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A SELF-EVALUATION SYSTEM FOR INDIVIDUAL LEARNING OUTCOMES OF COLLEGE STUDENTS BASED ON THE FIVE-EDUCATIONS WITH QUANTITATIVE SUPPORT

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Abstract: A questionnaire survey was conducted among 348 college students, 68 teachers and 63 business people from outside Guangdong Technology College. Reliability analysis and inductive analysis of the data were carried out through the 4th Generation Statistical Analysis Software (SPSSAU), and "five educations" were identified as the primary indicators. The individual evaluation system for college students, which consists of 14 basic elements (secondary indicators) and 26 literacy elements (tertiary indicators), was verified among some undergraduate students of Guangdong Polytechnic. The evaluation system basically covers all aspects of college students' study and life during their school years. It can combine process evaluation (semester evaluation) with summative evaluation (academic year evaluation), qualitative evaluation (qualitative elements) with quantitative evaluation (quantitative supporting elements), and incentives with guidance (explanations of bonus and deduction points). It is simple and easy to implement and conducive to promotion.
Keywords: Individual college students; Evaluation system; Quantification; Learning outcomes

1 INTRODUCTION

In the design and implementation of the evaluation system for college students, it is essential to comprehensively reflect the all-round development and individual characteristics of students in the context of the "five-pronged education" (morality, intelligence, physical fitness, aesthetics, and labor education). This should also incorporate students' subjective awareness and objective self-understanding, as well as illustrate the process of their development and the achievements they have attained. By doing so, the incentive and guiding functions of educational evaluation can be fully realized.In accordance with the requirements of college students' cultivation goals, the evaluation system should be structured around the "five-pronged education". The core competencies of college students' development should be further refined into multiple evaluation criteria. Emphasis should be placed on integrating formative evaluation with summative evaluation, qualitative assessment with quantitative measurement, and incentives with guidance.Maximizing the effectiveness of the college student evaluation system is contingent upon a scientific evaluation framework and an efficient evaluation mechanism. However, the subjective awareness and self-cognition of individual college students remain pivotal in this process.

2 RESEARCH BACKGROUND AND SIGNIFICANCE

The Overall Plan for Deepening the Reform of Education Evaluation in the New Era proposes that education evaluation should "adhere to the effectiveness of moral education as the fundamental criterion", and sets out the basic task of "innovating the process evaluation methods of morality, intelligence, physical fitness, aesthetics and labor, and improving the comprehensive quality evaluation system". From the perspective of individual evaluation of college students, learning outcomes should include both the comprehensive and integrated effects required by the training objectives and the effects of individual development and innovation. In the past, the evaluation of college students had problems such as incomplete connection between the evaluation content and the requirements of the training objectives, simply replacing individual evaluation with group evaluation, obvious utilitarian orientation of the evaluation purpose, insufficient exertion of the incentive and guiding functions, virtual moral evaluation, single intellectual evaluation, and weakened evaluation of physical, aesthetic and labor education. Therefore, in-depth research and implementation of comprehensive evaluation under the framework of individual "five educations" for college students is an urgent requirement to implement the modern educational evaluation concept and promote the reform of higher education evaluation, especially the student evaluation model.
Student evaluation is at the core of school education evaluation. Improving the elements of individual comprehensive evaluation of college students and constructing an evaluation system that fully and truly reflects learning outcomes is of great significance for giving full play to the incentive and guiding functions of education evaluation, promoting the all-round development and individual expression of students, and fulfilling the fundamental task of fostering virtue and nurturing talent[1-2]. At the same time, the reform of the student evaluation model plays an important role in promoting educational and teaching reform, improving the quality and level of school operation, and meeting the practical requirements of society for the selection of talents. The individual evaluation of college students should change the

simple quantitative and vague qualitative evaluation model, build a learning effect evaluation system that promotes the attainment of the five education standards and individual development, and conduct practical verification[3-4].

