

Research on Quality Assessment System of Business Talents Training in Application-oriented University

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Abstract: Strengthening the construction of application-oriented universities and cultivating high-quality application-oriented talents is not only the need of economic and social development transformation, but also the internal requirement of improving the internal structure of higher education, which is conducive to solving the structural contradiction of higher education personnel training. Major enterprises are in urgent need of a solid theoretical foundation, strong practical ability, can quickly adapt to the production of the first line of business application-oriented professionals. Based on relevant research results at home and abroad, this paper builds a quality assessment and evaluation system for business talents training in application-oriented university. Through empirical analysis, this paper further analyzes the problems existing in the process of business talents training in application-oriented university and draws specific suggestions: clear talent training target positioning; construct scientific and reasonable teaching staff; establish a practical curriculum and teaching system, promote the improvement of the quality of business talents training in application-oriented university, and continuously deliver high-quality talents for the transformation and upgrading of economic and industrial structure.

1. Introduction

In March 2015, China put forward a number of opinions on deepening institutional reform: It is necessary to focus on talent training, focus on talent innovation, and expand the channels for school-enterprise cooperation to educate people. Local colleges and universities are accelerating the pace of transformation into applied technology colleges and universities. In the country's "14th Five-Year Plan" mentioned that "the development of private education should be standardized, the investment of human resources should be increased, the integration of production and education should be continuously deepened, the cooperation between schools and enterprises should be intensified, and the training of technical skills should be strengthened." It shows that private colleges should deepen the integration of production and education and promote the training of applied talents[1].

In recent years, the employment of college graduates and the recruitment of enterprises have encountered difficulties. On the one hand, some graduates are difficult to find jobs suitable for their own majors, and on the other hand, some enterprises cannot recruit high-quality technical skills. The main group of graduates who find it difficult to find employment is the undergraduate students. This

kind of practical contradiction requires local colleges and universities to build applied talents training model and vigorously train applied talents to adapt to and serve social and economic development[2]. Strengthening the construction of application-oriented universities and cultivating high-quality application-oriented talents is not only the need of economic and social development and transformation, but also the internal requirement of improving the internal structure of higher education, which is conducive to solving the structural contradiction of higher education personnel training.

Therefore, how to position and train the application-oriented talents who meet the requirements of social development is a problem that the colleges and universities of our country must face in the new reform. It is particularly important to deepen the reform of higher education personnel training mode, strengthen school-enterprise cooperation in running schools, improve and build innovative teaching staff, and establish a feasible curriculum system.

2. The Connotation of Application-oriented University

In 1993, China issued the "Outline of China's Education Reform and Development" proposed that "institutions of higher learning must be classified according to their characteristics and development priorities, and release classification standards." So that all kinds of colleges can reasonably divide their work levels and develop their own advantages at their own levels." The training of application-oriented talents is an inevitable choice for the adjustment of education structure in the mode of economic and social development. At present, national construction and regional social development require local colleges and universities to train a large number of high-quality applied talents of different types, levels and specifications. This requires local undergraduate universities to change from academic or theoretical talents training to applied talents training.[3]

Applied talents are skilled talents who apply mature technology and theory to actual production and life or culture, and are characterized by practical application ability. The training goal of application-oriented talents is to meet the needs of society.

Lain (2008) has studied Sakacunda University of Applied Science and Technology in depth. He points out that in the current era, industry and education need to deepen cooperation, knowledge in the field of higher education needs to promote social and economic development through industry, and industry also needs to interact with higher education to deepen trust and form a mutually beneficial partnership. And constantly realizing knowledge creation[4]. Liu Zhentian (2014) proposed that if it is necessary to promote the transformation of local colleges and universities, it is necessary to carefully study the epistemology and methodology of higher education, and understand the essence of the transformation of colleges and universities is the basis for the success of the transformation of local colleges and universities. It is also necessary to recognize that the relationship between universities, the government and the market is a dynamic transformation, so it is necessary to coordinate the relationship between all parties according to market changes. Du Chi (2015) believes that the success of applied university reform in Europe lies in its conformity with the social background, social structure and policy system of applied university development. To cope with the current situation of university transformation, China must learn from the successful cases of the transformation of applied universities in Europe and the United States, and explore the mode of university running and the path and method of transformation that meet the realistic background of China[5]. Zhong Fang (2020) summarized the researches of scholars on applied universities and found that the researches mainly focused on the orientation of applied universities, the construction of teaching staff, personnel training and path research. The development of China's higher education and the transformation and upgrading of industrial structure need more high-level research based on the integration of industry and education to promote the development of applied universities as

theoretical support[6].

