# Research on the Construction of Intelligent Assessment Model for Career Development of College Counselors

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Abstract: With the implementation of the national education digitization strategic action in 2022, the trend of intelligent career development of college counselors has become more and more obvious. College counselors are an important force in the ideological and political work of colleges and universities. As the closest person to college students, the career development of college counselors is related to the realization of the fundamental task of cultivating people in colleges and universities as well as the fundamental problem of whom and what kind of people colleges and universities train. In the era of artificial intelligence, the career development of college counselors has become an inevitable trend. This paper draws on the results-oriented thinking of the OBE concept of international engineering education certification and based on the vocational ability standard of college counselors of the Ministry of Education, attempts to construct an instant and visual intelligent assessment model of college counselors' career development that meets the requirements of the new era in China, in order to effectively improve the vocational ability of college counselors and continuously improve the team construction.

Keywords: College counselors; Career development; Intelligent; Evaluation model

#### 1. Introduction

With the continuous attention of the country to the construction of college counselors, domestic researchers pay more attention to the related research on the career development of college counselors. Over the years, domestic researchers have paid continuous attention to the career development of college counselors. Since the career development of college counselors became a research topic in 2006, researchers have mainly entered into the topic of career development of college counselors from two aspects. First, it focuses on summarizing the existing problems from the practice of college counselors' career development and puts forward countermeasures and suggestions; Second, taking the counselor as a specialized profession, the multi-dimensional degree of the career development of college counselors is discussed from the theoretical perspective of professional development. However, there are few relevant studies on the intelligent assessment of college counselors' career development and the design of counselors' career development analysis model by using massive data through big data and intelligent information means. For example, (Cui Wei, 2015) discussed the construction of college counselors' competency model from the perspective of their career development and scientific research ability [1]. However, the relevant research is limited to the perspective of a certain ability of college counselors' career development, and the overall research on career development ability is lacking. At the same time, most of the achievements are a single theoretical model, which lacks practical application and has not been upgraded to the intelligent level.

The career development of college counselors has always been a hot topic in the construction of college counselors. In 2005, the Ministry of Education issued opinions on strengthening the construction of college counselors' homeroom teams clearly pointed out that "the development of full-time counselors should be planned as a whole." Encourage and support a group of backbone to study for relevant degrees and professional training, engage in counselor work for a long time, and develop in the direction of professionalism and experts "[2]. As China's higher education has entered a popular stage, the development system of college counselors has become more and more perfect, and a large number of professional talents have been enriched to the team of college counselors, (Li Yongshan, 2009) the professional development pattern of college counselors will inevitably change and become mature [3]. However, there are many problems in the career development of college counselors at present. (Fu Ding, 2008) To fundamentally solve these problems, it is necessary to establish a

professional platform for the majority of counselors from the system, carry out professional construction and training, and take the path of professional development [4]. In order to achieve the goal of professional development of college counselors, we should pay close attention to and attach importance to the tasks and problems faced by counselors in different stages of career development, and take practical and effective measures to provide systematic and comprehensive guidance for their career development. 2009) This is an important issue that must be paid attention to and solved in the current and future period of professionalization and professional development of college counselors in China. In addition, (Li Mingzhong, 2016) strengthen the theoretical research on the growth process and development law of outstanding college counselors in China, improve the process of college counselors' appointment, training, training, management and evaluation, and promote the professionalization and professional construction of college counselors in China [5].

College counselor is an important force in the ideological and political work of colleges and universities. As the closest person to students, the career development of college counselor is related to the realization of the fundamental task of cultivating people in colleges and universities and the realization of the fundamental problem of whom and what kind of people colleges and universities train. In the current era of artificial intelligence, the career development of college counselors has become an inevitable trend. It is necessary and significant to construct a real-time and visual intelligent assessment model for the career development of college counselors in order to effectively improve the career ability of college counselors and continuously improve the construction of counselor team.

