

# Reform and Practice Exploration of Student Work Idea in Science and Engineering University

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**Abstract:** In order to better cope with the increasingly severe employment situation, in view of the science and engineering college students the concept of traditional job set up research and guidance aspect, based on the concept of student work, analyzing the influence factors of targeted specification in science and engineering students work idea direction, combined with the background to establish school students undertaking idea in science and engineering, building perfect career guidance organization structure, in order to better develop the students' employment thinking, improve the innovative ability of students, promote the healthy development of the society.

**Keywords:** University of science and engineering; Student work; Ideological change

## 1. Introduction

At present, most of science and engineering colleges have begun to pay attention to the optimization and reform of the student work philosophy of science and engineering colleges to meet the talent demand of related enterprises and innovate the student employment philosophy. However, at the present stage, the methods and systems of practical employment guidance in major science and engineering schools still have problems of copying models and standards of famous universities, which cannot be effectively combined to make innovations on the actual situation of current social development and professional characteristics<sup>[1]</sup>. At present, the professional practice teaching system of science and engineering colleges is not perfect and targeted, which easily leads to the blindness of practical employment, which makes it difficult for students to truly understand and set up correct work concepts, and students in science and engineering colleges still cannot solve problems such as outdated work concepts. With the rapid development of the current society, there is a high demand for the practical ability of applied talents in science and engineering colleges.

## 2. Optimization Method of Working Concept in Science and Engineering Colleges

### 2.1. Influence of work philosophy in science and engineering colleges

Student organization in science and engineering colleges refers to the guidance and reform of the work concept in the form of class, student union and society in accor-

dance with certain rules. The change of student organization's employment idea is a kind of complexity activity. Personal life experience, growth environment, subjective experience, current government policies and social development trends will all affect students' work concepts and methods. Guided by the management science theory, it can avoid subjective assumptions in the management process and promote management activities to develop towards the goal and regularity<sup>[2]</sup>. All kinds of student organizations are the organizational carriers of university students' ideological and political activities education. They bear the responsibility of strengthening students' ideological guidance, quality development, ability cultivation and promoting students' all-round development. In order to transform and innovate the work concept of xuesong in the team science and engineering university, the influencing factors of the work concept in the science and engineering university were analyzed and systematically illustrated, and the following figure was obtained.

As shown in the figure, the scientific organization and management of students in science and engineering colleges aims to improve the efficiency of organization and management through scientific management, thus enhancing the effect of academic employment concept. In the educational environment of science and engineering colleges, student organization is an important carrier of concept transmission, and the efficiency of organizational management has an important influence on the development of students' work concept<sup>[3]</sup>. Therefore, the management concept and management attitude of the organizational managers, as well as the innovation requirements of students' work concept, operation and development

mechanism and employment values all reflect the level of

management.