3. The Role of Business Talents Training in Application-oriented University

The concept of application-oriented talents training plays a positive role in meeting the needs of high-level application-oriented talents in China's economic and social development and promoting the popularization of China's higher education. The teaching system of application-oriented talents training should be different from the traditional research-based teaching, and the cultivation of practical ability should be strengthened with a greater proportion on the premise of mastering basic theoretical knowledge. In order to enable students to adapt to the needs of practical work faster and better[7].

Liu Chang (2019) believes that The Times require teaching reform. In the context of industry-university cooperation, innovation and entrepreneurship education should be strengthened to cultivate high-level applied talents and meet the needs of society, so as to realize the transformation and development of colleges and universities and fulfill the function of serving society. At the same time, it is also an important way for universities to accelerate connotation construction and characteristic construction[8]. Zhu Jianxin (2019) The training of application-oriented talents requires "more emphasis on ability than knowledge; More emphasis on practice than theory; More emphasis on technology than on academics; Relative to further study, more emphasis on employment ", but whether it is ability, practice, technology or employment, can not be separated from the industry. Therefore, the economic transformation and the adjustment of industrial structure will have an important impact on the innovation of methods, paths and models for the training of applied talents[9]. Luo Yaojia (2019) Training high-level applied talents is an inevitable choice and inherent requirement for serving and developing high-end market. The training of applied talents is mainly based on the needs of local economic development and industrial structure transformation and upgrading, and is an important basis for realizing labor reproduction and optimizing human resource allocation. The training of advanced applied talents by local high-level universities will better meet the needs of industries for engineering and technical talents, especially senior engineering and technical talents, and enable a large number of senior applied talents with strong industry background knowledge, engineering practice ability and competence for industry development needs to serve high-end market development. Promoting the innovative development of society[10].

4. Empirical Analysis

4.1. Questionnaire Design

In order to further investigate the problems existing in the quality assessment and evaluation system of business talents training in applied universities, this study adopts the questionnaire survey method for analysis. The questionnaire of this study takes students, teachers and enterprise executives as the survey objects, and combines 1-5 single choice of satisfaction and single choice of personal data to investigate the quality assessment and evaluation system of business talent training in applied universities. The first part designs Likert scale items from four aspects: practical curriculum system, school-enterprise cooperation management, talent training goal setting, teacher team training and construction, and summarizes the questionnaire of business talent training quality evaluation system of applied universities. And the setting of the topic is more flexible, using the statement to describe the relevant factors to explain the measured item, each item is scored.

SPSS 26.0 software is selected as a statistical tool for data analysis, and the data obtained by collecting questionnaires are analyzed and summarized statistically. Through the distribution of questionnaires, recycling, data collection and data analysis, this systematic process sorts out the

problems existing in the quality assessment and evaluation system of business talents training in applied universities.

4.2. Questionnaire Distribution and Recovery

Prior to the publication of the formal questionnaire, the research conducted a preliminary survey to delimit the scope, in order to ensure the scientific attributes and reasonableness of the data collected by the formal questionnaire. According to the pre-survey results and the opinions and suggestions of some interviewees and experts, the data scale of this survey was slightly adjusted to form a formal survey questionnaire. The data used in this study came from formal studies. A total of 200 questionnaires were distributed and collected to the participants. In order to fully ensure the authenticity of statistical survey results and the validity of data, this study conducted a detailed review of the formal issuance and recycling of questionnaires. After sorting out the number of questionnaires collected, the author analyzed the case processing summary table by SPSS 26.0, as shown in Table 1 below:

Table 1: Summary of case processing

Case summary			
		case	%
case	effective	185	92.50
	Exclude	15	7.50
	total	200	100.0

(This study was compiled according to SPSS 26.0)

The author collates 185 questionnaire data by SPSS 26.0 analysis software, and analyzes the basic information of gender, educational background and education level of the survey objects, as shown in Table 2:

