Research on the training of international talent training for undergraduate graduates of Thai universities

Shangjie Meng and Kuotung Shih
Krirk University, Thailand
Corresponding Author, E-mail: la_chada@hotmail.com

****

Abstracts

With the continuous deepening of economic globalization, whether it is the expansion of multinational enterprises or the international development of enterprises, they are eager to join the excellent international science and engineering talents. This study uses the theory of virtual human resources management, analyzes the current status of the international talent training model of undergraduate majors in science and engineering, and studies how universities choose professional education activities based on international human resources, so as to form high -efficiency, flexible and characteristic science and engineering Undergraduate professional international talent training model.

First of all, the main body of the international talent training model of science and engineering undergraduate majors, and the choice of undergraduate students of science and engineering. The construction of the international talent training model of undergraduate majors in science and engineering must not only meet the strategic development needs of the school, but also meet the students' international development needs. The Academy of Science and Technology is the designer and executive of the training model. The undergraduate students of science and engineering are demanders and recipients. On the basis of analyzing international human resources, the international talent training model based on international human resources investigates the choice tendency of the Thai Academy of Science and Technology and the willingness to choose from undergraduate majors in science and engineering. Studies have found that there are significant differences in understanding of international human resources undergraduate students based on international human resources undergraduate students and undergraduate students of the University of Science and Technology of Science and Technology in Thailand.

Secondly, the impact of social background in the selection of international talent training models of science and engineering, and the role that educational behavior can play in it. Through this article, research helps to further analyze the development needs of students in Thai University of Science and Technology. Studies have found that whether it is difficult to change the social background and educational behavior implemented by universities, it has a significant impact on the choice of students' undergraduate students. As a result, this thesis concluded that the disconnection of international strategy and talent training has led to the value of the international talent training model of the undergraduate majors of science and engineering in Thailand. There will be differences in the willingness to choose, but it can have a positive impact through educational behavior.

Finally, a selection mechanism for the international talent training model of science and engineering undergraduates. This mechanism refers to the value and unique theoretical framework proposed by the theory of virtual human resource management, and combines the characteristics of the training of international talent training of universities in Thailand. The purpose is to improve the core competitiveness of university talent training and enhance the

* Received: July 9 2023; Revised: July 18 2023; Accepted: July 20 2023

competitive advantage of university organizations. Through educational behavior, Thai universities transform international strategies into students 'international development needs, and consider the differences in differences caused by different social backgrounds, and then realize the consistency of students' value perception. The core function and the characteristics of the school's professional education determine the use of international human resources, and actively adapt to the new changes of information technology, take into account costs and benefits. Professional international talent training model. This selection mechanism is also applicable to the selection of international human resources use in different implementation links of the international talent training model of science and engineering undergraduate majors.

Keywords: Science And Engineering; Training Model; International Talent; Virtual Human Resource Management; Selection Mechanism

Introduction

To cultivate international talents, we must first realize the international flow of talents. That is to say, the training model of the undergraduate international talent training model of science and engineering must be integrated with international engineering education. Graduates can have the ability and qualifications to participate in international engineering projects. Thailand is one of the earliest countries to join the Washington Agreement, which means that Thai talent training quality standards and the standard substantial equivalent of the Washington Agreement. Thai universities pay great attention to cooperation with international organizations, and use international intelligence resources to improve the quality of international talent training in science and engineering, and improve the international talent training model of science and engineering undergraduate majors. The Thai government encourages universities to develop international human resources in multi -channel and build a variety of international talent training models of science and engineering undergraduate majors (Mcnerney, 1995; Connell, 1996; Anonymous, 1998; Greenard, 2001).

Research Objective

This thesis uses the theory of virtual human resources management, analyzes the current status of the international talent training model of undergraduate majors in science and engineering, and studies how universities choose professional education activities based on international human resources, so as to form high -efficiency, flexible and characteristic science and engineering Undergraduate professional international talent training model.

