# Research on Application Practice Ability Cultivation of Industrial Engineering Specialty of Panzhihua University Based on the Mode of Integration of Production and Education

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## Abstract

Through the research and analysis of the integration model of production and education in some applied universities, with reference to the integration model of colleges and universities in colleges and universities, combined with the actual situation of industrial engineering in Panzhihua University, this paper combines the four years of study in the industrial engineering of Panzhihua University. Through the integration of internal and external resources, enriching the practical teaching system, and strengthening the cooperation between schools and enterprises, this paper studies the integration model of production and education in this specialty, and proposes a blending model and practical teaching system for industrial engineering in Panzhihua University.

### **Keywords**

Panzhihua University; production and education integration; industrial engineering.

### **1. INTRODUCTION**

With the rapid development of China's economy and society, economic restructuring and industrial upgrading, homogenization of college education can no longer meet the changing needs of talents. The employment situation of college graduates is severe. In the face of today's ever-changing social needs, universities should combine their own realities. In the situation, the traditional teaching mode and curriculum design will be reformed, the integration model of production and education will be integrated into the teaching of colleges and universities, and students' practical application ability will be strengthened to meet the needs of enterprises for talents. The purpose of this paper is to learn and analyze the successful experience of integration of production and education at home and abroad, combined with the practical teaching course of industrial engineering in Panzhihua University, systematically analyze and change the practical teaching system of the major, and combine relevant internal and external resources, from applied undergraduate education and Starting from the industrial engineering profession, we explored the integration mode and practical teaching system suitable for the industrial and engineering majors of industrial engineering in our school, and studied the practical application ability of industrial engineering students under the system, and improved the inadequacies of the school's production and education integration[1]. Through the research on industrial engineering of Panzhihua University, it provides reference for the application of undergraduate education and the sustainable development of colleges and universities.

### 2. COMBINATION OF PRACTICE AND THEORY TO STRENGTHEN PRACTICAL APPLICATION ABILIT

#### 2.1. Building A Practical Teaching System

The practical teaching system of industrial engineering is based on the "3+1 training mode". The system has certain consistency with the "3+1 training mode": students are required to complete all theoretical courses in three years, but the practical system requirements while learning and expand the relevant combination of teaching practice course, students practice their ability to use both at the same time put forward last school year internship in the enterprise, combined with the actual problem, mutually agreed by the enterprises and colleges Graduation design topics and content to complete the graduation design. Compared with the "3+1 training mode", the practical teaching system pays more attention to the cultivation of students' practical ability during the school, and strengthens the students' practical ability training in various ways. Its proposal is beneficial to the rapid entry of industrial engineering graduate students. In the workplace, the knowledge can be applied to check and fill the gaps. The construction and application of the practical teaching system will be based on the teaching curriculum plan, and the students will be further strengthened through effective reorganization of the curriculum.

(1) Theoretical teaching module: Industrial engineering is an interdisciplinary subject of engineering and management. It not only needs to learn mechanical related knowledge, such as engineering graphics, mechanical principles and design, computer-aided design, etc. Relevant professional knowledge of machinery, as well as economics and management, such as marketing, accounting, financial management, engineering economics, etc., requires students to master certain management knowledge and skills, and ultimately combine professional core courses: basic industry Engineering, systems engineering, human factors engineering, quality management and reliability, logistics facilities and planning production operations and management, lean production, etc., the core curriculum is added to enable students to be problem-oriented, systematic and holistic to factory production The operation carries out comprehensive analysis and design, formulates economic, reasonable and feasible solutions, reduces waste in the operation and operation of enterprises, reduces operating costs of enterprises, and enhances the market competitiveness of enterprises. In the theoretical teaching module, the course of industrial engineering is set up, from the basic course of the subject to the core course of the major, and finally the first course of the major is selected to form the theoretical teaching module in the practical teaching system.