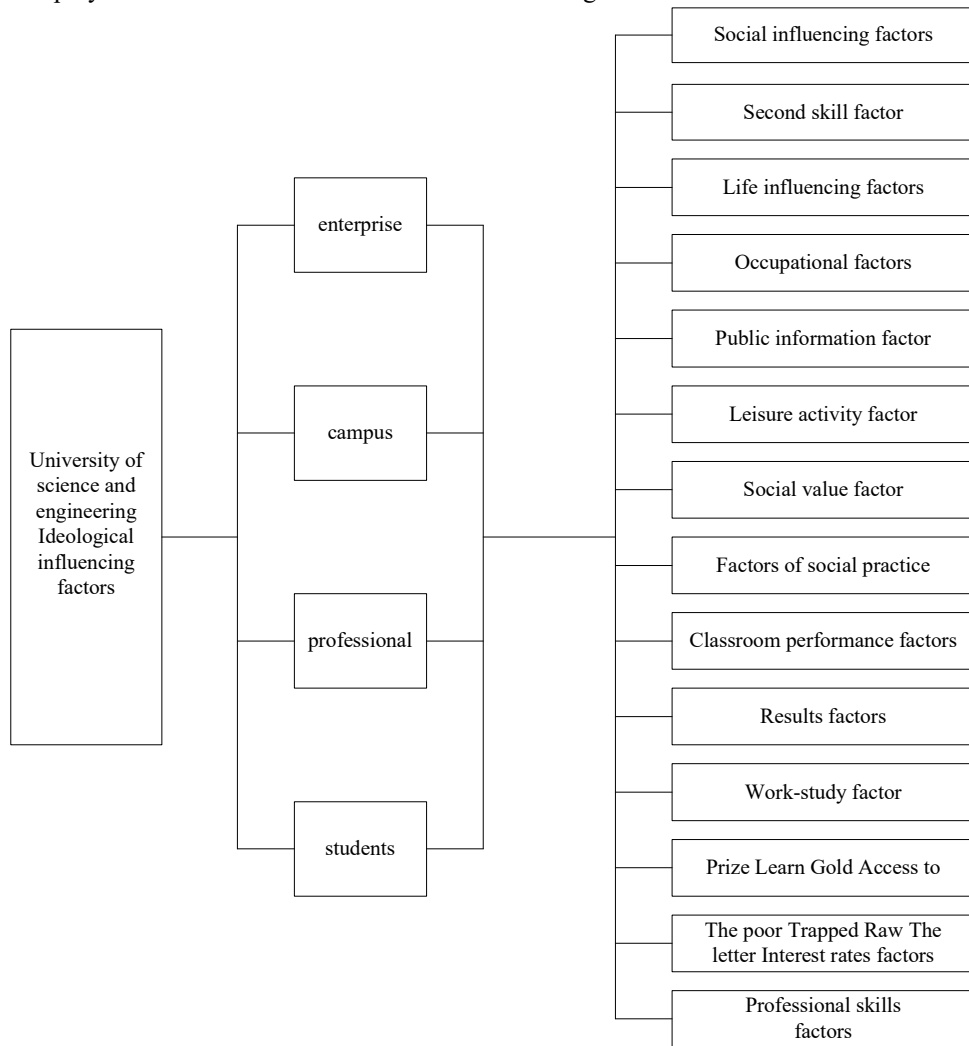


Figure 1. Influencing factors of work philosophy in science and engineering colleges

Only by strengthening the scientific concept of organization work, can the effect of organization education and management education be promoted. Work idea theory is a regular summary of management activities, which provides new methods and means to transform work idea for scientific organization and management in science and engineering colleges<sup>[4]</sup>. According to the actual demands of the working concepts of science and engineering colleges in recent years, we should actively strengthen and innovate the professional practical teaching system, carry out school-enterprise cooperation, expand the teaching practice activities of this major, and actively develop the off-campus teaching platform for reform and exploration<sup>[5]</sup>. Polytechnic colleges in our country's education goal is to cultivate the high quality, high level of professional talents for the society, which requires the positive innovation management mode in higher vocational colleges, the comprehensive development of talent, actively

establish the full, full, comprehensive and efficient sound management system, promote the students to actively participate in management, each department cooperation, for the students involved in life, learning, such as a full range of management services and full responsibility clear management organizations.

**2.2. Standards of students' working concepts in science and engineering colleges**

In science and engineering schools, counselors play an important role as partners in students' daily life, listening, guiding and consulting to many problems in students' life and study. Their work covers almost all aspects of college students' life, study and daily life<sup>[6]</sup>. Therefore, counselors are more likely to contact and get close to students, and are easily respected and trusted by students. Therefore, counselors have certain advantages in the development and implementation of college students' work

concept. It greatly facilitates the standardization and guidance of college students' work concept [7]. College is the transition stage from campus life to social life. Therefore, it is necessary to guide and guide college students in their daily work, and guide them to know themselves and the society. Therefore, the guidance of professional employment philosophy runs through the beginning of university students' education work in the counselors' job responsibilities [8]. When the student enters the school

gate, the counselor needs to give some guidance to the employment idea. Concept of science and engineering colleges and universities student management work is according to the student work in the student work system of position and function is different, the student work is divided into basic students work with the basic work, on the basis of school students in the scope of work idea and internal concrete manifestation, to the school students work idea specification level division get below.

