, and be conducive to promoting the all-round development of students and improving the quality of teaching.

**Assessment process:** The process of teacher assessment of students should be timely, comprehensive and continuous, avoiding one-off sampling or calculation. Evaluation should continue throughout the teaching process, providing timely feedback and guidance to students to help them identify their strengths and weaknesses and improve them.

**Evaluation of effectiveness:** The effectiveness of teachers' assessment of students should be visible and quantifiable, while the results should provide students with targeted suggestions for improvement and help them achieve personal growth and development.

2.1.2 Student evaluation

Student mutual evaluation refers to students evaluating each other and giving specific suggestions and recommendations for improvement. Student mutual evaluation can promote teaching quality and teaching reflection and improvement, enhance students' sense of participation and belonging, establish a good communication channel between teachers and students, as well as provide students with an objective and fair evaluation standard and promote students' self-improvement. The following are steps on how students can assess each other:

**Determining the scope of mutual assessment:** firstly, the scope of mutual assessment needs to be clarified, which can be students from the same class, different majors or different years.

**Defining evaluation criteria:** Defining evaluation criteria is an important prerequisite for mutual assessment. The evaluation criteria should be objective, comprehensive, specific and able to cover all aspects of the student's life.

**Conducting mutual evaluation:** Students can evaluate each other anonymously or in their real names, the anonymous method allowing students to express their opinions more freely, while the real name method helps to enhance the seriousness and authority of mutual evaluation. Students can evaluate their classmates according to the evaluation criteria and give specific suggestions and recommendations for improvement.

**Aggregate and analyse the results:** After completing the mutual assessment, all the assessment
results need to be aggregated and analysed to understand the general feedback and problems of the students and to take measures to improve the quality of teaching.

Feedback and improvement: The results of mutual assessment need to be fed back to students in a timely manner to encourage them to build on their strengths and correct their weaknesses, and to promote mutual progress. Feedback to teachers is also needed to provide reference for improving teaching and learning.

2.2 Multidimensional evaluation content

2.2.1 Academic achievement

The assessment of university students' academic performance should reflect their learning level and subject competence, and needs to be objective, comprehensive and fair, while also focusing on the cultivation of students' comprehensive quality and innovative ability, not only on their knowledge level, but also on their thinking ability and innovation. The following are the methods for evaluating the academic performance of university students under this system:

Examination evaluation: Examination evaluation is one of the most common ways of evaluating university students' academic performance, through final examinations, mid-term examinations and assignment assessments.

Classroom assessment: Teachers can assess students' performance in class in terms of participation, quality of discussion, questions asked, and ability to summarise and review.

Project evaluation: For specific courses or projects, appropriate evaluation criteria can be set, for example in terms of group discussions, lab reports, research papers, etc.

Credit evaluation: The evaluation of students' academic performance under the credit system also involves the acquisition of credits, including compulsory courses, electives and general education courses.

Scholarship evaluation: The school can award scholarships based on academic performance, thus motivating students to study harder [4].

2.2.2 Innovation in practice

The evaluation of university students' practice innovation refers to the assessment of the performance of university students' participation in research projects, social practice, voluntary service and other practical activities [5]. The evaluation of university students' practical innovation should be carried out from multiple perspectives and dimensions, focusing on both the results and the quality and process; teamwork as well as individual ability. The evaluation can be used to improve and develop the students' practical innovation ability in a comprehensive manner. The following is the approach of this system to the evaluation of practical innovation of university students:

Evaluation of results: For scientific research projects, the results can be evaluated based on published papers, obtained patents, competition results, etc. For social practice and voluntary service, the evaluation can be based on practice reports, planning plans, practical results, etc.

Quality assessment: In addition to outcomes, students can also be assessed in terms of quality, such as teamwork, practical and creative skills, and social responsibility.

Experience Sharing: Students are encouraged to share their practical experiences, and their experiences and feelings are collected through experience sharing to reflect their enthusiasm and motivation to participate in practice.

Self-evaluation: Students can self-evaluate their practical activities so that they can better summarise their experiences and shortcomings in order to better innovate their practical activities.

2.2.3 Ideological and moral character.

The evaluation of university students' ideological and moral character needs to be conducted from multiple perspectives and dimensions, focusing on both student outcomes and the process and development of students. Through evaluation, students can be motivated to better improve their ideological and moral qualities and strengthen their self-management and cultivation. At the same time, educational institutions and society need to give more support and encouragement to students to help them better fulfil their roles and contribute to society [6]. The following are the methods of evaluating the ideological and moral character of university students under this system:
Psychological assessment: Schools can use psychological assessment to evaluate students' psychological status in areas such as emotional management skills, stress tolerance and interpersonal communication skills.

Activity evaluation: Schools can evaluate students' sense of social responsibility and teamwork based on their participation in social practices, volunteer services and other activities.

Daily performance assessment: For daily learning, life and behaviour, teachers can assess students' ideological and moral performance based on observations, records and conversations.

Social evaluation: Students' moral character is also evaluated and valued by society in terms of awards, honours, public reputation, etc.

2.2.4 General Ability

Comprehensive ability assessment refers to the assessment of students' verbal, organisational and leadership skills, reflecting their overall ability and potential. The evaluation of students' comprehensive ability should be diversified, comprehensive and specific, focusing on students' actual performance and potential, while different evaluation methods need to be adopted for different aspects of ability. The following methods are used to assess the overall ability of students under this system:

Listening, reading and writing evaluation: for language expression ability, which can be assessed by listening, reading and writing, including listening comprehension, oral expression, reading comprehension and writing ability, etc.

Project management evaluation: for organisational and coordination ability, students' ability in project management can be evaluated through activities such as social practice, voluntary service and scientific research projects that students participate in.

Personal development assessment: for students' personal qualities and career development abilities, students can be evaluated through their CV, self-presentation and career planning, reflecting their personal development and potential.

Leadership evaluation: For students' leadership and teamwork abilities, they can be evaluated through group discussions, team competitions, volunteer services, etc.

3. Conclusions

After the introduction of a system based on teacher performance factors, better feedback was achieved. This is reflected in two main areas:

The evaluation system is more complete. With the introduction of the teacher performance coefficient into the comprehensive quality evaluation system for university students, the weighting of academic performance grades has been relatively reduced, the comprehensive assessment is more comprehensive, and the evaluation results are more reasonable and standardised. Both student feedback and teacher feedback are more satisfactory than the original evaluation system.

Students are more active in school. After the introduction of the teacher performance coefficient into the comprehensive quality assessment system for university students, on the one hand students are more active in the classroom, more motivated to participate in various activities and competitions, and more active in the classroom atmosphere from teacher feedback. On the other hand students' daily performance is more regular and positive. Feedback from tutor teachers is more positive in terms of students' daily performance and less student conflicts. It contributes to a better campus atmosphere.

After the introduction of the system based on teacher performance coefficients, the comprehensive quality assessment system of students in the College has been improved, and students' performance and motivation in school have been greatly improved, and better results have been achieved. In future practice, it is necessary to continuously improve the size of the weights to make the system more reasonable and better serve the comprehensive quality assessment of students.

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References