In the theoretical teaching module, each course has certain requirements for industrial engineering students, from general compulsory courses to subject foundations to core courses, staged, comprehensive and comprehensive theoretical teaching for students, basic learning to professional study, develop students' comprehensive theoretical knowledge. For the opening of the core curriculum, we will carry out more in-depth study on the basis of general compulsory and subject basics. For example, engineering economics as a core course requires students to complete accounting and financial management and application statistics in the subject basis. Learning courses, mastering certain accounting foundations, financial budgets, economic analysis and other capabilities, and then more in-depth feasibility analysis of the project and economic decision-making of the project; basic industrial engineering as the core curriculum of industrial engineering, is the industrial engineering Professionally conducts overall study, clarifies the content and improvement ideas and methods of industrial engineering professional research. As the basis of the core curriculum, students are required to master the basic concepts of IE and carry out in-depth development on this basis; system engineering requires students to be Analyze and combine various analysis and evaluation methods, such as analytic hierarchy process, Delphi method, fuzzy evaluation method, etc., systematically and comprehensively analyze and evaluate problems and programs; logistics facilities and planning, production planning And control, lean production, quality management and reliability, etc. Cheng is the integrated use of professional core courses, lean manufacturing enterprise in terms of production operations, quality control, communist layout. The core course of industrial engineering relies on the foundation of the discipline to carry out more in-depth study of the industrial engineering profession. Each course has a separate part, and the emphasis is different, but there are also links between each other. Each course complements each other. Just like project management and engineering economics, both of them are based on the development of enterprise projects. Project management analyzes, implements, operates, evaluates, etc. as a whole, while engineering company based on different needs, creation of relevant professional elective courses, creation of professional elective courses, allowing students to choose a different direction Conduct in-depth study to find a career orientation and life orientation that suits you.

(2) Practice training module: The practical teaching system combines theoretical teaching with practical application, strengthens the practical application ability of college students, thus achieves the teaching purpose of knowing and doing, and cultivates the application-oriented talents needed by the society. We can see that for professional courses, both the subject and the core courses are designed and practiced. When learning the theoretical knowledge, combined with the current courses, the basic practical teaching content is set to strengthen the students in the subject. Practical ability. Table 5-2 lists some courses in the integration of production and education in industrial engineering.

For industrial engineering, a good corporate training environment, can play an unusual role for students, just as large by increasing the awareness of a student internship can before learning courses allow students to understand what is industrial engineering Industrial engineering? The application and role of industrial engineering in enterprises, why the rapid development of modern enterprises is inseparable from industrial engineering and inseparable from lean production. Through awareness training business internship, can stimulate students' interest in learning, students develop a more substantial program and live life planning, and entrepreneurial training can be a huge help graduating students, businesses and schools together through education So that students can step into the society in advance, understand the production operations of the company, and help the rapid entry after graduation.

#### 2.2. Analysis and Research Courses in Practical Teaching System

The practical teaching system combines theoretical teaching with practical training to form a curriculum system based on practice-assisted teaching. This kind of curriculum system is not as simple as increasing the curriculum design and experiment of professional courses, but through the integration of resources and reasonable. Arranging experiments, curriculum design, production internships, etc., and integrating practical resources, can form a complete practical teaching system, enabling students to enhance their practical ability step by step. The establishment of the practical teaching system first needs to integrate the curriculum resources to ensure that the professional courses are not heavy, and the foundation gradually expands to the deeper level, systematically teaching industrial engineering students. Secondly, in the student practice session, with reference to the successful experience of enterprises and some colleges and universities, through the organizational model of the project team, continuous improvement of practical topics and research projects, this organization model uses the participation of senior and lower grades, flexible according to needs The adjustment team members make the project continuous and in-depth and the team members' practical ability is

continuously strengthened to meet the requirements of the practical teaching system for talent training.

