



Application and Effect Evaluation of Multiple Intelligences Theory in College Students' Career Guidance

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Abstract. With the increasingly diversified demand of the job market, the traditional career guidance model of college students is difficult to meet the needs of students' career development. This study explores the introduction of multiple intelligences theory into college students' career guidance, builds a career guidance model based on the theory of multiple intelligences, and evaluates its application effect. Firstly, it analyzes the connotation and applicability of the theory of multiple intelligences, then discusses the current situation and existing problems of the vocational guidance education of college students in China, and puts forward the application strategies of the theory of multiple intelligences in the vocational guidance of college students from four aspects: teaching concept, education model, teaching method and assessment. Finally, the application effect is evaluated from the four dimensions of vocational cognition, vocational skills, vocational attitude and employment quality. The research finds that the vocational guidance teaching under the guidance of the theory of multiple intelligences has achieved positive application results.

Keywords: Multiple intelligences theory; Career guidance for college students; Application effect.

1 Introduction

In "Improving people's well-being and improving people's quality of life", the 20th CPC Report proposed to "implement the strategy of giving priority to employment". College vocational guidance education is a bridge for college students to transition from school to the workplace. It not only helps students define themselves and make reasonable career plans, but also provides them with necessary attitude, knowledge and skill preparation for their career development. Vocational guidance education has become an important part of the teaching system of colleges and universities, and plays a key role in personnel training and employment quality improvement. However, the curriculum of vocational guidance education is influenced by the level, direction and philosophy of the school, so there are great differences in the curriculum of vocational guidance in colleges and universities. In order to improve the effectiveness of vocational guidance

courses in colleges and universities, some scholars have tried curriculum innovation and achieved certain results. For example, Zhan He and others put forward the management concept of fine vocational guidance through research.^[1] Wang Guangxu et al. proposed to apply the concept of "three-whole education" to vocational guidance work in colleges and universities, and establish a multi-dimensional collaborative work model of "3-6-3".^[2] Shi Susu put forward an "outsourcing" model to optimize college career guidance.^[3] Chen Jie put forward the application of vocational assessment tools to college career guidance^[4]. However, whether it is multi-party collaborative education or vocational assessment tools, it mainly discusses vocational guidance in colleges and universities from the perspective of "instrument", but does not explore how to train and how to train from the perspective of "Tao". The existing problems restrict the innovation and development of vocational guidance education, and it is urgent to break through with new theoretical perspectives and practical paths.

The theory of multiple intelligences provides a new possibility for solving the above problems. Proposed by Harvard University professor Howard Gardner in 1983, the theory challenges the long-held idea of a single intelligence and argues that humans have at least eight relatively independent intelligences. The theory emphasizes the diversity of human intelligence and advocates that each person should make up for his or her weaknesses with his or her strengths, which provides theoretical support for personalized and diversified vocational guidance education practice. Introducing the theory of multiple intelligences into vocational guidance education in colleges and universities is helpful to broaden the content of education, reform the teaching method, stimulate the intrinsic potential of students, and improve the pertinence and effectiveness of vocational guidance education.

This study intends to design and implement college students' career guidance program under the framework of multiple intelligences theory, and construct a multi-dimensional effect evaluation index system to systematically evaluate the application effect of multiple intelligences theory in college students' career guidance.

2 College students' Career Guidance Education from the Perspective of Multiple Intelligences Theory

2.1 The Connotation of Multiple Intelligences Theory

The theory of multiple intelligences was put forward by Howard Gardner in 1983. In his book *Mental Framework: A Theory of Multiple Intelligences*, Gardner challenged the traditional view of unitary intelligence and proposed that human beings have at least eight relatively independent intelligences. Including verbal intelligence, logic-mathematical intelligence, spatial intelligence, body-motor intelligence, musical intelligence, interpersonal intelligence, introspective intelligence, and natural intelligence.^[5]

Gardner believes that each person's combination of intelligence is unique, and that traditional education places too much emphasis on verbal and logic-mathematical intelligence and neglects the cultivation of other intelligences. The multiple intelligences

theory advocates teaching students according to their aptitude, designing teaching programs according to students' intelligence advantages, and exploring each student's potential. According to the core of the multiple intelligences theory, in the career guidance of college students, students should be helped to fully understand their own intelligence advantages and disadvantages, and choose a suitable career direction. At the same time, combined with the theory of multiple intelligences, it can also broaden students' cognition of multiple professions, explore diversified career possibilities, and improve career adaptability and competitiveness .^[6]

2.2 The Intelligent Education Function Contained in Vocational Guidance Education in Colleges and Universities

Vocational guidance education is a systematic and comprehensive educational practice, covering a variety of intelligent educational functions. By combing through the current vocational guidance education content in colleges and universities, it can be found that there is a close relationship with the theory of multiple intelligences.

