

Construction of Employability Index System for Graduates of Applied Colleges and Universities

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Keywords: Colleges and universities, Employability, Employability indicators

Abstract: With the popularization of higher education, helping college graduates to have employability has become the key concern of colleges and universities. Based on this, this study adopts theoretical discussion and empirical research. Based on the discussion of relevant literature at home and abroad, as well as the advice and integration of college employment counselors, the index of employability of college graduates is constructed. Main findings: Tier first-level indicators include work practice, social management and school study; The second-level indicators under school study include theoretical knowledge in the major field, theoretical knowledge in the cross-professional field and theoretical knowledge in the cross-disciplinary field. The second-level indicators under social management include communication ability, emotional management ability and organizational ability. The second-level indicators under work practice include work attitude, work experience and work performance.

1. Introduction

In the past decade or two, with the expansion of higher education, there has been a phenomenon of oversupply of college graduates in the job market. The employability and employment performance of college graduates have become the key points in the school affairs and teaching evaluation of colleges and universities, as well as the youth policy issues that countries attach great importance to. Labor force is closely related to economic system, becomes an important part of the human capital, to explore the discovery after scholars point of view: the sustainable development of labor force is the learning process, its emphasis on the cultivation of the ability and construction, colleges and universities should cultivate students' employment for the market force, and at any time through improving knowledge and skills in specific areas, promote the competitiveness of the students themselves, to face the challenges of the workplace and problems [1]. From the perspective of educational economics, colleges and universities cultivate the knowledge and skills of college students through educational means, which can improve the competitiveness of national human capital and then promote the growth of economic system. In short, colleges and universities should improve their efficiency, cultivate students' employability and enhance the competitiveness of the national economic system.

The index composition of employability, from the core employability skills proposed in the employability reports of various countries, as well as the relevant literature, combined with the teaching background and environment of Chinese colleges and universities, preliminarily formulated the employability index system of college graduates as follows: The indicators selected for the first level are “school learning ability”, “social management ability” and “work practice ability”. The indicators selected for the second level are “academic competence”, “self-growth”, “communication ability”, “organizational ability”, “emotional management ability”, “work experience”, “work attitude” and “work performance”. The indicators selected at the third level are the evaluation criteria at all levels, which form the basis of the overall index system. Among the indicators selected at the second level, “academic competence” and “self-growth” are the two aspects of school learning ability. “Communication ability”, “Organizational ability” and “Emotional management ability” are three aspects of social management ability. On the other hand, “work experience”, “work attitude” and “work performance” are three aspects of work practice.

The indicators for the second level of subdivision are formulated as follows:

(1) Disciplinary ability and self-development

If college students can take cross-disciplinary knowledge as an elective course and receive cross-disciplinary and even cross-disciplinary theoretical guidance in different fields, they will have more learning opportunities and can transform knowledge in different fields to improve their analytical and thinking ability, expand cross-disciplinary skills and enhance their employability [2]. Therefore, corresponding to the curriculum formulation of colleges and universities in China, the subject competence indexes are divided into three categories: “theoretical knowledge in the major field of the major”, “theoretical knowledge in the cross-professional field” and “theoretical knowledge in the cross-disciplinary field”.

(2) Ability to communicate, organize and manage emotions

According to the third level of social operation ability, the communication ability of social operation ability is subdivided into “interpersonal interaction”, “oral expression ability” and “written expression ability”. Organizational ability is subdivided into “leadership”, “team work ability” and “team loyalty”. Emotional management is subdivided into “tolerance”, “stress resistance” and “adaptability”.

(3) Work experience, work attitude and work performance

College students should take advantage of the opportunities of cross-field learning and practical skills internship to cultivate more expertise and increase opportunities for employment. During the school period, students should focus on the combination of practical technical knowledge and theoretical knowledge to improve knowledge and skills in specific fields. Therefore, the work experience is divided into three parts: “practice and internship in professional field”, “participation in community activities” and “part-time work”. In terms of work attitude, it can be subdivided into “concentration”, “work adaptability” and “work independence”. Job performance is subdivided into “performance of practical skills in the professional field”, “problem solving ability” and “practical analysis ability”.

2. Validation of Setting Employability Index for College Graduates

In this study, firstly, the literature analysis method is used to summarize and sort out the relevant studies on employability at home and abroad, as the basis of compiling the questionnaire, and the data obtained from the questionnaire are set up. In the aspect of data analysis, the hierarchy analysis method is used to construct and weight the indicators.