In the investigation, we can find that the production service system optimization design and the production service system operation control belong to the production operation and management, and through the investigation of the book of production operation and management, some chapters of the book and basic industrial engineering and logistics facilities Duplicate with the planning, some courses are not detailed, and the corresponding practice teaching is repetitive. Through interviews with enterprise IE personnel and college teachers, the entry of university professional courses may not be used, but the focus of the university is to train students. Self-learning and practical application ability, according to their actual experience, the setting of college professional courses is almost the same as the thinking mode of professional courses. Therefore, the most important thing in practical teaching platform is systematic teaching of students, which will be relevant. Resource integration, such as the combination of curriculum design and experiment in each professional course, the resources of the two are merged together, in the form of practical projects, and the project is deeply explored and continuously carried out, and finally the results are completed. Subject, through this model, can make Students have enough time and energy to complete, we will utilize the expertise in practical problems. Through the integration of resources, we can do a series of practical topics, just as the enterprise starts from the basic on-site management and combines the PDCA cycle theory to gradually deepen the lean, and the practical teaching system can also adopt this model. The basic on-site analysis began, gradually integrated into quality management, equipment maintenance, production planning and control, etc., thus forming a systematic practical teaching system.

Quality is the core of enterprise production, and it is also the focus of IE improvement. The establishment of quality management and quality system in enterprise production will last for a long time. As the lifeblood of enterprise operation, the professional knowledge and practical ability required for quality management and control is especially Important, the quality management and reliability of our industrial engineering majors is not reasonable in terms of curriculum and practical teaching. Because quality management and control require strong practicality, we can understand the bitter and empty content inside. This requires long-term practical teaching. Through interviews and consultations with enterprises, combined with the second phase of the research topic of Quality Theme Innovation Zone published by Nanjing University of Aeronautics and Astronautics (see WeChat public number : China Southern Airlines IE Society), quality management The course of reliability is divided into different sections for learning and practice. Through the application of university research projects and enterprise improvement projects, quality management systems, quality management control, failure mode analysis and other related quality research projects are formulated. Voluntary registration and system grouping, combined with senior grades Drive the model of participation in the lower grades and conduct in-depth quality management research and practice.

### 3. STUDENTS USE PRACTICAL ABILITY TRAINING

#### 3.1. Planning Campus Activities--Basic Quality Cultivation

Students can quickly improve their practical application ability by participating in competitions such as academic competitions and innovation and entrepreneurship. However, the cultivation of personal comprehensive quality is the first to start. The industrial engineering profession requires students not only to have certain practical ability, but also to be practical. The analysis of the problem and the solution of the design solution also require the students to have a relatively good personal comprehensive quality, including certain writing ability, speaking ability, organizational ability, communication ability, etc., which need to be slowly

exercised during the school. to develop students' personal abilities through a series of activities, training in this regard, it is also necessary for academic competitions, in order to meet the needs of the students of the school practice, the various aspects of resources for effective integration, relying School of industrial Engineering Professional background, the establishment of industrial engineering professional school, through the joint efforts of teachers and students to achieve practical requirements.

IE Practice Society was established in September 2014. As a professional organization of industrial engineering, it provides a practical platform for students. The community carries out a series of professional activities under the guidance of the secretary of the Youth League Committee and the teachers of the teaching and research section. As a professional society, the school has always maintained a positive and upward spirit. From the perspective of industrial engineering, it integrates into the basic management philosophy of IE, continuously improves and innovates, and treats each activity as an improvement project, insisting on improvement. At the limit, strive to do every activity. Under the leadership of the teachers of the Industrial Engineering Teaching and Research Section, the Society constantly integrates resources and always adheres to the attitude of serving the students. It constantly enriches the students' life and practice platform on campus, and forms the service aim of on-campus study and off-campus internship.