Table 2: Summary of respondent information

type	item	quantity	%
gender	male	85	46.0%
	female	100	54.0%
age	20-29 years old	60	32.4%
	30-39 years old	45	24.4%
	40-49 years old	40	21.6.%
	Over 50 years old	40	21.6.%
Educational level	Junior college	25	13.5%
	Undergraduate course	100	54.1%
	Master degree or above	60	32.4%
occupation	School student	60	32.4%
	Teacher	45	24.4%
	Enterprise management personnel	80	43.2%

It can be seen from the summary of Table 2 that in the valid samples, there are 85 males, accounting for 46% of the total number of valid samples, and 100 females, accounting for 54% of the total number of effective samples. The population was 32.4% from 20 to 29 years old, 24.4% from 30 to 39 years old, 21.6% from 40 to 49 years old, and 21.6% above 50 years old. Among the respondents, 32.4% had a master's degree or above, 54.1% had a bachelor's degree, and 13.5% had a junior college degree. In the occupational statistics table, students accounted for 32.4%, teachers accounted for 24.4%, and business managers accounted for 3.2%.

4.3. Questionnaire Reliability Analysis

Cronbach Alpha is the most common reliability measure used in scientific research. Cronbach Alpha coefficients are used to check whether items measuring the same theoretical dimension agree with each other. The size of the Alpha coefficient represents different levels of confidence. When the Alpha value is less than 0.3, the reliability is low and untrustworthy. An Alpha value between 0.3 and 0.4 indicates barely credible; An Alpha value between 0.4 and 0.5 indicates confidence; An Alpha value between 0.5 and 0.7 indicates confidence. Scholars generally agree that the reliability is roughly between 0.7 and 0.98 Cronbach Alpha values, which can be used as a value with high reliability. In this paper, through the calculation of SPSS26.0 statistical software, the Cronbach Alpha value has reached 0.858, which has reached the high reliability reliability value widely recognized by the academic circles at home and abroad. The results of questionnaire reliability analysis are shown in Table 3:

Table 3: Questionnaire reliability analysis table

reliability	
Cronbach Alpha	items
0.858	15

(Source: Calculated by SPSS 26.0)

4.4. Questionnaire Validity Analysis

KMO and Bartlett sphericity test is one of the methods to check whether the index conforms to the factor analysis. When the value of KMO is higher, the number of common influencing factors between variables is greater, and it is more likely to be applicable to common factor analysis. After the KMO test reaches a certain level, the problems of practicability and efficiency evaluation of measurement content can be effectively solved. Among them, the closer the KMO value is to 1, the better the effect of statistics on the analysis of test variables. In this study, the KMO value is about 0.823, indicating that the analysis of the principal component has a good effect. Since the measurement scales of this questionnaire are not completely independent from each other, the significance of Bartlett's sphericity test is relatively obvious. The test of KMO and Bartlett sphericity is shown in Table 4:

Table 4: KMO and Bartlett test tables

KMO and Bartlett test		
	KMO	0.823
KMO and Bartlett test	Approximate chi-square	2292.398
	Degree of freedom	105
	significance	0.000

(Source: Calculated by SPSS 26.0)

4.5. Principal Factor Analysis

In this study, the method of principal component analysis was selected for extraction. In this study, 15 variables were designed for factor analysis. The results of the questionnaire analysis were based on the comprehensive calculation results obtained after the analysis of the SPSS questionnaire, which showed that the sum of the comprehensive interpretation accuracy of the four common factors in the questionnaire extraction results was 78.014%, higher than 60%, which could fully determine that the common factors were representative to a certain extent. Common factor variance and total interpreted

variance are shown in Table 5 and 6 below:

Table 5: Common factor variance table

Common factor variance		
	Initial	extraction
Business executives teach class	1.000	0.812
Set up in combination with specialized courses of international colleges and universities	1.000	0.822
Scientific teaching methods and means	1.000	0.795
Adjust the practical teaching plan according to the needs of enterprises	1.000	0.774
improve the management system for school-enterprise cooperation	1.000	0.768
Establish a platform for practical training	1.000	0.755
Cultivate experimental teaching teachers	1.000	0.772
Select high-quality cooperative enterprises	1.000	0.797
Talent target positioning is accurate	1.000	0.808
It conforms to the training mode of business talents in applied universities	1.000	0.791
The process of personnel training is scientific and practical	1.000	0.808
Build a scientific and reasonable teaching structure	1.000	0.668
Cultivate a team of double-qualified teachers	1.000	0.630
Schools and enterprises jointly train young teachers	1.000	0.877
Effectively integrate student evaluation and teaching feedback system	1.000	0.826
Extraction method: principal component analysis.		