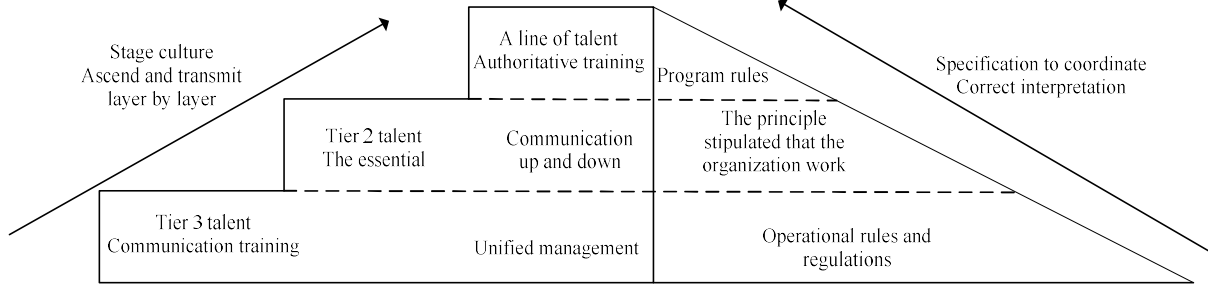


Figure 2. Standard level of school student work philosophy

As shown in the figure, in the process of standardizing the work concept of students, the department and work area of colleges and universities are embodied with specific and functional characteristics. The work concept of students at this level should be implemented and implemented in schools through a series of specific operational student work. Therefore, the work of students at the third level has strong procedural and operational characteristics [9]. The three levels from high to low are a process from the universal and general concept of student work to the specific and narrow concept of student work. It should be pointed out that although this hierarchical diagram is mainly targeted at the school's student work philosophy, the formation process of the entire student work hierarchy must be coordinated with the informal or implicit norms of the society or school [10]. School students work for hierarchical analysis is necessary, in the process of academic work idea change and standardize, acknowledge and respect the specific school

for teachers, concrete, concrete, concrete managers, the difference and the difference to actively develop and utilization of resources and development space and opportunities for the creation of students work item, is likely to achieve the value pursuit of education help others grow, this itself is the return of the essence of the concept of student work [11]. Introduce the four levels of student work management idea reform research, has formed a theoretical framework for the education function of the "vertical", among them, especially in the negative work idea of education, such as: dominant negative work idea and the concept of recessive negative work and explained to be the current student work idea change in one of the most important problems in [12]. In order to make a better reform of the student work concept, the test and standard index of the current student work concept in science and engineering colleges were analyzed, and the following figure was obtained.

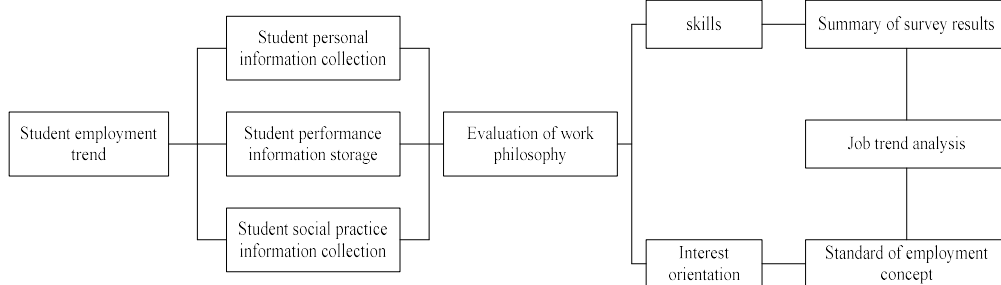


Figure 3. Standard index of students' working concept in science and engineering colleges

According to the above thought of functional analysis, the normative function of school students' working concept can be divided into positive student working function and negative student working function. From the

presentation of the function, it is divided into the explicit student work function and the implicit student work function. If the division is made from the combination of property, direction or property dimensions, it can be di-

vided into positive dominant student's work function, positive implicit student's work function, negative dominant student's work function and negative implicit student's work function<sup>[13]</sup>.

