

# Principles and Practice of Constructing Diversified Student Evaluation System in Universities

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**Abstract:** In teaching evaluation, it is a very important teaching link to evaluate students' academic achievements accurately, effectively and properly. At present, there are some problems in the quality evaluation system of Chinese university students, such as single evaluation subject, single evaluation standard and outdated evaluation content, which need to be improved by determining diversified evaluation indicators, changing the functions of the evaluation system, enriching the content and methods of the evaluation system, and scientifically formulating the evaluation management system. A single student evaluation method and system can no longer meet the diversified development needs of students. Diversified student evaluation is an important means to promote university education and educational reform, and to promote and realize the all-round development of students. This paper starts with the problems existing in the curriculum evaluation system of colleges and universities, optimizes the evaluation system, establishes a more reasonable curriculum evaluation system of colleges and universities, and promotes the diversified development of higher education.

## 1. Introduction

With the rapid development of China's higher education and the rapid increase in the number of college students, higher requirements have been put forward on the quality and methods of university talent training [1]. The university must not only conduct a comprehensive evaluation of students, but also take into account the individual differences and development of students in the process [2]. Student learning assessment is the process of judging learners' learning premise, learning status and learning effect under the guidance of certain values that use scientific methods and methods to optimize learning activities and ultimately achieve learning goals [3]. From the perspective of education management, the evaluation of university education quality is an important guarantee for improving education quality. Accurate, effective and appropriate evaluation of students' academic performance is a very important part of education in educational evaluation [4]. Evaluation enables teachers to collect students' learning information in a comprehensive manner, as a basis for coordinating the curriculum, improving teaching methods and correcting teaching directions [5]. Diversified student evaluation refers to the use of various evaluation methods and paper-based examinations to evaluate students' academic performance, in order to solve the evaluation method of test-based teaching in informal situations. On the basis of objective assessment, pay attention to the strengths and strengths of each student as mentioned above, and emphasize personality development [6].

With the development of the times, universities pay more and more attention to various quality evaluation systems for students, and the training of talents is gradually diversifying [7]. As an important base for cultivating human resources, universities should pay attention to the diversity of students, actively establish an effective evaluation system, and improve the quality of university personnel training. In order to establish a diversified evaluation system for college students, universities must proceed from the actual needs of education and conduct practical research [8]. At present, China's higher education is in a new period of great development and reform. The method of evaluating students' academic diversity and differences according to local conditions can greatly promote the growth of students, which is a common concern of universities and society [9]. With the transformation of education from elite education to public education, the pressure to recruit

college graduates is becoming more and more obvious. Graduates complain about employment problems, even the best students recognized by teachers and students are not competitive in the job market [10]. This article starts with the problems existing in the existing ordinary college curriculum evaluation system, optimizes the design of the evaluation system, and promotes diversified development by establishing a more reasonable ordinary college curriculum evaluation system.

## **2. The current situation and problems of the construction of student evaluation system in Colleges and Universities**

### **2.1. Alienation of evaluation purpose and evaluation function**

In higher education, despite the existence of a large number of evaluation methods, a sound teaching evaluation system is missing, or there is a teaching evaluation system which is too formal to be effectively implemented. From this point of view, universities should strengthen reflection and constantly optimize the teaching evaluation system according to teaching needs. The development of college students' personality and all-round development complement each other. Individualized development of college students must be based on all-round development, and individualized development provides necessary conditions for all-round development. Teachers are the long-term subject of teaching evaluation, but with the continuous advancement of quality education, the authority of the evaluation subject should be decentralized, and students themselves and study groups should become the evaluation subjects, so as to ensure the diversification of the evaluation subjects and avoid influencing the evaluation results due to subjective factors of a single evaluation subject [11]. If the evaluation subject of students in colleges and universities is only limited to teachers, but lacks social employers, parents and communities, the evaluation effect on students will be greatly reduced. Therefore, it is of great significance and value to combine social employers' evaluation, parents' evaluation, community evaluation and teacher-student joint evaluation for building a diversified and differentiated evaluation system for college students.

Often testing and evaluating learners' learning status can enable teachers to take improvement measures according to specific situations to improve teaching effect. In the implementation of teaching, teachers' teaching evaluation is mainly based on result evaluation, theoretical evaluation or quantitative evaluation. This kind of teaching evaluation is unitary and lack of comprehensive understanding of students will inevitably affect students' learning situation. In other words, teaching evaluation can't evaluate students reasonably and scientifically, so it is difficult to arouse students' interest in learning, and can't let students find their own advantages. Students' evaluation in colleges and universities should take students' development as the object, and judge students' development and changing value in combination with the comprehensive needs of society and enterprises for students' quality. Its purpose is to promote the reform and development of higher education and teaching, thus providing important reference for the management and education of college students.