Through a series of activities, the Society enhances students' practical application ability and comprehensive quality ability. For example, in entertainment, the Society organizes fun games, not only to enhance students' on-campus activities, but also to improve their comprehensive quality and ability. It is also a practice of the backbone of the school and the practice of industrial engineering concepts. Through every fun event, you can apply the IE concept to the event. How to quickly identify the staff of each nature and the participants of each team in a group of people? This requires reference to the visual management in the basic industrial engineering, using different colors of clothing to distinguish the staff of each type of position, so that the participants or organizers can quickly find the required personnel, but also let the staff In his position, he avoids duplication, omission, and shirking responsibility in the arrangement; the contestants use the form of armbands to distinguish each group of contestants, and the advantages of visual management are also reflected in this activity. The concept of IE is Get the most profit with the least cost. Here, the team with the least number of people to manage the most, not only that, the use of many IE management concepts in the event, not only the visual management, but also the management of personnel The pre-planning, results display and solidification of the event, and the effective combination of fun entertainment activities and professional concepts, Hengjia highlights professional charm. The Society not only organizes fun games, but also one of the daily entertainment activities of the Fun Games Knowledge Society. The Society always adheres to the principle of "in-school learning and off-campus practice". Through the help of the teaching and research section and the Youth League Committee, the Society actively undertakes a number of practical activities. The students provide a better practice platform, and through the IE tour tour, the practical teaching system will be effectively combined, and the cognitive internship will be transferred from the intramural visit to the school-enterprise joint training, and the experimental facilities and enterprises will be explained and learned. The newly-entered students form a certain sense of awareness in the industrial engineering profession; according to the requirements of professional teachers, the school will form the curriculum design to improve the project, provide corresponding resources and help for each group, and complete the curriculum design in the form of projects. It can enhance the learning atmosphere between students, and the group's participation mode can carry out more in-depth improvement projects; in addition, there are new and old students exchange activities, website dry goods knowledge push, all will be on the students' personal qualities, professional learning Practical ability is of great help.

The existence of the society is to improve the practice teaching system, to help professional teachers to carry out practical teaching, and to also provide a practical platform for the majority of industrial engineering students to integrate, reorganize and inherit resources through the society. To enhance the communication and communication of students at all levels and enhance the professional practice ability of students.

The IE Liangjian Competition is a professional discipline competition for industrial engineering. Every year, our school organizes personnel to participate in the application of industrial engineering expertise through practical improvement cases. Improve project combines training model under the teaching system, the analysis of the case problems in the form of the project team, in conjunction with the relevant theoretical knowledge and logistics facilities planning, integrate into the genetic algorithm and system simulation design and improvement programs, and The results were analyzed. The project team members include the hard work of the three-year students. They are the practical application of the participation and continuous improvement of the high and low grades in practical teaching. Through the joint guidance of the teachers and corporate instructors in the school, the senior team drives the lower grade model, and the project team has achieved certain the achievements fully reflect the advantages of the practical teaching system.

In addition to the annual IE Bright Sword Contest, our school is also actively participating in other discipline competitions and declarations of innovation and entrepreneurship competitions. Industrial engineering is an effective combination of engineering and management. It not only requires students to have engineering-related professional knowledge, but also requires students to study professional courses in economic management, and combine them with the core courses of industrial engineering itself. Let students develop a systematic and holistic thinking of thinking, and in this mode of thinking, combined with the actual feasibility improvement, this kind of thinking training can make students have more logic and creativity. The advantages of this systematic thinking can be reflected in every game. In addition to the IE Liangjian Competition held in Tsinghua every year, the students of this major have entered the competition through the enterprise practice improvement project, and have achieved certain results. In the provincial industrial engineering improvement project competition, the industrial engineering students of our school are actively under the guidance of the teacher. Participated in and achieved certain results; in the Sichuan Liquor Marketing Competition, our industrial engineering students through the systematic investigation and analysis of the liquor industry, combined with the marketing knowledge, human factors engineering, systems engineering and other professional knowledge, The brand rebranding and marketing strategy of the liquor brand was finally awarded the first prize of the first liquor marketing contest and the second prize of the second session, and also won the second prize in the global marketing competition; In the project, the actual problems will be studied in the form of project improvement. Through the investigation and analysis of practical problems, combined with the industrial engineering expertise, guided by the IE improvement concept, the system will decompose and study the problem, through the form of practice. Improve the design.