2.1 The Research Methods

In the process of research, the primary work is to collect relevant literature, and analyze and summarize. In the process of data collection, on the basis of relevant literature of experts and scholars at home and abroad, this paper designs a questionnaire for available indicators of “College Graduates Employability Index”, and carries out two stages of expert questionnaire survey and the formal implementation of relative weight questionnaire respectively.

And the distance from them to the unknown node M is d_e , d_f and d_g , respectively. Set the coordinate of unknown node M to (x, y) , then from (2), (x, y) can be calculated and obtained.

Expert questionnaire : The overall index system of this study is mainly divided into three targets at different levels. Through the collection and collation of domestic and foreign literature, relevant analysis and collation are carried out as the theoretical basis for the stratified details in the index system. After that, the researchers themselves compile the preliminary expert questionnaire for the available indicators of “graduate employability”.

Expert questionnaire is to assist researchers to adjust and modify the available indicators of “college graduates' employability index” based on the opinions of education experts and scholars in related fields. In this way, the completed index system can be more feasible.

Relatively weighted questionnaire : After the development and modification of the above indicators, the researcher prepared a questionnaire on the relative weight of “College Graduates Employability Index” based on the revised content, and then issued a formal questionnaire after the questionnaire was completed. After the questionnaire was collected, the obtained data were analyzed by hierarchical analysis method.

Hierarchical analysis is a set of decision making system developed by Thomas L. Saaty, a professor from Caldeo University, USA, in 1971 to deal with complex decision making problems under uncertain factors. It mainly simplifies the complex problem into a simple factor-level system, then sets up a pair comparison among factors through the collection of opinions of scholars, experts and decision-makers at all levels, and then evaluates the strength and weakness of the relative weight of the indicators established at all levels to provide reference indicators for decision-makers [3].

After the formal questionnaires were collected, the relevant data were documented, and the hierarchical structure established by the researchers was compared in pairs through the application of hierarchy analysis, and the conclusion of index construction was drawn from the vector comparison and consistency in the data.

2.2 The Research Process

Of this study is to construct the university graduate employment force index: in the process of research, first of all, the related literature at home and abroad were discussed, to collect scholars view as the basis of research, and carries on the questionnaire compiled in accordance with this, again through the education experts and scholars suggested that the questionnaire content changes, further compiling “university graduate employment force index” the relative weights of the questionnaire, and then the formal questionnaire. After the formal questionnaire is collected, the obtained data are analyzed by computer software, and the results of the relative weight distribution of each class system are finally obtained. Based on the results, relevant conclusions and suggestions are put forward.

Stage 1: The subjects of the expert questionnaire on “Available Indicators of College Graduates' Employability”. The experts and scholars who participated in the “Questionnaire on Available Indicators of College Graduates Employability” were mainly professors of education-related departments in the researcher's unit, and a total of eight professors provided their opinions.

Stage 2: The subjects of the questionnaire of “College Graduates Employability Indicators” by the caste analysis method. In colleges and universities, the employment guidance teachers have the most direct correlation with the employment of college graduates. Therefore, this study uses a questionnaire to understand the employment counselors' views on the current employability of college graduates, and makes a comparison and understanding of the relative weight of employability through hierarchy analysis. A total of 59 nationally representative application-oriented undergraduate universities were selected for this study. Questionnaires were distributed after the researchers invited them to cooperate with the study by telephone.

A total of 59 questionnaires were sent out and 40 were actually collected with a recovery rate of 67.79%.

2.3 Research Tools

Through the literature collation and expert questionnaire consultation, the empirical data collection tool is formulated, the connotation of the employability index system of college graduates is constructed, and the opinion survey of scholars in related fields is used as a complete employability index tool of college graduates.

According to the related literature at home and abroad to discuss the results obtained after reference university of domestic actual situation, then the proposed by questionnaire, the college graduates employment force index is divided into three aspects of the present and connotation are discussed, respectively, in the school study, social management and work practice, and then down from the upper concept of subdivision and by the way of the concept of being below the upper building architecture.

After confirming the initial connotation of the indicators, the relevant education experts and scholars conducted a questionnaire survey on the available indicators of the “employability of college graduates”. The available indicators expert questionnaire adopts a three-point scale, presenting three options of “applicable”, “to be modified” and “not suitable”. In addition, the indicators at all levels are provided with a space for expression of opinions, which can be used as the basis for the revision of the questionnaire.

As mentioned above, this research is divided into two stages according to the different types of subjects who send questionnaires. The data processing process of these two stages is described as follows:

The first phase of the data processing system according to the “index of” university graduate employment force available questionnaire survey, through summarizing the opinions of the education experts and scholars, index connotation changes and add or delete, to further establish the index of each level in the connotation, to build the next stage “university graduate employment force index relative weight” questionnaire.