First of all, job-hunting skills are the key content of vocational guidance education. Students are usually taught to use their own resources and surroundings to improve the success rate of job hunting, which mainly includes language expression, thinking ability, observation ability and so on. The essence of job-hunting skill education is to cultivate students' linguistic intelligence and natural observation intelligence. Through improving students' oral expression ability, written expression ability and keen insight into things, so as to improve students' job hunting competitiveness. Secondly, mental guidance is also an important part of vocational guidance education. The essence of employment mentality education is to establish students' healthy mental state, which is closely connected with introspection intelligence. Introspective intelligence is the ability of an individual to know, see and reflect on himself. Only by accurately positioning themselves from the objective level and identifying their strengths and weaknesses, can students make correct decisions in career selection and maintain a positive attitude. Vocational guidance education guides students to know themselves and improve their introspection intelligence by means of psychological counseling and vocational assessment. Thirdly, vocational guidance education focuses on cultivating students' employability, including teamwork ability, interpersonal communication ability, problem solving ability and so on. This part of ability is related to interpersonal intelligence and introspective intelligence. Interpersonal intelligence reflects students' interpersonal communication and interpersonal skills. Vocational guidance education can improve students' interpersonal intelligence through scenario simulation and team cooperation, so as to make them better adapt to the workplace environment. Only by objectively understanding self-worth in good interpersonal activities can individuals find the right position in team cooperation and give play to their strengths.^[7] Therefore, the essence of vocational intelligence education for the cultivation of teamwork ability is to improve students' interpersonal intelligence and self-understanding intelligence.

3 Present Situation and Problems of Vocational Guidance Course Teaching for College Students

In the 1990s, vocational guidance education in domestic colleges and universities began one after another. After more than 20 years of development, an education system with Chinese characteristics has initially taken shape. As a compulsory course for college students, vocational guidance courses play an important role in helping students understand the employment situation, master job-hunting skills, and plan their career. However, there are still some problems in the current domestic vocational guidance education, which affect the effect of education.

In the aspect of education concept, the traditional exam-oriented education thinking is deeply rooted. Some vocational guidance courses in colleges and universities pay attention to the theoretical indoctrination of employment knowledge and the training of employment skills, but neglect the cultivation of students' employment quality and ability. Vocational guidance education is more of a kind of teaching activity carried out by colleges and universities to improve the employment rate.

In terms of teaching content, career guidance courses mainly focus on employment policy, job-hunting skills, employment information and other aspects, and the content is simple and superficial. Most career guidance courses ignore the cultivation of students' professional values, professional ethics and professional adaptability, and only master simple job-hunting methods and skills, which may make it difficult for students to adapt to the future workplace environment.

In terms of teaching methods, vocational guidance courses generally lack practical links and innovative exploration. Most courses are mainly taught by teachers, and students listen passively, with low interaction and participation. Some teachers of vocational guidance courses stay in school to work after graduation or are limited by the working platform of colleges and universities, and lack rich and multi-directional employment experience, resulting in only "paper talk" and disconnection between theoretical knowledge and practical application, making it difficult for students to convert what they have learned into actual employability.^[8]

The reasons for the above problems may be analyzed from two aspects. On the one hand, the understanding of vocational guidance education by colleges and teachers is not enough, and they unilaterally equate it with employment information service and career planning, ignoring its important role in the overall development of students. On the other hand, the national assessment policy on the employment rate of college graduates also has a certain negative impact on vocational guidance education. In order to improve the employment rate, some colleges and universities have alienated vocational guidance courses into "employment promotion courses", paying too much attention to short-term employment results while ignoring the long-term development of students.

4 The Application Strategy of Multiple Intelligences Theory in College Students' Career Guidance

4.1 Change the Teaching Concept of Vocational Guidance and Establish the Guidance of Multiple Intelligences

Colleges and universities should change the traditional educational concept of only focusing on knowledge and skill transfer, and establish a multi-intelligence-oriented vocational guidance education concept. Based on the theory of multiple intelligences, college teachers should realize that each student has a different intelligence combination and advantage field, and should not give unified guidance of "one-size-fits-all", but should teach students according to their aptitude, explore and cultivate students' multiple intelligences, and realize the transformation from the test-oriented education concept to the curriculum concept of cultivating students' intrinsic quality. From the one-sided pursuit of employment rate to the improvement of college students' professional quality.