3 RESEARCH DESIGN AND IMPLEMENTATION

3.1 Basic Ideas of the Research

College student evaluation can be divided into group evaluation and individual evaluation. From the perspective of the goal of cultivating virtue and nurturing talents, college student evaluation should ultimately be implemented in individual evaluation. Group evaluation is aimed at the overall development of college students and is applicable to the evaluation of the level of college students in higher education institutions. It is characterized by integrity, hierarchy and utilitarianism. Individual evaluation is targeted at individual college students, with the basic requirement of meeting the Five-educations. It is applicable to the evaluation of individual development of college students and has the characteristics of individuality, development and non-utilitarianism. The attainment of the Five-educations is a common requirement for the group of college students, a prerequisite and foundation for individual development, and individual development is a reasonable extension of the attainment of the Five-educations, an important condition for innovation and creation[5-6]. Individual evaluation of college students should establish a complete and effective evaluation system based on the attainment of the five aspects of education, should reflect the internal logic and interaction of the five aspects of education, should be based on self-evaluation by students, should reflect the mutual corroboration of qualitative evaluation and quantitative evaluation, and should have the operability of common evaluation plus individualized adjustment evaluation. The evaluation results should be conducive to guiding autonomous learning and self-development, and provide references for schools' operation and society's selection of talents.

The individual evaluation of college students should, on the basis of meeting the Five-educations standards, respect and guide students to enhance their sense of autonomy and encourage creative development. This is both a requirement of the goal of cultivating virtue and nurturing talent and a regular requirement of the individual development and evaluation of college students[7]. The "five educations" involve the qualities of ideals and beliefs, physiology and psychology, thinking level, learning ability and practical creation in the individual development of college students. They are independent of each other and influence and support each other as a whole[8]. The principles that should be followed in the design of the evaluation system are: to implement modern educational evaluation theories and embody the concept of development evaluation; Reflect the core literacy requirements for college students' development, and demonstrate the internal logic and interaction of the "five educations"; Highlight the positive guiding function of individual evaluation of college students, and show the individual development process and potential of college students; Reflect the interlocking and corroboration of qualitative and quantitative elements; The evaluation elements are composed of what to do and what not to do to facilitate actual operation and practice.

3.2 Formulation of the Evaluation Index System

The basic framework of the Five-educations evaluation index system was designed by referring to the literature and taking advice from experts within the school. Questionnaires were conducted among 348 college students, 68 teachers of Guangdong Technology College and 63 business people outside the school. Reliability analysis of the collected data was carried out through the 4th Generation Statistical Analysis Software (SPSSAU). Through semi-structured interviews, online interviews and key case studies, the data from the questionnaires and interviews were summarized and analyzed to determine the individual evaluation system for college students (Table 1), with moral, intellectual, physical, aesthetic and labor education as the primary indicators and 14 basic elements such as ideological and political, knowledge and skills, physical health as the secondary indicators. Twenty-six quality elements, including life ideals and moral identity, are the third-level indicators. Weights are assigned to each level of indicators, and qualitative and quantitative supporting elements are set for each level of indicators.

Table 1 Evaluation Form for Individual Learning Outcomes of College Students (Experimental Version)

Five educations (Score)	Basic elements (fractions)	Literacy elements (points)	Qualitative elements	Quantitative supporting elements (abbreviated)	Points added or deducted
Moral education (30 points)	Ideological and political (8 points)	Life ideals (3 points)	Life ideals and value judgments	Career planning, postgraduate entrance examination, ideological and political course qualification	Receiving scholarships, being awarded as an advanced individual, etc. can add points
		Social responsibility (3 points)	Fulfill the mission and take on responsibilities	Group activities, social research, voluntary blood donation	Bonus points for winning an activity, minus points for not participating in a group activity
		Abide by the rules	Democracy, rule of	Do not be late or	Points will be added for

