

# Research on Career Guidance Path of Unemployed after Leaving University for Major in Chemical Engineering

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**Abstract:** The rapid development of the chemical industry has brought a large number of jobs, but according to the initial employment data of chemical graduates, the number of graduates who have left school without employment has increased year by year, which puts forward higher requirements for the career guidance of graduates who have left school without employment. Taking the graduates of chemical engineering major of Zhaoqing University as an example, this paper analyzes some problems such as the lack of psychological guidance at the beginning of employment in the career guidance work of chemical engineering graduates who have left school without employment; single form of vocational guidance and insufficient guidance to employers. The solution strategy is put forward in five aspects, such as clearing the career guidance work objectives; strengthening professional team building; broadening the career guidance channels; strengthening employment psychological guidance; doing a good job in the career guidance of employers, so that the career guidance can play a full role in promoting the full employment of college graduates and improving the employment quality of graduates.

**Keywords:** major in chemical engineering; unemployed after leaving university; graduates; career guidance path

## 1. Introduction

Chemical industry has always been an important pillar of economic development. It's industry has the industrial characteristics of rapid development; high degree of intensification and knowledge and technology intensive which put forward higher demands on practitioner, every year to create a large number of jobs, for college graduates to provide more employment opportunities. Only from January 2023 to now, more than 20 enterprises have recruited at the school, and directly provide more than 70 jobs for Zhaoqing University's chemical graduates. The employment statistics of the past three years show that there are 224 chemical graduates in 2020, and the initial employment rate is 77.23%; In 2021, there are 205 graduates majoring in chemical engineering, and the initial employment rate is 86.83%. In 2021, the university has 264 graduates majoring in chemical engineering, and the initial employment rate is only 86.59%, and the number of unemployed graduates from colleges and universities has increased year by year [1]. Facing the increasingly severe employment situation, it is particularly important to solve the problem of unemployed graduates of this major, improve the employment rate of graduates and do a good job in career guidance.

## 2. The Main Problems of Career Guidance for Graduates Who Have Left School Without Employment

Career guidance refers to the process of providing consultation, guidance and help around job seekers' employment, employment stability, career development and reasonable employment of employers. At present, the content and form of career guidance for chemical graduates are relatively simple, and still stay in the explanation of employment policy, analysis of employment situation. In the guiding ideology, the content and form ignore the trend of talent demand and the guidance of coping with career crisis and career mentality and principles.

### ***2.1 Lack of Psychological Guidance at the Beginning of Employment***

The only child of the new generation of college students accounts for a large proportion, and the over-protection of parents makes college students lack independence, and even some students are not completely weaned psychologically. According to the employment psychology survey of chemical engineering students in Zhaoqing University, there is a significant difference in state anxiety between the graduating group and the non-graduating group. 63% of the 317 graduates who are looking for jobs are anxious, and 12% of the graduates have low self-esteem. At the same time, there are other bad psychological problems such as utilitarianism, comparison and escape among the graduates. First, some graduates have been employed because of their own analysis is not accurate, in the process of job hunting repeatedly encountered setbacks, has produced negative emotions, began to doubt their ability; Second, the ideological confusion about the ranking of employment value and the priority of employment choice decision-making. Graduates have high job expectations and want to obtain a more ideal job through their own achievements [2]. The career guidance of graduates majoring in chemical engineering shows that they do not have a deep scientific grasp of the psychology of choosing a career in the early stage of employment, and replace psychological guidance with ideological education. There is no continuous tracking and effective return visit, resulting in the anxiety and negative psychological effect of these graduates, refusing or missing employment opportunities, affecting their stable development in the career path.

### ***2.2 Single Guidance Method for Career Guidance***

The career guidance for chemical engineering majors still adopts the "large class teaching" mode, and the single teaching mode led by the career guidance teacher lacks the interaction with students. In the sample survey of students who have received vocational guidance courses, 49% of students said that the teaching cases of vocational guidance are outdated and lack of The Times, and the analyses and research views of vocational guidance teachers are backward. 72% of students believed that the career guidance of college students should be carried out in combination with the information technology platform in the era of big data. 61% of the students have low enthusiasm for learning the career guidance course, and only 38.9% of the students think that the career guidance course offered by the school can acquire the career guidance knowledge. According to CNNIC2020 survey data, the average proportion of students born after 2002 who use the Internet exceeds 95%, far higher than the national average. The survey also shows that the post-00s are rich in online activities and have a high demand for online learning, social entertainment, and content consumption. They are also keen to express themselves on social platforms and to collide and communicate with others on other online places. Among the surveyed college students, 44.24% said that "new media" has a good role in helping and promoting the learning process; 39.28% believe that "new media" helps to improve employability skills; 46.37% of people believe that "new media" has a good role in promoting self-employment and is conducive to solving personal development problems. But this has not attracted the attention of career guidance teachers in the process of career guidance.