In the concrete implementation, professional assessment tools should be introduced to help students identify the distribution of multiple intelligences, such as linguistic intelligence, logical and mathematical intelligence, and interpersonal intelligence. Based on the assessment results, teachers and students have one-on-one in-depth communication to clarify students' career interests and future development intentions. The teacher guides the students to design a personalized career planning path according to their strengths and interests.

4.2 Innovate the Career Guidance Education Model and Integrate Multiple Intelligences Training

Colleges and universities should integrate the theory of multiple intelligences into the whole process of vocational guidance teaching. By setting up modular and project-based vocational guidance courses, the teaching content and activities should be set according to different intelligence fields. For example, for language intelligence, modules such as cover letter writing and eloquence training can be set up in the vocational guidance teaching system; For interpersonal intelligence, team cooperation and leadership training programs can be carried out; For introspection functions, career planning, career goal setting, career personality testing, etc. Through diversified teaching forms, enriching and innovating vocational guidance education models, comprehensively improving students' professional quality and employability.

In the concrete implementation, combined with the theory of multiple intelligences, different modules of vocational guidance courses are set up. In each module, specific project activities are designed. For example, in the module "Language Expression and Communication Skills", students are required to complete a mock interview and a public presentation; In the "Teamwork and Leadership" module, students participate in team-building exercises and leadership challenge tasks; In the "Career Self-exploration" module, students take a career personality test and develop a personal career development plan.

4.3 Implement Personalized Career Guidance to Meet the Diverse Needs of Students

According to the theory of multiple intelligences, every individual has multiple intelligences. The core of education is to promote the development of certain aspects of individual intelligence through appropriate strategies, so as to realize their own value. Under the guidance of the theory of multiple intelligences, colleges and universities should provide personalized career guidance for students, that is, carry out personalized education strategies according to the combination of students' intelligence and its advantages and disadvantages. Through the establishment of students' career development files, a comprehensive assessment of students' intelligence characteristics, hobbies and career tendencies can be made for their career development plans. ^[9]

In the concrete implementation, different guidance will be provided according to students' different intelligence advantages. For students with outstanding language intelligence, emphasis is placed on guiding them to improve their communication and expression ability; For students with outstanding mathematical logic intelligence, we will guide them to engage in analysis and research careers. At the same time, career guidance teachers help students make personalized career plans, including short-term goals (such as internship opportunities, skills improvement) and long-term goals (career development paths, career skills improvement plans).

4.4 Adopt Diversified Assessment and Evaluation, and Attach Importance to Process-Based Evaluation

The assessment of vocational guidance courses in colleges and universities should correspond to the idea of vocational guidance. Therefore, the current assessment methods based on employment rate, employment knowledge and employment skills should be reformed, and students' performance and progress in vocational guidance activities should be paid attention to. In terms of assessment indicators, in addition to the assessment of employment knowledge and skills, intelligent assessment indicators should also be added. At the same time, pay attention to process assessment, through phased feedback and guidance, help students find problems and improve in time, and finally effectively improve their own employment competitiveness.

In the concrete implementation, a set of assessment indicators including vocational knowledge and skills (40%) and multiple intelligence development (60%) will be formulated, among which the multiple intelligence development indicators cover vocational cognition, professional attitude, teamwork, communication ability, innovative thinking and other aspects. The career guidance course will be divided into several stages, and at the end of each stage, the assessment will be conducted through practical projects, group discussions, personal reports and other forms, while giving students specific feedback, pointing out their progress and areas for improvement.

5 The Application Effect Evaluation of Multiple Intelligences Theory in College Students' Career Guidance

In order to comprehensively evaluate the application effect of multiple intelligences theory in college students' career guidance, a college students' career guidance evaluation system based on multiple intelligences theory is constructed. The evaluation system focuses on four first-level indicators: occupational cognition, occupational skills, occupational attitude and employment quality. Under the first-level indicator of occupational cognition, five second-level indicators are divided: the clarity of occupational interest, the recognition of vocational ability, the matching degree of professional values, the clarity of career development direction and the perfection of career planning. Under the first-level index of vocational skills, five second-level indicators, including communication and expression ability, teamwork ability, problem solving ability, information technology application ability, innovation and entrepreneurship ability, are divided; Under the first-level index of professional attitude, it is divided into five second-level indexes, such as career management initiative, career development self-confidence, career responsibility, career adaptability and professional ethics. Under the first-level index of employment quality, it is divided into five second-level indicators, such as internship position matching degree, employment position matching degree, employment stability, career development satisfaction degree, and employment competitiveness, so as to evaluate the application effect of multiple intelligences theory in college students' career guidance.