Five educations (Score)	Basic elements (fractions)	Literacy elements (points)	Qualitative elements	Quantitative supporting elements (abbreviated)	Points added or deducted
		(2 points)	law and sense of rules	skip classes, do not copy homework, do not cheat in exams, and pass the rule of law course	winning relevant activities or competitions, while points will be deducted for illegal acts, cheating, truancy, etc
	Civilized progress (8 points)	Moral cognition (4 points)	Moral concepts and value recognition	Identify with the core socialist values and social morality	Relevant behavior will earn extra points
		Civilized behavior (4 points)	Public morality and behavioral habits	Reason, hygiene, good behavior	Providing evidence of doing good deeds earns extra points, while frequent waste and wearing slippers to class deduct points
	Social participation (8 points	Social identity (4 points)	National identity and cultural identity	Expressed identification with national identity and the excellent culture of the nation	Additional points will be given for supporting evidence
		Social service (4 points)	Practical experience and contribution to society	Volunteer service, social welfare, community service	Bonus points can be added for winning or being awarded in activities
	Self-development (6 points)	Personal strengths (3 points)	Innovative experiences and achievements	Competitions, performances, project research, clubs	Innovative achievements such as winning awards, applying for patents, publishing papers, etc. are added points
		Self-management (3 points)	Self-awareness and self-restraint	Have a study plan	Extra points for positions such as student leader, student information officer, club leader, etc
	Cultural foundation (8 points)	Humanistic background (4 points)	Cultural knowledge and humanistic sentiment	Self-reading habits, borrowing of humanities books, participation in related activities	Bonus points for winning awards in related activities and having related test works
		Scientific spirit (4 points)	Advocate true knowledge and rational thinking	Have scientific thinking, have raised questions and analyzed scientifically and reasonably	Participation in scientific research or technical research can earn extra points
Intellectual Education (26 points)	Knowledge and skills (12 points)	Comprehensive knowledge (4 points)	Knowledge breadth and thought depth	Complete the required credits and meet the standards for public course grades	30% of the total class ranking, bonus points for obtaining non-professional qualification certificates, and deduction points for failing courses
		Professional knowledge (4 points)	Professional knowledge and learning application	Complete credits and professional course grades	Bonus points for ranking in the top 30% of the class in major courses, minus points for failing major courses
		Professional skills (4 points)	General skills and professional skills	Experimental training and skills competitions	Bonus points for obtaining professional skill certificates and winning competitions
	Self-study (6 points)	Enjoy learning and be good at learning (3 points)	Learning interest and learning literacy	Classroom interactions, lectures, learning clubs, library learning records	Bonus points for participating in science and technology, innovation and entrepreneurship activities, lectures, and learning clubs
		Self-improvement (3 points)	Self-management and self-reflection and self-confidence	Offline self-study, online learning	
Sports	Good health (8	Physical fitness (4 points)	Athletic interest and athletic will	Physical education class grades,	First aid skills earn extra points

Five educations (Score)	Basic elements (fractions)	Literacy elements (points)	Qualitative elements	Quantitative supporting elements (abbreviated)	Points added or deducted
(24 points)	points)			physical fitness test scores	
		Participation in sports (4 points)	Motor skills and scientific exercise	Extracurricular sports, sports competitions	Participating in sports competitions and winning awards, sports meeting bonus points
	Sound personality (8 points)	Self-confidence and self-love (4 points)	Attitude towards life and mental state	Upward, inquisitive, communicative, generous and comforting others	
		Psychological adjustment (4 points)	Self-regulation and mental health	Adaptability, stress relief ability	Having relevant qualifications is a plus
	Love life (8 points)	Healthy living (4 points)	Health awareness and rational consumption	Cherish life, pay attention to health, use medicine properly, consume civilly	
		Good habits (4 points)	Self-regulation and habit formation	Have good study, exercise and sleep habits, and do not stay up late or sleep in	
Aesthetic Education (10 points)	Aesthetic taste (6 points)	Aesthetic taste (6 points)	Aesthetic cognition and aesthetic taste	Aesthetic interest and the ability to discover beauty	Having related works will add points
	Aesthetic experience (4 points)	Aesthetic experience (4 points)	Aesthetic practice and aesthetic outcomes	Aesthetic exhibition, aesthetic creation	Awards for calligraphy, painting, design, etc., patent design, etc. will be added points
Labor Education (10 points)	Labor cognition (6 points)	Labor cognition (6 points)	Labor value and labor identity	Labor courses, daily labor	Points will be deducted for failing labor courses
	Labor experience (4 points)	Labor Experience (4 points	Labor practice and labor outcomes	Participating in labor, labor outcomes	Those who have been awarded the title of "Advanced Individual in Hygiene", "Civilized Dormitory Head", "Civilized Dormitory Member", or have won awards in the Labor Skills Competition will be given bonus points

3.3 Implementation of the Evaluation Index System

The purpose of the empirical study is to test whether the evaluation system can reflect modern educational evaluation concepts and methods and effectively solve the predicaments in student evaluation; Whether it can be understood and accepted by students, and provide them with methods of self-awareness and evaluation, so as to better play the main role in educational evaluation; Can it reflect the objectivity of student evaluation and the effectiveness of its motivational and guiding functions; Whether it is convenient and practical, simple and easy to implement, and conducive to promotion.