The second phase of data processing is based on “university graduate employment index relative weight” the results of the questionnaire, using Expert Choice version 11.5 as tools for data analysis of test and analysis, as to establish a “university graduate employment force index” hierarchy structure model, and the questionnaire of each specialist input statistics, the Choice of the judgment and analysis of the connotation of the questionnaire by topic, and, according to the results of the analysis to calculate the relative weight between all levels index distribution.

3. On the Index of Employability of College Graduates

This study on the distribution of university graduates employment force index relative weight basis, is by the first stage to participate in the evaluation of the universities employment counseling teachers choose the judgment results, and on the basis of the results by Expert Choice 11.5 by topic

relative weights of the questionnaire analysis, and then again by the results of analysis, calculation of index between arithmetic average, at the level of the overall index statistics relative weights.

In this study, the weight distribution system of “college graduates' employability index” constructed by the hierarchical analysis method can clearly show the connotation of college graduates' employability index from the statistical results, and the research results can provide an understanding of the relative importance of each index in the system. The conclusions of this study are as follows:

3.1 The Most Important Thing for College Graduates to Enhance Their Employability is Their Practical Ability

The “University graduates employment force index” is mainly divided into three aspects are discussed, respectively “on learning”, “social management” and “practice”, the results showed that the first level indicators of the overall weight distribution, the highest weight value is “practice”, followed by “social management”, “learning” in school are the lowest; However, there is a small difference between “work practice” and “social management”, while there is a big difference between “study in school” and the other two.

It can be inferred from the above results that if college graduates want to improve their employability, they should accumulate experience through work practice, and conduct interpersonal interaction and self-emotion management through social communication skills. Only rely on the school to learn knowledge, and no social integration, no work experience, compared with others in the workplace, the competitiveness is low.

This study overturns the university are usually considered to emphasizes the professional theoretical knowledge in the field of cognition, most university graduates enter the workplace and the gap in the industry expect highly, so most of post graduates to have a basic working experience, as soon as possible to fit for the work, more hope to be able to properly the related theoretical knowledge in the field of flexible use.

This phenomenon is consistent with the weight distribution ratio presented by the results of this study, and the highest one is “work practice”. In this regard, universities in general should not only emphasize students' understanding of theoretical knowledge, but also pay attention to students' flexible application of theory in practice, so as to improve the competitiveness of students in the workplace.

3.2 College Graduates Should Develop a Good Working Attitude to Enhance Their Employability and Competitiveness

In the second level of “learning in school”, the weight distribution of self-growth is higher than that of disciplinary ability, and the difference of the weight value is more than two times, indicating that the importance of self-growth is much higher than the cultivation of disciplinary ability. In the second tier of “social operation”, “communication ability” is the most important, followed by “emotional management ability”, and “organizational ability”. “Communication ability” and “Emotional management ability” have a small difference in weight allocation, while “Organizational ability” has a large difference and a small value with the other two items. In terms of the results, “Organizational ability” is less important than the other two items. In the second tier of “work practice”, “work attitude” is the most important, followed by “work experience” and “work performance”. There is a small difference in the weight distribution between “work experience” and “work performance”, while there is a large difference and value between “work attitude” and the other two. From the results, it can be seen that “work attitude” is more important than the other two.

3.3 College Graduates Should Pay Attention to the Growth of Their Ability during Their Study At School

According to the research results, in the second level of “learning in school” project, the weight distribution of self-growth is much higher than the proportion of disciplinary ability, which indicates that the importance of self-growth is much higher than the cultivation of disciplinary ability. In the actual situation, some students study in higher education only to obtain the diploma certificate of graduation certificate. They hold the attitude of muddling along with their study, and only require their academic performance to reach the passing limit, not to mention other self-fulfilling abilities [4]. However, in today's society, the industry has already believed that a diploma cannot be equated with a student's strength. Therefore, college students should still make efforts to improve their own ability during their study in school [5]. Moreover, because employability emphasizes the ability of sustainable development, self-growth should be emphasized not only during the period of study, but also after entering the workplace, so as to constantly improve their ability and strength, so as to improve the chances of keeping their own jobs and improving their job promotion.

3.4 Cultivating the Ability of Communication and Emotion Management is Helpful to Enhance the Employability

In the workplace, communication ability and emotion management ability have always been listed as the key [6]. Good communication skills and emotional management skills are conducive to interpersonal interaction and social management. Good interpersonal relationship is a great boost to work and career, which can help to expand contacts. Networking is an excellent power for social management and contributes to the performance in the workplace.