(This study was calculated based on SPSS 26.0)

Table 6: Total variance interpretation

element	Initial eigenvalue			Extract the sum of squared loads		
	total	Percent variance	accumulate %	total	Percent variance	accumulate %
1	5.932	39.544	39.544	5.932	39.544	39.544
2	2.944	19.629	59.173	2.944	19.629	59.173
3	1.622	10.812	69.985	1.622	10.812	69.985
4	1.204	8.029	78.014	1.204	8.029	78.014

(This study was calculated based on SPSS 26.0)

In this paper, the principal component analysis method is used for factor analysis. The rotated variable will calculate its corresponding factor load, with the value ranging from 0 to 1, and the acceptable value range is above 0.5. The closer it is to 1, the higher the reliability. After the rotation of the questionnaire, 15 variables are classified into 4 factors, and the load value of the corresponding variables is higher than the acceptable load value of 0.5, and the highest load degree reaches 0.946, indicating that the questionnaire has a high degree of credibility. As shown in Table 7.

Based on data and knowledge, this study extracted 4 common factors and named them by analyzing 15 variable factors. Although the judgment of common factors is subjective to a certain extent, the four factors obtained through the analysis of principal components in the research are likely to have an impact on the quality assessment and evaluation system of business talents training in applied universities, namely, practical curriculum system, school-enterprise cooperation management, personnel training goal setting, and teacher team training and construction.

Table 7: Rotation component matrix table

Rotation component matrixa				
	element			
	1	2	3	4
Business executives teach class			0.893	
Set up in combination with specialized courses of international colleges and universities			0.802	
Scientific teaching methods and means			0.656	
Adjust the practical teaching plan according to the needs of enterprises			0.820	
improve the management system for school-enterprise cooperation	0.828			
Establish a platform for practical training	0.793			
Cultivate experimental teaching teachers	0.866			
Select high-quality cooperative enterprises	0.884			
Talent target positioning is accurate				0.898
It conforms to the training mode of business talents in applied universities				0.840
The process of personnel training is scientific and practical				0.882
Build a scientific and reasonable teaching structure		0.814		
Cultivate a team of double-qualified teachers		0.774		
Schools and enterprises jointly train young teachers		0.921		
Effectively integrate student evaluation and teaching feedback system		0.895		

(This study was calculated based on SPSS 26.0)

5. Strategies for Improving the Quality of Business Talents Training in Applied Universities

5.1. Determine the Target Positioning of Talent Training

The training specification stipulated by the training goal of application-oriented talents includes the quality, knowledge and ability of talents. In recent years, many local colleges and universities appear the phenomenon of convergence and broad goals in the orientation of talent training, and the specialization and individuation of talents are insufficient[11]. On the one hand, the concept of talent training is easy to fluctuate between applied talents and academic talents. It not only hopes to cultivate knowledgeable and research-oriented talents, but also emphasizes the learning of advanced and deep knowledge in teaching. At the same time, it hopes that students can have a strong ability to solve cutting-edge practical problems. For universities of applied technology, it is necessary to define the training goal of application-oriented talents. This ability refers to the application ability, that is, the effective application of the knowledge and methods learned in the actual production and life. The biggest characteristic of this ability is practicality, which also requires constant attention to experiment and practical training in the process of training talents. Therefore, schools should ensure the effective connection between majors and market industries according to the actual conditions of colleges and universities and majors, so as to solve the employment problem of graduates and provide sufficient labor force to meet the requirements of the market. Colleges and universities should establish a market demand monitoring system, scientifically predict and judge the changes in market demand in the next one to four years, and timely adjust the professional Settings according to the new changes in emerging industries or market demand. Pay full attention to the value of connecting the cluster composed of majors with the market, and establish an on-campus tracking evaluation to check whether the entire training process is in line with the professional orientation, whether it is implemented in accordance with the pre-set training path, and whether the set training goals are achieved. The off-campus evaluation is provided by the employer of the graduate, including the student's professional knowledge and application ability, self-learning ability after work, ability to adapt to the job, ability to bear hardships and stand hard work, etc., so as to form a win-win situation

of the school, students and enterprises.