Randomly select Class 3 of the 22nd grade of the Finance Management major and Class 3 of the 24th grade of the Environmental Design major at Guangdong Technology College to distribute the "Individual Learning Effect Evaluation Form for College Students (Experimental Version)" offline. A total of 83 questionnaires were distributed and 82 were retrieved, with a recovery rate of 98.8%. Among them, 48 from Class 3, Grade 22 of the Finance Management major, accounting for 58.5%, and 34 from Class 3, Grade 24 of the Environmental Design major, accounting for 41.5%. In addition to the content of the evaluation system, five additional questions were given to further listen to students' opinions and suggestions on the evaluation system.

4 RESULTS ANALYSIS

4.1 Questionnaire Reliability Analysis

Cronbach reliability analysis indicated that the *Cronbach α* coefficient was 0.906, greater than 0.8, suggesting high

reliability quality of student self-assessment data, which could be used for further analysis and research.

4.2 Total Score of Student Self-Assessment and Analysis

Table 2 results show that students' total self-assessment scores are hierarchical, with less at both ends and more in the middle, and the situation of inflated scores in previous evaluations is not obvious. Eight students rated themselves 100 points, accounting for 9.76%; 70 people scored between 70 and 99, or 85.36 percent; Four people scored between 60 and 69, accounting for 4.88%; None of the students rated their total score as failing, which is in line with the actual situation of the students that the teachers have in mind. It indicates that students basically understand the content of the evaluation system, have a relatively normal mindset during self-evaluation, have less arbitrariness, and have a certain degree of objectivity in self-evaluation. At the same time, it is also indicated that the evaluation index points adopted in the evaluation system have both qualitative evaluation guidance and quantitative evaluation support methods, which are reasonable and feasible in practice.

Table 2 Summary of Students' Self-assessment

Statistical items	Full marks	Minimum score	Converted points	Number of full marks and proportion		(Converted) 90-99 points and proportion		(Converted) 80-89 points number and proportion		(Converted) 70-79 points and proportion		(Converted) 60-69 points and proportion		(Converted) The number of people who failed and the proportion	
Total score	100	61	61	9	10.98%	32	39.02%	22	26.83%	15	18.29%	4	4.88%	0	0
Moral education	30	20	66.7	19	23.17%	29	35.37%	22	26.83%	11	13.41%	1	1.22%	0	0
Intellectual education	26	9.5	47.5	16	19.51%	14	17.07%	21	25.61%	12	14.63%	11	13.41%	8	9.76%
Sports	24	13	54	24	29.27%	20	24.39%	14	17.07%	17	20.73%	6	7.32%	1	1.22%
Aesthetic Education	10	4	40	49	59.76%	2	2.44%	26	31.71%	0	0	4	4.88%	1	1.22%
Labor education	10	4	40	64	78.05%	0	0	9	10.98%	1	1.22%	7	8.54%	1	1.22%

4.3 Additional Questions Student Evaluation and Analysis

The additional questions included five questions: the content of the index system, the weight of the index system, the bonus points of the index system, whether the deduction points of the index system were reasonable, and whether the students' self-evaluation was meaningful. It was clear that students could freely choose whether to fill in or not, and all students chose optional filling. Table 3 shows that 93.90 percent of students consider the content and weights of the evaluation index system to be very reasonable and relatively reasonable overall, and 6.10 percent think that some indicators or weights need to be adjusted. The design of adding and subtracting points on the basis of the basic score for the index system is considered reasonable by most students. It can be seen that the overall design of the index system is in line with the wishes of the majority of students and is supported by the vast majority of students.