### **2.2. The evaluation subject lacks diversity**

In the process of evaluation, some universities use teaching evaluation system to replace students' diversified quality evaluation system, which can not reflect the characteristics of normal schools. In this process, the government put too much energy on the collection of indicators, and did not realize the importance of the personality development of normal schools, which affected the construction quality of the diversified quality evaluation system of university students. In the case of examination instead of evaluation, examination has become a synonym of teaching evaluation. Teachers can not understand the students' learning situation through the examination, and then reflect on the problems existing in the teaching, the benign teaching feedback mechanism can not be formed, and improving the quality of teaching has become an empty talk. In teaching practice, feedback lag and improper feedback methods often appear in teaching evaluation results, which seriously affects the real-time effect of evaluation report and is not conducive to the further improvement of teaching objectives and curriculum design. At present, the evaluation of students is

mainly to judge the students' examination results, and then to select and screen them. Students' evaluation is alienated into a compulsory tool to divide students into grades and survival of the fittest, which greatly hinders the free development of students' personality. In the process of teaching, whether teachers can turn students' passive learning into active participation, so that students can actively collect information, think about problems and obtain information. At the same time, whether teachers can communicate with students, understand the real thoughts of students, and develop and progress with students. Teachers should comply with the development of the times, according to the requirements of quality education reform, actively optimize the teaching evaluation methods, build a diversified evaluation system, and ensure that the evaluation is reasonable and scientific, so as to further promote the comprehensive development and progress of students.

### 3. The path of constructing diversified evaluation system for College Students

#### 3.1. Improve the evaluation system

The evaluation of students' course achievements should also include the above aspects, and should not be biased. At the same time, the course is a relatively long and coherent course, and students' learning attitude should also be a necessary factor to evaluate their achievements in the whole learning process. In order to effectively improve the teaching quality, we should start from the teaching reality, construct a perfect evaluation system, set up a school-level teaching evaluation supervision team, with the dean and teaching director of each hospital as the person in charge, arrange special personnel to evaluate and monitor classroom teaching and extracurricular activities, and urge teachers to put the evaluation mechanism in place. By scientifically guiding students to conduct self-evaluation and mutual evaluation among students, schools can make students know and know themselves accurately, and then make clear the direction of their efforts and achieve their goals.

Most universities still attach importance to theory and neglect ability, and students' evaluation is still based on written test, which can not effectively evaluate students' practical ability and innovative ability [12]. Faced with this situation, universities should change the function of evaluation system and actively promote education and teaching to develop students' practical ability and innovative ability. The implementation process of the hybrid teaching platform is shown in Figure 1.

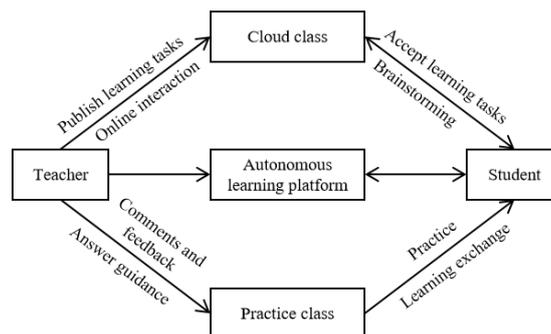


Figure 1 The implementation process of the hybrid teaching platform

In the past, the evaluation method was mainly based on quantitative evaluation, and the scores determined students' learning situation. However, in practice, students' learning scores were determined by factors such as playing on the spot, psychological quality and physical health. Therefore, we should not only pay attention to quantitative evaluation, but also pay attention to qualitative evaluation to evaluate students' innovative ability, learning ability and ideological conduct, so as to break the limitation of quantitative scores. Teachers are no longer the only subject to evaluate students in the evaluation of diversified and differentiated students. In the evaluation, students are not only the object but also the subject of evaluation. Administrative departments and teaching departments in colleges and universities have their own division of labor and responsibilities, but it is their common purpose to serve students better. Therefore, colleges and

universities should set up a special student evaluation contact meeting or department to enhance the linkage among functional departments. In the traditional evaluation system of college students' quality, the evaluation content is mainly the students' test scores, and the evaluation of learning process is not emphasized, which seriously affects the diversification of the evaluation system. Therefore, universities should combine formative evaluation with summative evaluation, reflect the growth of students in the learning process, and improve the accuracy of evaluation results. Teachers should attach importance to students' self-evaluation, not neglect each student, and cultivate each student as a pillar.