Through the analysis of the above cases, we can see that through the practice of project practice improvement, guided by the practical problems of enterprises, combined with the knowledge learned, effective analysis and program design for the problems existing, to solve practical problems for enterprises, but also strengthen the practical application ability of students in this major. Through the help of teachers and enterprises, students take specific cases as research objects, combine the theoretical knowledge they learn with practical problems, and quickly strengthen students' practical application ability in the process of solving problems. The promotion of the project is not a one-time improvement process. She needs continuous improvement and design. Through the joint efforts of the students in the season, a project can start from the curriculum design of the students and conduct joint research and analysis in the

form of small groups. In the process, it will be further optimized. As a graduation design, the results will be displayed in the form of competitions and judged by experts. It will greatly promote the advancement of the practical teaching system.

#### 3.2. Enterprise Practice Base--Cultivating Students' Comprehensive Practice Ability

The practical teaching system includes three stages of practical learning, such as basic practice, professional practice, and comprehensive practice. However, in practice, the practical content of colleges and universities is closely related to the enterprise. Each stage will require more or less enterprise support, especially for comprehensive The practice sector, a good corporate practice environment, can greatly enhance students' professional practice ability. Therefore, the practice teaching system is inseparable from the enterprise. For this reason, through the combination of school and enterprise, the professional skills can be improved. It can be seen from the practical teaching system that the college has strengthened the practice of integration of production and education in the industrial engineering profession, so that students can learn, visit and practice in the enterprise according to the requirements of relevant courses. Learn to use, to achieve the teaching philosophy of knowing and doing. The industrial engineering major of Panzhihua University combines theory with practice, through in-depth cooperation with enterprises and society, jointly cultivates the application-oriented talents that enterprises urgently need, and takes students' practical application ability as the embodiment of teaching quality, and establishes the practice base. school, department are constantly efforts and more enterprises to establish internship base, so that students can get more practice opportunities to build more than a dozen practice bases, promote the enterprise solid training program and improve industrial engineering The professional employment rate, according to the quality survey of the 2009-2015 graduate employment and accompanying Auntie of the third-party organization New Jincheng, the industrial engineering professional employment rate and average monthly salary rank second in the school, and for the 2014 industrial engineering. In terms of continuous improvement of the practical teaching system, the industrial engineering students of our school are more loved by enterprises. The employment rate of our 2014 industrial engineering students is 100%. As of November 2017, the professional students will achieve full employment, industry. Engineering graduates are in short supply, and it can be seen from the survey results. Through practical teaching system and school-enterprise cooperation training model, applied talents enterprises need.

Applied undergraduate education pays more attention to the cultivation of students' practical ability. Through in-depth cooperation with enterprises, students will have more opportunities and time to practice in the enterprise, enhance students' practical application ability, and integrate the industrial engineering major of Panzhihua University into practical teaching. More business practice courses, students use the summer and winter vacation time to go to the company for comprehensive practice, such as in the 2014 industrial engineering teaching course, arrange students to Mianyang Changhong Group for production internship, practical teaching of the core course of industrial engineering, Mianyang Changhong Group has achieved relatively great success in promoting IE. The employees have their own unique understanding of industrial engineering. The company has a rich IE concept and is a rare internship platform for industrial engineering students. Changhong Group integrates the concept of industrial engineering improvement into daily production. The efficient and safe production line, the ubiquitous lean improvement, the elimination of all waste, and the continuous improvement of full participation will be the focus of this internship. The core course of engineering--production operation and management can be fully applied in practice here. Through a series of basic improvements, the waste of handling, waiting and temporary storage is minimized, the production cycle of enterprises is shortened, and the production of employees is improved. Efficiency, production internship is not only a visit to Changhong Group, but also requires us to

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carry out practical operations. Through the development of standard operating instructions (also known as SOP) for each process, each step is optimized and the operation process is

removed. Waste phenomenon, standardize the steps of product processing, through the standard work instructions, can quickly train and regulate the employees, and learn from the 5S management in the industrial engineering, through the "red card battle" on the production site, will not belong to Clean up the items on site, and work on the items needed at the site. With the arrangement, uniform and standardized placement, the time for staff is reduced, the responsibility is implemented to each employee, the site is regularly cleaned and inspected, and the relevant reforms and regulations are adopted to ensure the cleanliness and unification of the site. The management of on-site 5S is an effective measure for enterprises to carry out rapid production and reduce the non-performing rate. Mianyang Changhong conducts production internships, which is a comprehensive practical study of production operation and management, basic industrial engineering, and human factors engineering in industrial engineering. Through the production internship in Changhong, students of 2014 can combine theoretical knowledge with practice. Combine and research and analyze the existing problems to enhance students' practical application ability.