Table 3 Evaluation Statistics Table of Additional Questions

Evaluation content	Very reasonable		Fairly reasonable		Basically reasonable		Some unreasonable		Basically unreasonable	
Index System content	28	34.15%	49	59.75%	0	0	5	6.10%	0	0
Metric system Weights	21	25.61%	56	68.29%	0	0	5	6.10%	0	0
Design for bonus points	31	37.80%	44	53.66%	2	2.44%	5	6.10%	0	0
Design for deduction	29	35.36%	42	51.22%	7	8.54%	4	4.88%	0	0

It is worth noting that when answering the question "Is the self-evaluation of students meaningful?", 86.59% of the students thought it was very meaningful, and 9.76% thought it was relatively meaningful. This clearly demonstrates the students' autonomous awareness and high attention to evaluating their own learning outcomes. However, 3.66% of students thought it was dispensable, showing a low level of concern or indifference. The reasons might include insufficient understanding of the role of self-evaluation, insufficient engagement in self-study leading to poor academic performance in the course, less participation in the "five educations" practice, and few learning outcomes available for display, and it is not ruled out that "the evaluation of students' learning outcomes is ultimately decided by the teacher.

The view that self-evaluation is unnecessary for students. The fact that no student considers self-evaluation meaningless indicates that the majority of students highly recognize and actively participate in the college student evaluation system that increases self-evaluation.

4.4 Analysis of the Five Aspects of Students' Self-Evaluation Results

The following analysis can be made by comparing the differences in the number, proportion, and score of evaluation points (i.e. literacy elements) of students' self-assessment of the "five educations" category with a converted score of more than 80 points:

1. 70 students scored 80 or above in moral education self-assessment, accounting for 85.37%. There were significant differences in the scores of the nine literacy elements, and the proportion of self-assessment full marks was as follows: Social identity (96.34%) > Compliance with law (90.24%) > moral perception (86.59%) > civilized behavior (84.15%) > social responsibility (65.85%) > self-management (62.20%) > social service (54.88%) > life ideals (45.12%) > personal strengths (39.02%). Among them, social identity and law-abiding accounted for more than 90%, and moral cognition and civilized behavior accounted for more than 80%, indicating that students attach great importance to social identity, have a correct level of cognition and strong self-confidence in terms of moral cognition and civilized behavior, and have the self-restraint ability of basic behavioral norms. Students' self-assessment in terms of life ideals, social responsibility, social service, and self-management is relatively scattered, indicating that most students have certain ideal pursuits, recognize social responsibility and social service, but a few have problems of vague cognition and insufficient action in actual implementation. Less than 40 percent of students rated their strengths above 80, indicating a low proportion of students who recognize and fully utilize their strengths. Some students are rather cautious in evaluating their strengths, fail to see their strengths or have a dependent "lying flat" mentality, lack of confidence and practical training in self-development, which may deviate from personal perception, and have weak initiative in participation. It is related to the relatively weak abilities. Schools should encourage students to develop hobbies and participate in group activities through evaluation feedback, and guide them to engage in practical innovation to discover and play to their strengths.

2. Fifty-two students scored 80 or above in their self-assessment of intellectual education, accounting for 63.41%. The self-assessment full score ratios for the seven evaluation points were relatively close but generally lower than those for morality, physical education, aesthetics, and labor, in the following order: self-improvement 65.85% > comprehensive knowledge 57.32% > professional skills 56.10% > love of learning 53.66% > professional knowledge 46.34% > humanistic background 42.68% > scientific spirit 34.15%. Among them, self-improvement, comprehensive knowledge, professional skills, and love of learning accounted for more than 50%, indicating that college students generally recognize the importance of autonomous learning, hold a positive attitude towards self-improvement, and most students have a relatively high level of confidence in professional skills, and most students' learning attitudes, learning methods, and learning effects meet the basic requirements. The proportion of students who scored full marks in professional knowledge, humanistic background and scientific spirit is less than 50%, indicating that most students have a positive attitude towards the cultivation of humanistic background and scientific spirit literacy and are basically adapted to professional learning, but some students find themselves lacking in the breadth and depth of knowledge and the rigor of learning attitude. The overall self-assessment score of intellectual education is relatively low, which may be related to the insufficient learning engagement of some students and quantitative evaluations such as course assessment results. Schools should pay close attention to the relevant curriculum, and teachers should guide students to improve their autonomous learning ability through measures such as improving teaching and educational methods, enhancing the attractiveness of classroom teaching, and improving assessment methods.