In the working environment, there must be opportunities to interact with others. Maintaining good communication and interaction between oneself and others is conducive to getting help when dealing with work problems and getting help from other organizations. Interacts well with others in the organization, and gets help in handling assignments from superiors, which makes it easier to keep your job.

3.5 Having Better Job Adaptability is Helpful for College Graduates to Have a Job and Then Keep a Job

In As can be seen from the above content, in the research results of the overall weight system, the top five ranking are “work adaptability”, “work concentration”, “practice practice in professional field”, “self-professional growth” and “oral expression ability”. Combined with the above two conclusions, it can be seen that better job adaptability contributes to higher employability and competitiveness of college graduates in the workplace.

“Practical practice in a professional field” ranks in the middle of the top five, indicating its importance. At present, in the curriculum arrangement of various colleges and universities, many of them have listed internship courses in specific fields as key projects, believing that students can accumulate work experience through practical internship courses in specific fields, and let students understand their own shortcomings through practical internship practices, so as to develop their professional development [7][8]. Moreover, want to have a better work “resilience”, can learn the theoretical knowledge into practical skills, and in accordance with the “labor market concentration of higher would improve the effect of the internship accumulated experience, through the” oral expression “communicate with others for professional and non-professional, promote good interpersonal interaction.

However, if there is no strong “work adaptability” to transform the theoretical knowledge into practical skills, or after graduation into the workplace, there is no strong “work adaptability” to adapt to the work content, it is easy to lead to difficulties in finding a job or difficult to keep the phenomenon. Therefore, the researchers believe that college students should develop their “job adaptability” in order to achieve the basic definition of employability, which is “to have and keep a job in the workplace”.

4. Suggestions Based on Employability Index of College Graduates

Based on the literature analysis and research results of this study, the following suggestions are put forward, hoping to be helpful for colleges and universities to improve students' employability in the future, and can be used as a reference for relevant follow-up studies.

4.1 Advice for Colleges and Universities

Colleges and universities should recognize the importance of cross-disciplinary knowledge in college courses to expand students' knowledge and skills. Although in the current curriculum planning of various colleges and universities, many schools directly include cross-field courses into compulsory courses, and some schools open credit scores to encourage students to take cross-field courses. However, in terms of the proportion, the credit scores of the major courses still account for the vast majority, and only a few elective courses have cross-field courses.

The study of cross-disciplinary courses helps to expand students' knowledge and skills [9]; Moreover, when students absorb knowledge from different fields and internalize these knowledge into their own knowledge, it can not only help to improve students' ability to absorb knowledge of different connotations, but also improve their adaptability and resilience.

Therefore, it is suggested that colleges and universities recognize the importance of interdisciplinary courses and allow students to freely choose courses in their desired fields, so as to expand students' knowledge and skills and further enhance their employability.

To improve students' ability of team organization. In the results of the questionnaire survey of the employment counselors in colleges and universities, it is found that the organizational ability is not valued; The reason why organizational ability is important is that it emphasizes the ability of teamwork. Leadership and team centripetal force are both emphasized in teamwork.

Cultivating students' leadership ability is conducive to the realization of collective goal performance; Leadership, however, is not only about leading others, but more importantly, the combining ability of being led by others [10]. But both leading and being led are very important in the organization. Furthermore, leadership is closely related to team centripetal force. Only by obeying the leader or letting others obey their own leadership can team centripetal force be enhanced.

4.2 Advice for College Students

We should focus on improving our ability to cope with the ever-changing workplace environment. During her study at school, in addition to passively accept school planning course content, take class taught by professor's curriculum and textbook knowledge outside of the, should be more proactive in make the best use of school resources, interdisciplinary study, in order to develop self ability, and cultivate their second specialty areas, and improve the competitiveness of entering the workplace in the future. Take advantage of internship opportunities to gain work experience.

Suggested that college students make good use of the practice internship related courses, accumulated experience in professional skills in the field of the operation, to take this opportunity to learn the theoretical knowledge of flexible use in practice, learn about related professional fields have the current situation of development and the future development prospect, more can understand their shortcomings and should strengthen the theoretical content. Besides the internship opportunities, it is suggested that university students in reading a lot of contact with society, on the premise of not affect learning, through work-study opportunities to increase working experience in other areas, understanding the change of social trend, and enrich themselves, along with the social tendency to avoid its own working experience is too narrow and evolution can't keep up with The Times.

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