### 3. Innovation of Students' Working Concept in Traditional Science and Engineering Colleges

In recent years, due to the pressure of employment in society, it is difficult for most university students in science and engineering colleges to set up correct work concept. Therefore, most students seldom choose to start their own business during the process of setting up work concept. College students has become synonymous with new generation of college students' innovative undertaking and it is also with development and trend of The Times, is the need of the situation of market economy in our country, we need to view down by the scientific concept of development view and support the college students' innovative undertaking, adhere to the independent innovation of the core, based on sustainable development<sup>[14]</sup>. The innovation of student work concept itself has four characteristics. Firstly, it has novelty characteristics, including the innovation of new products, new services, new undertakings and other concepts. This industry means the breakthrough of student work concept, and the new level of innovation and entrepreneurship concept established on the basis of the original employment concept<sup>[15]</sup>. Awareness of science and engineering college students' innovative undertaking and expand further, cultivating and developing countries increased the supporting policies, group after group of college students to join into the innovative entrepreneurial boom and influential student cadres to start new projects, innovative undertaking to build and improve the new space for entrepreneurship and campus gradually strengthen theoretical teaching and innovative undertaking business platform for the practice of establishing and perfecting face-to-face, hope can through the establishment of the BBS and classroom training and curing entrepreneurial innovation consciousness, help students to improve their own comprehensive innovation and entrepreneurship. Innovative content of students' working idea in engineering colleges.

In the practical application process, students' working concept has a great space for people to influence environmental factors, change the organization and themselves. To some extent, the advantages and disadvantages of the work structure of students in science and engineering colleges and the advantages and disadvantages of the school's employment guidance organization are in the same line. In order to more intuitively feel the influence of the change of school work concept guiding organization on the change structure of this kind of department's functional students work concept, the structure diagram of school's student work concept innovation was con-

structed and analyzed, and the following figure was obtained.

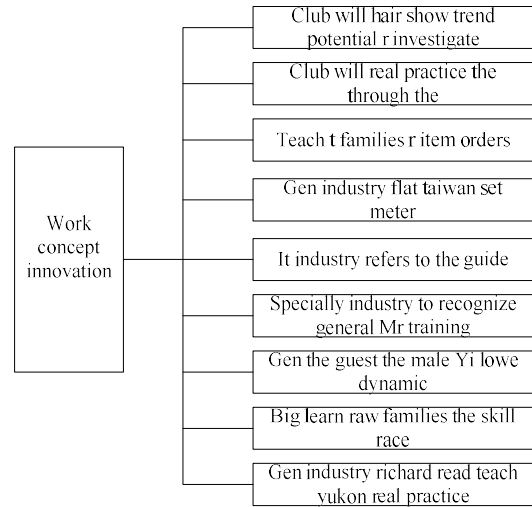


Figure 4. Innovative content of students' working concept in engineering colleges

As is shown in Figure 5, in addition to the cultivation of the consciousness, on campus, you also need to support one or two large influential innovative entrepreneurial project, by implementing effective docking outside the enterprise and the school education, it seems, can not only provide students with a more broad platform of innovative undertaking and innovation can also be set up and improve the school entrepreneurship practice gaps, create the project, support and expand, trying to get the relevant departments and national recognition, innovate the development of entrepreneurship education deeply, in this way, school innovation within the entrepreneurial space being perfect, further to attract more projects into a school. Project in and create a new brand, we will continue to do the maintenance and improvement of innovative entrepreneurial space set up a supermarket on innovation and invite the expert training joint between upper level and social level, etc., of education on campus and off-campus practice match, as soon as possible with the help of the students' innovative entrepreneurial marketization, from where, we will continue to improve the innovative entrepreneurial space, continue to produce education influence. Through the blessing of the competition, the creation of innovative entrepreneurship competition, promote students' comprehensive quality of the competition, concise characteristic of the college professional, to achieve the improvement of the platform system, guide the students' innovative entrepreneurial enthusiasm, lead the students know that come into contact with the innovation entrepreneurship competition, in addition, the national support will increase to make up for the guarantee of students' innovative entrepreneurship, etc.