3. 58 students scored 80 or above in physical education, accounting for 70.73%. There was little difference in self-assessment scores among the six evaluation points. The proportions of full marks for self-assessment were as follows: healthy living 78.05% > self-confidence and self-love 73.17% > psychological adjustment 59.76% > living habits 57.32% > physical literacy 54.88% > participation in sports 47.56%. Among them, the evaluation indicators such as self-confidence and self-love, healthy living, accounted for more than 70%, indicating that the majority of students highly recognized self-confidence and self-love, had a generally good cognition of physical and mental health and basic life attitude, had a high degree of love for healthy living, paid attention to physical and mental health and could put it into practice; The proportion of evaluation indicators such as psychological adjustment, living habits, and physical literacy exceeded 50%, indicating that the majority of people recognized and actively participated in physical literacy and psychological adjustment ability; The proportion of students participating in sports was less than 50%, with 29.3 percent of students scoring less than 80 in their self-assessment of sports, indicating that some students have deficiencies in sports participation, which may be related to personal cognition, academic pressure, sports organization methods and sports atmosphere. Guidance should be strengthened in areas such as raising awareness, sports organization, and the cultivation of good living habits.

4. 78 people scored 80 or above in their self-assessment of aesthetic education, accounting for 95.12%. There were significant differences in the self-assessment scores of the two evaluation points. Among them, 90.24% of the students self-assessed full marks for aesthetic taste, while only 63.41% self-assessed full marks for aesthetic experience. This phenomenon indicates that the majority of students have basic aesthetic awareness and confidence in their own aesthetic cognition and aesthetic taste, but only a few students have participated in different forms of aesthetic experience, and the proportion of those who have participated insufficiently or have no relevant results is small, which may be related to

personal initiative, academic pressure, and fewer opportunities for related activities. Schools should increase the intensity of aesthetic education, focus on integrating college students' aesthetic sense with professional learning, campus cultural activities, daily life and social participation, organize aesthetic experience activities through various channels, cultivate aesthetic taste, and guide college students to improve aesthetic literacy.

5. 73 students scored 80 or above in labor education, accounting for 89.02%. There was little difference in the self-assessment scores for the two evaluation points, which were 84.15% for labor cognition and 82.93% for labor experience. Based on the current situation of students' participation in daily labor, internships and practical training, innovation practice and social practice, it shows that the correct labor values of the majority of college students have basically formed, and they are willing to realize their own value through labor. The vast majority can voluntarily participate in daily labor experience, and some students perform outstandingly in applied research, science and technology competitions and social service labor practice. There are some positive labor outcomes. At the same time, some students' understanding of the value of labor is not accurate and profound enough, and they participate less in innovative labor and social labor experience, which may be related to a lack of initiative, negative influence from family and society, and insufficient support from related conditions. Conditions should be actively created to encourage more students to give full play to their strengths, combine learning with labor practice innovation, improve cognition through labor, and achieve positive labor results.

5 DISCUSSION

5.1 There are Differences in Self-Assessment among Students of Different Majors

Studying the differences in self-assessment among students of different majors has practical significance for student evaluation. In the practice of student evaluation, the basic evaluation indicators and weights can be adjusted in combination with the characteristics of different majors to make the evaluation more in line with the actual situation of students of relevant majors, thereby generating more direct incentives and guidance. Statistics show that the self-assessment scores of aesthetic education and labor education of students in the two majors are relatively close. The differences are mainly reflected in the fact that students majoring in financial management pay more attention to moral education, while those majoring in environmental design pay relatively less attention, which may be related to the background of the major or the curriculum of the major; Environmental design students scored significantly lower in self-assessment of intellectual education than financial management students, had a lower score in humanistic background, and had a higher score in scientific spirit, which may be related to the curriculum and the students' focus on learning. Environmental design students rated lower than financial management students in terms of consistent participation in sports, but higher than financial management students in terms of psychological adjustment, which may be related to the learning burden and pressure; In terms of aesthetic taste and experience, environmental design students show a stronger sense of identity and engagement, which may be related to more opportunities for aesthetic practice in professional courses and professional practice. The differences in self-assessment between students of the two majors should be related to the differences in the perspective of professional thinking, the actual learning pressure faced, the future employment expectations, etc. There are differences in the political and academic cognition, thinking methods and sports participation among students of different majors. This leads to differences in the psychological state of self-evaluation. It should be noted that these differences are objectively existent, but the contradictions and differences can be resolved by correctly understanding the relationship of the Five-educations and rationally planning college life. The key lies in the establishment of individual ideal goals and active participation behaviors, as evidenced by a group of outstanding college students who have achieved remarkable results in the Five-educations and individual development in reality.