The practical teaching system also pays attention to the students' graduation design and extracurricular practice. For the senior students, the professional knowledge has been completed. Through the previous in-school off-campus basic internship, there is a certain practical ability, but for industrial engineering students, the foundation Practice and production internships are far from meeting the needs of enterprise talent training. For industrial engineering students, graduation internships and seniors' extracurricular practice can strengthen their comprehensive practical ability, such as the 2014 Jingdong Logistics Graduation Internship and 2013 Guangdong TTI graduation internship, through the graduation internship can strengthen the comprehensive practical ability of Xu Xiezi, taking the Jingdong logistics internship as an example, the 2014 students internship in Chengdu Jingdong ProLogis Logistics Park, from the management introduction, practice hands-on, post training, etc. In this aspect, the logistics park's production operation, facility layout, storage system, etc. are understood and analyzed, and combined with the logistics facilities and planning curriculum knowledge, the corresponding analysis and research are carried out from the theoretical level, and the logistics route of the factory is combined with the internship. , storage systems, and other electronic technologies scan code practice Science To further understand the operation and management of the logistics industry and the warehousing department, and to discuss and analyze the deficiencies in the practice process, and to improve the logistics route and warehousing system of the factory from the actual situation; the graduation internship of the 2013 TTI enterprise, Understand the company's production operation mode, optimize the production line and improve the layout of the equipment, and conduct hands-on research and analysis before and after improvement. By enumerating the graduation internships of the 2013 and 2014 industrial engineering students, it can be seen that through the practical training of the enterprise, it is of great help to the students' practical application ability. In the process of practice, the students can combine the actual situation of the enterprise and will Combining theory with practice, systematically analyzing and researching the current situation and existing problems of enterprises, independently solving the problems faced by them, and cultivating students' ability to think independently, discover problems and solve problems, so as to quickly improve students. The practical application ability and comprehensive quality ability.

For some basic training from the original campus visit into a business visit, this knowledge is generally arranged internship at the University of the first school year, students in industrial engineering expertise on the basis of one o'clock, so that its practical application to visit the enterprise, from the company is responsible for explaining the application of students'

professional knowledge. For the industrial engineering major of the university, the new-born cognitive internship cooperates with the internship base of our city. Through the visit and study of the internship enterprise, we can understand the application of industrial engineering professional techniques. The cognitive practice base includes the catering industry and the manufacturing industry. The enterprise and catering industry are mainly two new restaurants, such as the new fishing head and the Hawker, which are uniquely owned by the company. They learn about the on-site management practices of the restaurant. The manufacturing industry is mainly the management and product control of the freezing point water production site. The following is a list of cognitive internships based on the 5S management of the kitchen chefs in the city. Fishing is my new masters of the city, a large restaurant, a few years ago, the introduction of the 5S management mode, and as our school of industrial engineering internship cognitive basis, its on-site management did a great job, it has a certain reference value.

The scene is the location of the venue where the event or activity is to be carried out, and it is also an important target for us to make improvements. The work of all companies is basically to be implemented on site. The level of on-site management determines whether the company can operate normally, and the work required or the established goals are also through the improvement of the site layout. Behind a successful enterprise, there must be a successful scene. First, the management of on-site 5S is the basis for effective management of the enterprise. Through on-site 5S management of the enterprise, it can effectively help the cleanliness of the on-site environment, so that the work efficiency has It is promoted to reduce unnecessary waste caused by unnecessary items, and fixed management is a scientific on-site management method. It is also essential to use in the catering industry. The principle of action economy is placed in an established location, allowing people to quickly and easily find the items they need. The core content of fixed management is to emphasize the order of the items, to ensure the transfer of goods between the items and the items, so that there is no waiting between the various processes, without delaying or hindering the next process, in the kitchen kitchen the kitchen utensils specific set-in a fixed position, and to develop items Taiwan account to ensure that staff can quickly find equipment in order to reduce seek time; drawing set management chart, indicating where in there, so that staff members clearly understand the entire The specific layout of the kitchen.