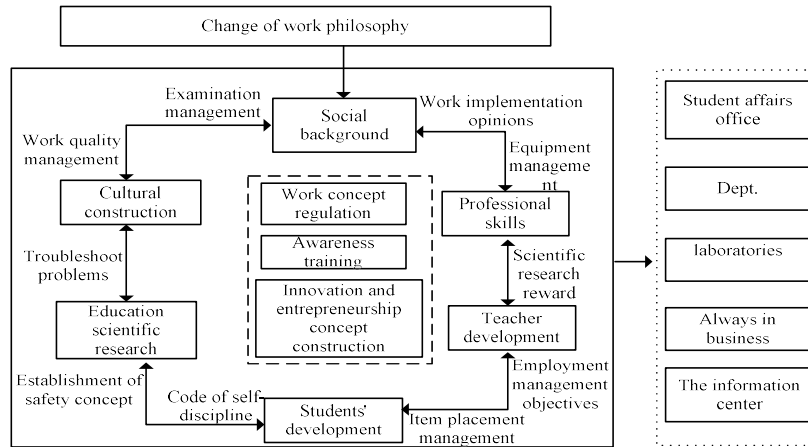


Figure 5. Optimization of the training junction module of students' teaching idea innovation

3.1. Teaching concepts and skills training of students in science and engineering colleges

There are many types and quantities of student organizations in science and engineering colleges. To give full play to students' initiative and initiative work idea change, higher vocational colleges to improve the students' work ethic system, clarify the functions and powers, through consultation and dialogue between teachers and students to motivate the student groups actively participate in related affairs, cultivate their ability of supervision and management so as to realize the subjectivity of students themselves, to encourage the democratic decision-making and improve efficiency at the same time protect the students' own interests. With the continuous deepening of education reform, it is imperative for the university of science and technology to actively create an efficient and healthy work concept and reform its management system. It is necessary to form an organized and hierarchical management structure model to ensure that the work concept of students is feasible. Based on the above ideas, the organization and management of students' cultural teaching is optimized, and the following figure is obtained.

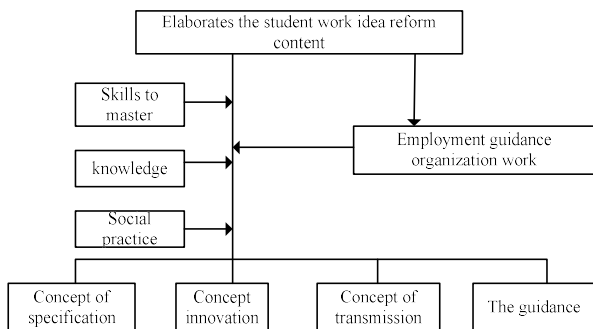


Figure 6. Organization and management structure guided by student work philosophy

Because college students are in growth stage of sustainable development, and outlook on life, the values of their rational thinking has yet to finalize the design, when meet things, deal with the problem emotional color heavier, lack of rational examination of various ethos, values and moral critical ability, therefore student organization culture and drawbacks, good Qiao. The organizational culture management of students in science and engineering colleges in China must be guided by socialist core values and guide all kinds of student culture. Only by establishing the guiding position of socialist core values and adhering to the unified leadership in the ideological field can the educational effect of the student organization be brought into play. The student organization managers of science and engineering colleges lack the systematicness and integrity of organizational culture, especially the construction of organizational values. The first is that the managers attach different degrees of importance to all kinds of student organizations.

4. Analysis of Experimental Results

To test the validity of the science and engineering colleges and universities students work idea change practice, random for a grouping of 5000 graduate students in polytechnic colleges, in order to differentiate, the use of traditional management idea for student work group is set to the control group, and optimize the work idea hair testing group as a team, detection of narrative work management of 8 months follow-up, compared to traditional students management work in institutions of science concept and practice effect and effect in this paper, the optimized management concept and practice, first of all to change the concept of student work situation to investigate and compare the results. Details are shown in Table 1.