5.2 Students' Self-Assessment of Low Scores Deserves Attention and Analysis of the Reasons

It is normal for some students to have lower scores in group evaluations, but for individual evaluations of students, low scores deserve special attention. It is often considered normal for a student class to have 10% failing in a certain course assessment, but for the individual students in the 10%, it means 100% failing. According to Table 1, nearly 15% of students scored below 80 in moral education, 37.80% scored below 80 in intellectual education, and 9.76% failed in self-assessment. Nearly 30 percent of physical education students scored less than 80 points, and there were also cases of self-assessment failure in aesthetic and labor education. This phenomenon is characterized by distinct personality traits and is somewhat representative. Among the 26 evaluation points of the Five-educations, low scores of 0-0.5 for students' self-assessment occurred in six evaluation points, namely: personal strengths, scientific spirit, comprehensive knowledge, professional knowledge, professional skills and aesthetic experience. The reasons for this phenomenon may be multifaceted. From the perspective of students, some college students have problems and difficulties in certain aspects, such as lack of self-awareness and confidence, low learning attitude, insufficient learning motivation, improper learning methods, etc. From the perspective of the student evaluation model, due to the use of qualitative evaluation plus quantitative support, some students who do not meet the quantitative data standards give themselves low scores. In terms of the purpose of the evaluation, the feedback of the evaluation results can serve as a warning, guiding students to reflect on themselves, face positively, and improve.

6 CONCLUSIONS AND PROSPECTS

6.1 Conclusions

The study of the evaluation system for individual learning outcomes of college students is an objective requirement for the comprehensive promotion of evaluation innovation in higher education, to achieve the goal of fostering virtue and nurturing talent, and to comprehensively enhance the core literacy of college students on campus, it is necessary to fully consider the laws of individual development and evaluation of college students as well as the technical feasibility. The empirical study, using the evaluation index system and students' self-evaluation data, conducted a comprehensive analysis of students' overall self-evaluation scores and classified self-evaluation of "five educations". The experiment was generally successful, verifying the rationality of the index system from multiple aspects and achieving the expected goals.

The main conclusions of the empirical research are as follows: First, the index system reflects the modern educational evaluation concept. The evaluation content and methods have been recognized by the vast majority of students participating in the experiment, creating conditions for college students to play the role of the evaluation subject. Second, by combining the all-round development of the five aspects of education with the encouragement of individual development of students, by integrating process evaluation with summative evaluation, and by integrating qualitative evaluation with quantitative evaluation, it has better solved the problems existing in previous student evaluation. Third, from the perspective of students' self-evaluation scores, quantitative data support qualitative conclusions, and the integration of bonus and deduction points basically solves the problem of inflated evaluation scores, enhances the objectivity of evaluation, and is more conducive to improving students' self-awareness and the effectiveness of the incentive and guiding functions of educational evaluation; Fourth, the evaluation system is relatively comprehensive in content, clear in logic and reasonable in design, basically achieving the goal of being easy to understand and convenient to use. Fifth, the evaluation is not primarily aimed at ranking students. It strengthens the role of students' self-evaluation, reduces the subjectivity and blindness of teachers and administrators in student evaluation, achieves objective evaluation, enhances the credibility of evaluation results and makes them publicly available to a considerable extent.

6.2 Existing Problems and Ideas for Further Research

The main problems in the empirical study are: the number of experimental classes and students participating in the self-evaluation experiment is relatively small, students' understanding of the evaluation indicators is not comprehensive, and the evaluation part of addition and subtraction adjustment is not specific enough, which will have an impact on the final score of students' self-evaluation and the subsequent information analysis. The basic conclusions of the evaluation system and verification need to be further tested and adjusted in practice. Based on the existing theoretical and empirical research, it is necessary to pay attention to listening to the opinions of relevant experts and further implement extended verification, expand the experiment to several colleges or select representative classes in each college to obtain more accurate empirical data. Second, organize a project research group consisting of researchers, teachers, teaching administrators and student representatives to conduct in-depth analysis of the data and problems reflected in the students' self-assessment, study the adjustment of the student evaluation system for different disciplines and majors, and study specific measures to use the evaluation results to play an incentive and guiding role, To facilitate the adjustment and improvement of the indicator system and the evaluation operation procedures.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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