### 3.2. Selecting suitable evaluation subjects

By strengthening school-enterprise cooperation, students can have more opportunities for social exercise, and then the feedback from internship units to students can be more effectively integrated into the student evaluation system. According to the characteristics of each evaluation index, the selection of evaluation forms can be combined with formative evaluation and summative evaluation, qualitative evaluation and quantitative evaluation, teacher evaluation, students' mutual evaluation and students' self-evaluation. For example, the examination and evaluation of students' theoretical knowledge can adopt the written test method, while the examination and evaluation of students' teaching ability, teachers can evaluate students' language speed, process control, time mastery and fluency of knowledge explanation. Figure 2 is a path analysis model for building an effective college English classroom environment and determining the learning effect.

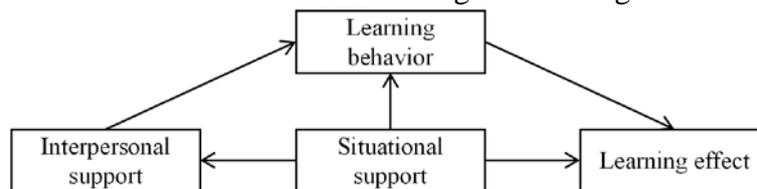


Figure 2 Path analysis model

The construction of college students' comprehensive evaluation system under the comprehensive and personalized collaborative development concept not only puts forward clear requirements for people's all-round development in education, but also promotes students to meet the specific needs of social development, and combines their own advantages and strengths to define their future development direction and realize the harmonious and common development of individuals and society. The fuzzy analytic hierarchy process (AHP) is used to evaluate the teaching quality quantitatively and recursively. Under the condition that the initial value of disturbance characteristics is certain, the probability density functional of teaching quality pre-estimation is as follows:

$$AI_t = \frac{(I_t + Q_t)}{2} \cdot \frac{(I_t + Q_t)}{D_t} \quad (1)$$

In the high-dimensional feature distribution space, the continuous function of the statistical model for predicting and estimating teaching quality is:

$$I_{t+1} = I_t + Q_t - \min(I_t + Q_t, D_t) = \max(I_t + Q_t - D_t, 0) \quad (2)$$

After iteration and adopting quantitative recursive analysis method, the nearest neighbor sample value of the big data information flow of the output index distribution of the teaching quality evaluation is:

$$R_t(p_{1t}, Q_t) = p_{1t} \cdot \min(I_t + Q_t, D_t) - (p_{0t} \cdot Q_t + C_t \cdot AI_t) + R_{t-1} \quad (3)$$

Personalized evaluation can be set from the aspects of learning style, learning attitude, helping others, personal hobbies, etc., paying attention to the differences of each student. At the same time, students should be comprehensively evaluated from theoretical knowledge, practical application, classroom answering, etc. In teaching, the unity of individualized evaluation and comprehensive evaluation should be maintained, so that students can develop and progress in an all-round way. The

formed evaluation information report should be fed back to universities, departments and teaching and research sections in time, so as to carry out teaching and research seminars and teaching evaluation activities, adjust courses and optimize teaching plans according to the actual situation, and further ensure the teaching quality and effect. At the same time, this kind of information is fed back to teachers, so as to encourage and whip teachers and promote teachers to continuously improve their teaching skills. In the diversified quality evaluation system of college students, the evaluation of parents and society is also included in the system, which can make students know themselves more comprehensively [13]. For example, when a university organizes parents to participate in the evaluation, it can send part of the evaluation content to parents via WeChat, email or SMS.

#### **4. Conclusions**

Diversified education itself is three-dimensional, multi-dimensional and personalized, and the evaluation of students' curriculum achievements should not be single-sided or single-dimensional. In the past teaching practice, students' evaluation was mainly based on their grades, which affected other aspects of students' textual research to a certain extent. The construction of diversified evaluation system for students' achievements in ordinary university courses can help us evaluate students' achievements from a more comprehensive, detailed, long-term and optimized perspective. The research on diversity-difference evaluation of college students is not only a new requirement for college education with the development of the times, but also a long-term, complicated and arduous task. At present, universities still lack corresponding theoretical basis and technical support for constructing modern student evaluation methods and systems. Only by continuously improving the quality of teachers and teaching administrators and building a high-level teaching evaluation team can a new situation of teaching evaluation be opened. Teachers and teaching administrators must recognize the situation clearly, strive to improve their own abilities, and fundamentally promote the reform of students' learning evaluation. As a university educator, we should make full use of various social resources and realize fair, scientific, objective and reasonable evaluation of students with the help of professionals, so that students can better adapt to the needs of diversified talents in the development of modern society and enhance the ability and level of running a university.

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