#### 2. Domestic and foreign research and inspiration on the career development of college counselors

#### 2.1 Domestic research trends

The year 2022 is known as the first year of the national Strategy for digitization of education. The state has set up a grand blueprint for the digitalization of education from the policy and technical levels. The "Key Points of the Ministry of Education in 2022" clearly put forward the implementation of national education digitalization strategic actions, and the Party's 20th National Congress report clearly requires the promotion of education digitalization. On March 28, 2022, the National Smart Education Platform launched by the Ministry of Education was launched, marking the advent of the digital era of education. In September 2022, Weng Tiehui, Vice Minister of Education, and others jointly opened the Big data empowerment platform for the ability improvement of the national college counselor team, which will integrate all kinds of shared high-quality training resources and improve the curriculum system for the ability improvement of college counselors. The enabling platform will strive to achieve the construction of big data analysis and accurate portraits of college counselors, provide learning and training resources for the majority of college counselors across the country, and strive to become a high-end training base for all counselors, service frontline think-tanks, exchange and mutual learning platforms, self-improvement centers, and development research engines.

## 2.2 The status quo of relevant research abroad

Due to the differences in ideology and management system, the roles and responsibilities of "counselors" in colleges and universities in different countries are different. (Chen Hongling, Xu Chao, 2012) "Counselors" in foreign universities are mainly engaged in the management of student affairs, emphasizing the concept of "student-oriented" and featuring standardized management system and professional team construction. [6] In general, the career development theory of college counselors was put forward earlier abroad, and the career development of counselors has received more attention and attention. However, there are few relevant studies on the intelligent assessment model of college counselors' career development.

In the United States, the study on the career development of college counselors originated from the study of human development theory. D.tanley Carpenter believes that the basic principles of human development can be directly applied to professional development, which is essentially a continuous and cumulative process from a single to a complex behavior, and can be described by common levels or stages. (Li Yongshan, 2009) In the 1980s, Miller and Carpenter put forward the famous career development stage theory in the United States, and divided the career development of college counselors (student personnel workers) into the formative period, the application period, the accumulation period and the generation period. Since then, American colleges and universities began to pay attention to and attach importance to the professional development model of full-time counselors,

in order to promote the effective professional development of counselors.

Miller and Carpenter also believe that college counselors need to pay attention to different problems at different stages of career development, and if these problems are not timely and properly dealt with, it will affect the healthy development of counselors' careers. From the perspective of the model theory of career development stage, college counselors should pay full attention to the different tasks and specific concerns faced by individuals in different career development stages. If individual counselors neglect professional growth, their professional development and work will be affected, which will harm the interests of the counselors themselves, the school and the students. Therefore, schools and professional associations of counselors should promote the professional development of counselors with systematic and active training programs, so as to promote the professional and professional development of counselors. Moreover, professionalization is a development structure, and if the tasks of the previous stage are not completed, the tasks of the later stage will inevitably be affected. If a counselor takes on a position that they are completely unmatched for, they will end up with constant frustration, disappointment, and stopped development. Similarly, if the counselor is suitable for greater responsibility and does not get promoted, it will also lead to career stagnation.

In the United Kingdom, the role of university counsellors is similar to that of student affairs administrators, providing services to all students. (Hou Qihai et al., 2011) As a professional profession, it has a high degree of professionalism and specialization. First, students' affairs management is becoming increasingly specialized; Second, the practitioners generally have a high degree and a deep research foundation, such as the teacher in charge of psychological counseling is generally a doctor in psychology and hold professional certificates; Third, the professional association of student affairs management is mature. [7]

#### 2.3 Inspiration from relevant research at home and abroad

In the face of educational changes brought about by new technologies such as big data and artificial intelligence, countries around the world are bound to use information technology to carry out research and exploration on intelligent assessment models for career development of college counselors, so as to continuously improve and enhance the adaptability and competence of college counselors in the new era. In this context, based on various platform systems such as the national smart education platform, the big data empowerment platform for college counselors, and the boost of big data and artificial intelligence technology, the intelligent evaluation model of college counselors' career development will become the practical needs of college counselors' career development and an important part of improving the development system of college counselors.