According to the newly established evaluation system for college student career guidance, a questionnaire with 4 primary indicators and 20 secondary indicators was developed to conduct a comprehensive assessment of the 500 students who had received diversified intelligence career guidance for a full academic year. At the same time, we actively prepared representative questions related to student career guidance, such as their expectations of their own careers, the application of skills, and the effectiveness of application, and conducted supplementary investigations on the application effects of the theory of diversified intelligence through interviews, discussions, and practical observations.

Table 1. Multiple intelligences theory application effect table

Items \ Comparison	Before implementation (The number of people)	After implementation (The number of people)	Percentage after implementation
High career development satisfaction	315	435	87%
High expectations for job fit	305	460	92%
Strong confidence in career development	315	420	84%
Take an active role in career guidance	295	450	90%
Excellent problem-solving skills	315	395	79%
Excellent teamwork skills	230	320	64%
Excellent communication skills	265	335	67%
Clear Career Planning	325	410	82%
Career Interest Awareness	295	425	85%

As is shown in table 1, it shows that the students' career cognition level has been significantly improved. Through the vocational interest assessment and vocational ability assessment, 85% of the students have a clearer understanding of their career interests and abilities, which is 26% higher than before the implementation. 82% of the students have made a clear career plan, 17% higher than before the implementation. In terms of vocational skills, students' employability has been comprehensively improved. Through scenario simulation and practice exercises, 67% of students have made significant progress in communication and expression skills, which is 14% higher than before the implementation; 64% of the students achieved significant improvement in teamwork ability, which was 18% higher than before the implementation; And 79% showed significant improvement in problem-solving skills, up 16% from the pre-implementation level. Positive changes have been seen in students' career attitudes. 90% of the students expressed willingness to take the initiative to participate in career guidance activities, 31% higher than before the implementation; And 84 percent are confident in their career development, up 21 percent from before the implementation. In terms of employment quality, students' internship and job matching degree have improved significantly. 92% of students said internship positions are in line with their career expectations, 31% higher than the previous year; According to the graduate employment satisfaction survey, 87 percent of graduates are satisfied with their career development, up 24 percent from the previous class.

6 Conclusions

The results of comprehensive investigation and research evaluations indicate that the career guidance evaluation system based on the theory of multiple intelligences is effective. The theory of multiple intelligences has a more comprehensive and scientifically positive impact on college student career guidance. The theory of multiple intelligences can vigorously improve the effectiveness and accuracy of vocational guidance in colleges and universities, and can promote the quality of talent cultivation in colleges and universities at a deeper level, achieving a double improvement in promoting employment in colleges and the individualized creativity development of students.^[10]

References

1. Zhan He, Zhan Mingze, Zhang Han First-class. A Fine Study on Career Guidance for applied Colleges and Universities from the perspective of employability Orientation -- A case study of Jilin University of Chemical Technology [J]. Journal of Jilin University of Chemical Technology,2022,39(02):40-42.
2. Wang Guangxu, Zhu Xiaowen, Dong Haiqin. Education Function and Practice Path Exploration of vocational guidance Work in Colleges and universities under the concept of "Three All Education" [J]. Journal of Wuxi Polytechnic College,2023,22(04):1-5.
3. Shi Susu. Implementation Path of "Outsourcing" Model of Vocational guidance in Colleges and Universities [J]. Journal of Heilongjiang Vocational College of Ecological Engineering,2018,31(03):95-97.

4. Chen Jie. On the application of Assessment Tool in College Vocational Guidance [J]. Journal of Taiyuan City Vocational and Technical College,2018(12):100-102.
5. Gardner, H. Mental Framework: A Theory of Multiple Intelligences. Basic Book, New York,1983.
6. Xu Hui, Yang Hongfang. The Enlightenment of Multiple Intelligences Theory to the Reform of secondary Vocational Education [J]. Journal of Jiamusi Vocational College,2017(06):40.
7. Liu Huaxin. Study on Employment Curriculum Strategies in colleges and Universities from the perspective of Multiple Intelligences Theory [J]. Journal of Liaodong University (Social Sciences Edition),2017,19(02):120-124.
8. Lu Feng, GE Yongfang. Thinking on Problems and Countermeasures of Vocational Guidance for College Students in the New Era [J]. Journal of Hubei Open Vocational College, 2019,33(13):33-34.
9. Yu Ying, Yin Xiaolong. Thoughts on Building a whole-course education System for college students' Vocational guidance [J]. Journal of Jilin Provincial Institute of Education, 2019, 35(04):34-37.
10. Jiang Huiyang. Research on Creative Development Paths and Countermeasures based on Multiple Intelligences in senior high school [D]. Zhejiang University, 2017.

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