5.2. Building a Scientific and Reasonable Teaching Staff

Application-oriented universities generally have some practical problems, such as lack of discipline leaders, unreasonable structure of scientific research teams, serious loss of teachers, few opportunities for further study, heavy teaching tasks and so on. Under the incentive of individual talents' own development needs and market mechanism, excellent teachers often flow into other colleges and universities due to development problems, while application-oriented universities are faced with the pressure of continuous loss of excellent talents and poor stability of teaching staff due to various practical reasons.

Therefore, in the construction of teaching staff, it is necessary to first establish a "double-qualified" teaching staff, which is the premise and guarantee of training applied talents in business. Teachers are not only required to have practical background, but also need to have deep academic background and have the ability to engage in high-level scientific research. Establish social practice bases for teachers, and send professional teachers to enterprises for training, temporary work and practical training in a planned way; Strengthen the introduction of high-level talents, and recruit high-level talents with high academic attainments at home and abroad, innovative ideas and strategic thinking for discipline construction, and pay attention to academic echelon construction in the field of characteristic disciplines; We will further improve the training system for young teachers and actively create conditions for the development of young and middle-aged teachers.

5.3. Establish a Practical Curriculum and Teaching System

Career analysis should be carried out before professional curriculum setting. Guided by "career analysis", it reflects the three principles of enterprise demand, relative stability and wide adaptation, and overcomes the disadvantages of professional-oriented curriculum setting in the past. The reform of the application-oriented personnel training system should focus on the overall optimization of the curriculum system and the cultivation of professional practical ability, give full consideration to the comprehensive embodiment of the structure of professional knowledge, ability and quality, strengthen the teaching of specialized basic courses, and pay attention to the integrity and science of professional curriculum Settings on the premise of keeping the discipline knowledge system relatively complete. It not only enables students to have a complete knowledge structure of tourism, but also lays a profound theoretical foundation for students and has a strong practical ability.

Under the digital background, the quality of talents training in applied universities in China is a multi-compound concept, and its standards are also complex, systematic and malleable. At present, application-oriented universities need to implement the construction of digital learning environment as the basis, focus on the innovation of learning methods and education models, take the deep integration of information technology and education and teaching as the core, pay close attention to the construction of software and hardware environment, and actively build the characteristics of digital education and teaching. Realizing Innovative structural reorganization and sharing of in-class and extra-curricular resources[12].

5.4. Deepening School-enterprise Cooperation

Enterprises play an important role in the training of application-oriented undergraduate talents. Enterprises are not only the main source of practical teaching funds, but also one of the main bodies of evaluating and examining practical teaching results, which runs through the whole process of practical teaching. In practice teaching, application-oriented talents should train students to solve various practical technical problems. The practice base provides internship positions for students to obtain real vocational training and work experience, and makes full use of the practice platform

provided by enterprises. On the basis of students mastering basic theoretical knowledge, students can exercise their job skills in enterprises through the combination of industry and education. This teaching mode, which attaches equal importance to theory and practice, can greatly improve students' production and operation ability, realize the seamless connection of students from "study" to "employment", and is conducive to exerting students' practical operation ability and creativity. At the same time, senior executives of enterprises are hired as base teachers, and external experts are added to the original teacher team to guide students and enrich the teaching content.

6. Conclusion

With the development of economy and society and the strategic adjustment of higher education structure, strengthening the construction of application-oriented university has become the common choice of many local colleges and universities. On the basis of the theoretical research results and practical advanced experience of the applied talents training mode of domestic and foreign disciplines, this paper puts forward the optimization strategy of the applied talents training mode of business disciplines. As a base for training skilled talents to meet the market demand, applied universities must combine the on-campus education with local industries to clearly define the orientation of talent training objectives. Build a scientific and reasonable teaching staff; Establish a practical curriculum and teaching system, and jointly train high-quality applied talents to meet the market demand.

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