# 3. College counselors career development intelligent assessment model construction

#### 3.1 Theoretical basis and application value

#### 3.1.1 Theoretical basis

Based on the policies, theories and practices of the career development of college counselors, the intelligent model of the career development of college counselors is constructed by means of information technology such as big data and artificial intelligence. Through the improvement of the evaluation model and a lot of practice, the comprehensive diagnosis, full employee feedback and whole-process governance of the career ability of college counselors are realized, so as to constantly improve the development system of college counselors.

#### 3.1.2 Practical application value

Starting from solving all kinds of difficulties and problems commonly encountered in the career development of college counselors, this paper draws on the results-oriented thinking of international engineering education certification OBE concept, and builds a real-time and visual career development intelligent assessment model that conforms to the new era of China's college counselors based on the professional competence standards. Through independent research and development of "intelligent management platform for Career Development of College counselors", it can provide career development AI portraits to counselors anytime and anywhere, provide comprehensive evaluation of career development, diagnose the status quo of career ability, and recommend learning and development programs according to the current career ability level of counselors. Finally realize the effective promotion of the professional ability of counselors and the continuous improvement of the

construction of counselor team.

#### 3.2 Construction of intelligent evaluation model

#### 3.2.1 Research object

The research object of this study is college counselors and their career development. Through studying the policies, theories and practices of college counselors' career development, the intelligent model of college counselors' career development is constructed by using big data, artificial intelligence and other information technology means, and the development system of college counselors is improved.

#### 3.2.2 General framework

First, the construction of the core competence index system of college counselors' career development under the "output-oriented" thinking mode. According to the "Vocational Ability Standards for College Counselors (Interim)" issued by the Ministry of Education in 2014 on the division standards for the primary, intermediate and senior vocational development ability of college counselors, the work content and ability requirements corresponding to nine functions, such as ideological and political education, party and league building and class construction, are taken as the first-level indicators of the core competence of college counselors' career development. On this basis, the corresponding secondary index system is established and improved, and data observation points are established for each secondary index.

The second is to build a college counselor career development intelligent assessment model that meets the requirements of our new era. Based on the application and exploration of new technological means such as big data, artificial intelligence, 5G, and blockchain in the educational domain, relying on the national smart education platform, the big data empowerment platform for college counselors, and various university-level platform systems related to counselors, and in accordance with the policies, theories, and practices of college counselors' career development, grounded in the results-oriented thinking of the OBE concept of international engineering education certification and the index system of college counselors' career development core ability, the intelligent evaluation model of college counselors' career development in the new era of our country is constructed (Figure 1).

Data cloud center

Primary index
Primary index
Primary index
Intermediate index
Advanced index
Data mining algorithm library
Index digital observation point
Provide access services

Data diagnostic center

Data mining algorithm library

Index digital observation point

Provide access services

Career development

Personation fercommendation (Personation fercommendation algorithm based on multiple learning objectives)

Data feedback center

National smart obscistors plusform

National smart obscistors plusform

Other third party systems

Development proposal recommendation

Development proposal recommendation

Figure 1: Results Oriented Management Platform Core Module Structure

The third is to promote the effective promotion of vocational ability and continuous improvement of team construction of college counselors by intelligent evaluation of career development. Through independent research and development of "intelligent management platform for Career development of college counselors", AI portraits are made for the career development of college counselors, and comprehensive evaluation of career development is provided, instant diagnosis of the current status of career ability is provided, and learning and development plans are recommended according to the current level of professional ability of counselors, so as to effectively improve the career ability of college counselors and continuous improvement of team construction is finally achieved.