#### 3.3. "Double Division Dual Energy" Teacher Team

Application-oriented undergraduate colleges and universities to achieve the integration of production and education, training enterprises to apply the application-oriented talents, has a high practical teaching significance, the integration of production and education is not only the requirements for the cultivation of students' practical ability, but also the practical teaching of applied undergraduate college teachers. It is required that practical teaching is different from traditional theoretical teaching mode. It requires university teachers to effectively integrate theoretical knowledge with practical application in combination with social practice, industry background and enterprise problems. In the teaching process, theoretical knowledge can be realized and fully realized. Using enterprise improvement project cases and practical experience, students can better understand and use, practice teaching system pays attention to students' practical training, and it is also a challenge and learning for applied undergraduate college teachers, requiring applied undergraduate college teachers to carry out theory. At the same time of research, strengthen their own practical training, and enhance their practical teaching ability.

The Department of Industrial Engineering of Panzhihua University currently has 18 teachers, 8 professors and associate professors, and 5 corporate supervisors with senior engineer qualifications. In the transition to applied undergraduate course at Panzhihua University, the

industrial engineering of our school has continuously strengthened the "double-master dualenergy" teachers. The training of the team enhances the practical teaching ability of college teachers. Through regular industry background training, our industrial engineering teachers continuously strengthen their practical application ability, combine the practical problems of the enterprise, combine theory with practice, and lead the students internship. Conduct practical learning, and arrange and guide students to practice learning in conjunction with the resources of the internship enterprise. In addition, the industrial engineering profession actively introduces corporate instructors, fully utilizes the excellent resources of the enterprise, and jointly cultivates students' practical application ability. The industrial engineering enterprise instructors strengthen the industrial engineering specialty with our school through lectures, enterprise guidance, and remote communication. students' communication and guidance, Shanghai fiber Division English teacher Li Hua late "industrial engineering used in the manufacturing industry," seminar, from today's manufacturing industry is facing the problem, combined with the company many years of successful experience, our school conducted for the industrial engineering students Explain and solve the doubts faced by the students. At the same time, through the network communication software, Mr. Li constantly strengthens communication and guidance with the students, and shares relevant practical cases and practical knowledge; the establishment of the enterprise training base, the students are sent to the enterprise to practice learning, strengthen communication and exchanges between students and business mentors, through relevant internships, business mentors from the field practice teaching and help assist the effective combination of theoretical and practical knowledge of students, enhance students' practical ability to use common Cultivate high-quality applied talents.

### 4. CONCLUSION

This paper analyzes the success and shortcomings of the integration of production and education in colleges and universities at home and abroad, analyzes the necessary ways and teaching modes of application-oriented undergraduate colleges to realize the integration of production and education, and combines the requirements of talents in domestic social and economic development with the actual situation of industrial engineering in our university. In the context of the transformation of our university to applied undergraduate universities, from the perspective of the integration of production and education, we focus on the cultivation of the practical application ability of industrial engineering students in the context of the integration of production and education, and integrate the relevant resources of industrial engineering majors of our university. Improve the practical teaching system of industrial engineering in our school. This system is based on improving students' practical ability and ability, combining the social requirements of industrial engineering students' ability requirements, from the students' basic personal ability, professional practice ability and comprehensive practical ability. Sexual analysis, and strengthen communication and cooperation with enterprises, strengthen the training of "double-skilled dual-energy" teachers, realize the training mode of colleges and universities, corporate training, college teachers, and corporate tutors, thus serving our school. professional production and education in industrial engineering fusion propose an efficient machine And elaborate system of training the practical ability of students through the use of practical examples and results.

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