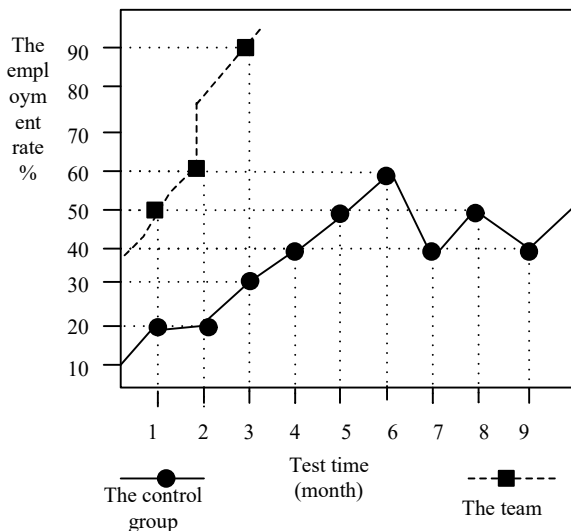
Thus it can be seen that, in the proportion of students' work concept transformation in science and engineering

colleges, the effect of the work concept transformation of students in the research group is significantly improved.

**Table 1. survey on the change of students' employment concept**

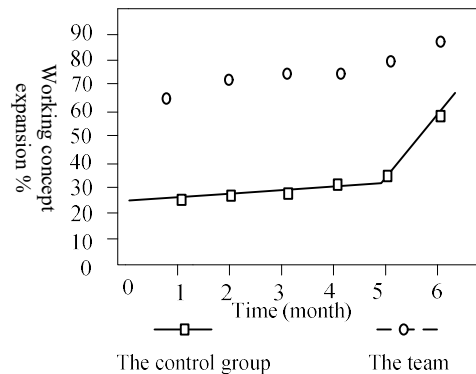
professional	Percentage change in employment philosophy (%)	
	The control group	The team
Electromechanical engineering	10.25	51.81
Electronic information	8.75	62.45
Electrical engineering	12.88	75.41
Equipment and engineering	9.12	81.47
Number of pieces engineering	10.51	92.15
Automobile manufacturing	5.49	88.18
Other aspects	54.00	79.12
Other aspects	54.00	79.12

To realize the goal of science and engineering students' employment concept and social demand, colleges and universities to pay attention to and improve the work idea change to guide the construction of the foundation, content, innovative concept change guiding to establish perfect work idea guiding system, the professional obtain employment is general entrepreneurship guidance comprehensive practice, practice and innovation better science and engineering colleges and universities work idea of innovation and practice. In order to better study the practical application effect of the above optimization Suggestions, the following test results were obtained by tracking and testing the employment rate of students in the control group and those in the research group.



**Figure 7. Comparative test results of student employment rate**

According to the figure above, the employment rate of the study group students was significantly higher than that of the control group, and the employment time consumed was twice as fast as that of the control group. From the employment situation, it can be seen that the work situation of science and engineering students has been greatly improved after the research group received the guidance of the optimization reform of work concept. To further analyze the effectiveness of the proposed research, in view of the research group and the control group of the students' employment situation and employment concept for a long track, expand innovation found in relative to the campus in terms of work idea of students before and after the work idea innovation guidance work had obvious changes, details are as follows.



**Figure 8. Effect tracking and detection of student work idea change practice**

Work according to the above, you can see that in the idea of change before work, the students before the work idea change guidance, work ideas, work intention are relatively narrow and work ethic to expand relative is not ideal situation, most students graduated in the second half, after experienced a large number of social practice result in a change to work idea, relatively speaking, the team members after being employment concept change instruction, have been at work into the initial stage of social idea has got obvious development, thus confirmed that the science and engineering colleges and universities student work idea change got obvious optimization in the process of practice and innovation.

**5. Conclusion**

Above all, work idea of college students in institutions of science innovation and culture, to promote students' employment and social progress and development, is the top priority in colleges and universities for students of science, should actively improve and optimize the concept of science and engineering colleges and universities work change, attach importance to this professional work idea of the standard and innovation, to adapt to the current social demands for talents in science and engineering



colleges, also helps to promote the success of students in this major employment concept.

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