### ***2.3 Insufficient Guidance to Employers***

Career counselors cooperate with school-enterprise cooperation and campus job fairs to provide employment information for students. However, most career guidance for graduates focuses on providing job search consultation for graduates and solving difficulties in the job search process, ignoring the main body of employers for career guidance and ignoring structural contradictions in the talent market [3]. Many units to the school for recruitment, there are some questions, for example, recruitment brochure writing is not standardized, job description responsibilities are not clear, some units listed in the recruitment treatment is obviously out of the market, some units do not understand the ordinary college graduates recommendation form and employment agreement. These all affect the effective recruitment of high-quality talents, but also affect the effectiveness of graduates. The lack of follow-up tracking of graduates' employment and inability to timely feedback on enterprise requirements, direction of demand change and talent training requirements, etc., lead to a disconnect between career guidance and employer guidance, which affects the talent demand of enterprises.

## **3. Analysis of the Causes of Problems in Career Guidance Work**

Career guidance is a long process, although the university has established a certain scale of career

guidance agencies, but it has not played an important role in promoting the employment of college students. Most of the work is only carried out around the employment of graduates, one-sidedly pursued the high employment rate, simple career guidance for students. Career guidance is mainly for the release of recruitment information, employment agreement signing, work dispatch and other aspects of the service, resulting in career guidance work cannot effectively provide help and advice for the actual needs of graduates

### ***3.1 Insufficient Attention is Paid to the Work of Vocational Guidance***

Compared with the situation that the recruitment work is mobilized by the whole school and the teaching and research work is always in the center of the school, the school does not pay enough attention to the vocational guidance work. At present, the career guidance work is basically undertaken by student management agencies. Although they play a certain role in obtaining information on social career needs for students and smooth communication between schools and the talent market, they are still lacking in institutional Settings, full-time personnel allocation and information feedback means. At the same time, the cognition of vocational guidance teachers is biased, they equate vocational guidance with employment guidance, confuse the difference between the two, ignore the core of vocational guidance is the relationship between people and occupation and its development, and focus on the realization of high-quality employment with "person-job matching". Most career guidance personnel replace vocational information with employment information, and improve students' job-hunting skills and short-term job-hunting rate instead of the training of students' professional quality and mental health. The main contents of career guidance include providing employment information, reading employment policies and regulations, counseling job-hunting skills, and organizing job fairs. Relatively little attention is paid to students' professional quality and mental health, and there is a lack of personalized guidance [4], which is not conducive to the improvement of students' comprehensive quality and employability, and has caused frustration in the employment of graduates to a certain extent.

### ***3.2 The Strength of Vocational Guidance Personnel is Weak***

To ensure the smooth progress of career guidance for students who have left school and are not employed is inseparable from the strong guidance of the guidance staff. As an excellent career coach, he should have relevant experience in psychology, education and management, and be able to grasp the employment dynamics under the big economic environment, including the development of various industries, various professional positions, various age levels, various educational levels and other supply and demand conditions. And it can predict the development trend of a certain occupation in order to provide specific information to job seekers. At present, the professional guidance teachers of chemical engineering major have major problems, which are mainly reflected in the lack of systematic training in professional guidance, weak theoretical knowledge base, insufficient experience in professional guidance, uneven overall quality level, and different degrees of specialization, which cannot achieve the ideal guidance effect. At the same time, they are affected by other work arrangements and cannot guarantee sufficient time for vocational guidance, and lack the understanding of the changing trend of economic development and talent demand. These all lead to the lack of effectiveness and pertinency of career guidance, and the lack of continuity and humanistic care for graduates [5].

## **4. The Effective Measures of Career Guidance for Graduates Who Have Let School Without Employment**

In view of the above-mentioned drawbacks and deficiencies in the career guidance of unemployed graduates of chemical engineering major, the college should actively explore new ways and methods of career guidance, and constantly introduce and cultivate professional career guidance talents, strengthen the theoretical level of career guidance, change ideas, and establish refined management ideas based on the needs of students [6]. Make full use of modern information tools, rich carriers and scientific guidance methods to solve the employment problem of graduates and improve the quality of employment.

### ***4.1 Clear Responsibilities and Direct Work Objectives***

In practice, the college clearly realized that only by strengthening the scientific nature of career

guidance and promoting graduates to "enter the right line" can the stability of graduates' employment be strengthened. It is necessary to establish market-oriented vocational work guiding ideology to cope with the increasing number of chemical graduates and the increasingly fierce competition for talents in the labor market, deepen school-enterprise cooperation with chemical enterprises, and establish a co-education mechanism for teachers, such as introducing excellent teachers, building a double-qualified teacher team, implementing double-base construction, and improving the oriented training and learning mode [7]. Establish a wide range of internship bases for graduates, and establish a relatively stable and sustainable internship cooperation relationship with employers, so as to better pave the way for college students' employment. Develop career guidance plans for students of different grades, and use the effectiveness evaluation mechanism to ensure that the career guidance work is in place.