## 3.2.3 Core index system of intelligent evaluation model

The core and difficulty of the intelligent assessment model of college counselors' career development are the establishment of the index system framework of college counselors' career development core competence (table 1) and the theoretical construction of the structural algorithm of the intelligent assessment model. In addition, the construction of the intelligent management platform for the career development of college counselors under the "output-oriented" thinking mode is also the difficulty of the intelligent evaluation model.

In short, the intelligent assessment model of the career development of college counselors includes two main parts: the basic theoretical index frame of the model and the structure of the intelligent assessment model. Through the construction of the model, the paper discusses the characteristics, advantages and application conditions of the intelligent assessment model for the career development

of college counselors.

Based on the existing data related to the career development of college counselors and in accordance with the requirements of the career development of college counselors, a new database should be actively developed, and the data should be managed, diagnosed, and fed back in accordance with the career development ability indicators of college counselors, so that it can meet the needs of the career development of college counselors and effectively provide basic support for improving the development system of college counselors. Based on the Ministry of Education's Vocational Competence Standards for College Counselors (Interim) and the existing theoretical and practical research results related to the career development of college counselors, this paper constructs an intelligent assessment model for the career development of college counselors, and attempts to build a theoretical model of the results-oriented management platform for the career development of college counselors. This study provides service and support for improving the professional ability of college counselors and improving the development system of college counselors.

#### 4. The general conclusion

Based on the existing policies, theories and practices of college counselors' career development, this study uses big data, artificial intelligence and other information technology to build an intelligent model of counselors' career development. Through the improvement of the assessment model and a lot of practice, it can achieve all-round diagnosis, full employee feedback and whole-process management of counselors' career ability. This study will provide support for the continuous improvement of the development system of college counselors. It highlights the systematization and process characteristics of the professional development of counselors, and integrates information technology into theory and practice to explore the career development path of counselors under the new situation. In addition, starting from solving various difficulties and problems commonly encountered in the career development process of college counselors, this paper draws on the results-oriented thinking of international engineering education certification OBE concept, and builds an instant-time and visualized intelligent career development assessment model that conforms to the new era of China's college counselors based on the professional competence standards. The research of this project will promote the effective improvement of the professional ability of counselors and the continuous improvement of team building.

In terms of research methods, the Model method, Fieldwork method, Empirical research method and other research methods are comprehensively applied. Combined with artificial intelligence, big data and other technical algorithms, the intelligent evaluation model of college counselors' career development is constructed, and the AI portrait of counselors' career development is drawn. In addition, it is also necessary to obtain first-hand information through personal visits and surveys, comprehensively use survey, interview, literature review and other methods, and select typical cases such as the national college counselors of the year for in-depth investigation and research, and in-depth analysis of the status quo of college counselors' career development ability indicators. Through scientific induction of a large number of college counselors' career development data, the general law of college counselors' career development is summarized.

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*Table 1: Table is the core competence index of career development of college counselors* 

ELEMENTARY			INTERMEDIATE			ADVANCED		
Level 1 indicators	Level 2 indicators	Index data observation point	Level 1 indicators	Level 2 indicators	Index data observation point	Level 1 indicators	Level 2 indicators	Index data observation point
1.The ideological and political education			1.The ideological and political education			1.The ideological and political education		
2.Party, league and class building			2.Party, league and class building			2.Party, league and class building		
3.Learning guidance			3.Learning guidance			3.Learning guidance		
4.Daily affairs management			4.Daily affairs management			4.Daily affairs management		
5.Mental health education and counseling			5.Mental health education and counseling			5.Mental health education and counseling		
6.Internet ideological and political education			6.Internet ideological and political education			6.Internet ideological and political education		
7.Crisis response			7.Crisis response			7.Crisis response		
8.Career planning and career guidance			8.Career planning and career guidance			8.Career planning and career guidance		
9.Theoretical and practical research			9.Theoretical and practical research			9.Theoretical and practical research		