#### ***4.2 Strengthen the Professional Guidance Team Building***

The college should actively let the career guide participate in the "national career guide level training", "College student psychological guidance group assistant teacher" and other training, and require the career coach to do the following. Firstly, they should master the laws and regulations on labor employment, students' career psychology, ideological dynamics, through scientific methods such as vocational interest test, comprehensive ability test, temperament and personality test in order to provide students with comprehensive assessment reports on their personality characteristics, social ability, career orientation and other aspects of their quality, and obtain professional guidance certificates, so that the professional guidance teachers can be specialized, specialized and expert. Secondly, it is necessary to go to the students, to the employers, to other colleges and enterprises to conduct research and study, and constantly improve their work and teaching levels in order to provide better career guidance services for graduates.

#### ***4.3 Broaden the Methods and Approaches of Vocational Guidance***

In view of the previous single form of career guidance for graduates, the college should gradually break the traditional way of career guidance based on preaching, and actively expand the methods and approaches of career guidance. First, the new media technology has the characteristics of fast information transmission, strong interaction, and span of time. Make use of these features of new media technology to establish a public wechat platform to timely push job assessment methods, industry development trends, job information and skills, and achieve online and offline two-way communication between teachers and students, timely communication. The second is to subdivide students according to their majors, gender, personality characteristics, vocational aptitude and other dimensions during their school life, establish a dynamic student information and employment information database, realize the informatization and convenience of employment guidance, and carry out classified guidance for them; The third is to organize students to enterprises and institutions research, internship, deepen the understanding of employers and careers, so that students understand the national conditions, understand the society, and hire the school's own outstanding graduates to go back to school "show", tell their successful employment experience; Fourth, use the second class to carry out career activities that students are interested in, such as group counseling inviting successful people from enterprises to talk, holding career planning competitions, resume making competitions, mock interview competitions, etc., to improve students' social and professional cognition level and job hunting ability, and lay a solid foundation for smooth employment.

#### ***4.4 Strengthen Psychological Guidance on Employment***

The main reason for the anxiety of graduates in the process of job hunting is the tension and fear of the main body in the face of the environment or about to face the new environment. In this regard, on the one hand, the college carries out targeted career guidance in different growth stages of students to reduce or reduce the impact of negative emotions in the lifelong job search process. In the "unexposed period", the college offers career planning courses for college students when they enter the school to understand themselves and the career environment; In the "prevention of problems in the early stage", the second and third grade period, the students strengthen professional awareness, and according to the situation to improve and adjust the career planning, clear the direction of efforts; In the "problem prevention period", the school carries out the one-to-one career guidance before graduation, including interview preparation, resume writing, appearance and clothing and other details of the skills, to help students in the job competition to make adequate psychological preparation, confidence in the face of challenges, to overcome the fear of employment. On the other hand, starting from professional psychological counseling work, professional psychological counselors are introduced and psychological counseling rooms are started. By using modern psychological testing methods,

individual counseling and group counseling, graduates are helped to master scientific methods and means, adjust the negative emotions that have been generated, and actively cope with obstacles and setbacks in the job search process with an optimistic attitude. Improve the success rate of job hunting [8].

#### **4.5 Doing a Good Job of Career Guidance for Employers**

The college should also make it clear that the objects of career guidance include job seekers and employers. While helping college students understand their personality characteristics and abilities and choose suitable jobs for themselves, it also provides guidance to employers. Such as determining the recruitment method, standardizing the writing of the recruitment brief, guiding the employer's on-site recruitment, signing the tripartite agreement, standardizing the labor contract, and helping the employer to obtain satisfactory talents through scientific and reasonable recruitment methods and techniques in a short period of time, so that the user can effectively recruit high-quality talents. Through the intermediary role of career guidance, college students and employers reach an agreement on the requirements of both sides to achieve "person-job matching" and improve the success rate of graduates' job hunting.

### **5. Conclusions**

In promoting the employment of graduates, career guidance plays an important role. On the one hand, it has a direct impact on graduates, including the guiding role of helping to establish a correct employment view, the navigation role of helping to improve the comprehensive quality, and the assistance role of helping students with employment difficulties to find employment. On the other hand, the direct effect on the development of the labor market includes the intermediary role to promote the reasonable matching of labor supply and demand of college students, and the bridge role to promote the effective transmission of vocational information. In promoting the employment of college graduates, only by correctly understanding the concept, function, goal and role of career guidance, deeply understanding and keeping in mind the goals of career guidance, can we give full play to the important role of career guidance in work and be more conducive to promoting the full employment of college graduates and improving the employment quality of chemical graduates.

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