Literature Review

University teaching management

The term management comes from the West, and management is the process of systematically planning, organizing, commanding, coordinating, and controlling certain people, finances, and things. That is to say, the management subject uses certain management methods to accomplish the goals achieved by the organization according to the various resources of the organization. Teaching management can be divided into broad and narrow senses. In a broad sense, it refers to the organizational leadership and management of various schools by the educational administrative department. In a narrow sense, it refers to the

planning, organization, command, coordination and control of teaching work in order to achieve teaching goals and achieve teaching goals according to the characteristics and laws of teaching. The essence of teaching management is to organize and use the school's human, material, and financial resources to manage teaching operations, teaching information, and the efficiency, effectiveness, time, quality, and procedures of the teaching process.

The teaching management of colleges and universities is based on the following principles: First, the principle of comprehensiveness. The teaching management in colleges and universities is restricted by the social system and the internal system of the school. The second is the principle of democracy. There are many factors in teaching management, especially to give full play to the subjective initiative of teaching management personnel, carry forward management democracy, stimulate the ownership spirit of teaching management personnel, and better serve teaching management. The third is the principle of efficiency. Teaching management must emphasize efficiency and improve the effect of teaching management. The fourth is the principle of flexibility and unity. Teaching management should ensure the coordination and unity of various system elements of teaching management, and should give play to the principle of flexibility in teaching management, pay attention to teaching students according to their aptitude, and respect students' individuality. Promote the individualization and pertinence of teaching management, and the differentiation and differentiation of teaching management to form its own characteristics.

Based on the above viewpoints, this paper believes that college teaching management refers to the process of comprehensive management of teaching business by college teaching managers in order to achieve teaching goals and improve teaching quality in accordance with college teaching laws and characteristics. Teaching management in colleges and universities includes three aspects: daily teaching management, teaching security management, and teaching evaluation management.

Talent training mode

(1) Main point of view

Through the analysis of literature search, the concept of talent training model has this different perspective and viewpoint, mainly the following: first, style theory. Professor Liu Mingjun (1993), who first proposed this concept, believes that the talent training model is an education and teaching style selected or conceived to achieve certain educational goals. This view was applied by Zhu Shengli (2005) with the concept of model. It is believed that the talent training model is the standard form (or style) of talent training. It is standardized and operable, and people can follow suit. Liu Ying et al. (2011 : 178-179) believes that under certain education concept guidance, the talent training model, the training goals, training systems, training processes and training mechanisms determined to complete the talent training tasks of talent training Essence The second is to say. The Ministry of Education's "Opinions on Deepening Teaching Reform and Cultivating High -quality Talents in the 21st Century" (Teaching High [1998] No. 2) pointed out that the talent training model is The way of species. The third is elements. Yu Xin (1997) believes that the broad talent training model refers to the combination of training goals, education systems, training plans, and teaching processes under certain education ideas. Li Shuohao et al. (2000) believes that the university training model is a systematic structure made of organic combination of several elements related to talent training goals. The fourth is the process that the army et al. (1997) believed that the training model was essentially a comprehensive process and practical process for the implementation of talent quality requirements and training goals. He Jianping (2003) believes

that under the guidance of certain educational ideas and educational theories, the talent training model refers to the general term of the talent training goals, education system, training plan, and process elements that constitute a relatively stable education and teaching process and operating mechanism. Cheng Guangxu (2009) believes that the talent training model refers to the sum of the process of talent education in accordance with the theory and ideological guidance of modern education, under the guidance of modern education theory and ideological guidance, follow the advanced teaching content and curriculum system, management system and evaluation method. Fifth, the combination of style and process. Gong Yizu (1998) believes that the training model refers to the standard structure style and operation of the training process adopted by a certain educational thinking and educational theoretical guidance to achieve the training process (including the training specifications). The category category. Zhou Quanxing (2006) uses mode theory analysis and believes that the talent training model is a structural style and operating method of talent training activities. Jiang Shiwei (2008) believes that the talent training model refers to a more stable structural state and operating mechanism formed by a certain educational concept (ideas). Yang Zongren (2012) believes that the essence of the talent training model is a relatively stable knowledge, ability, quality structure and how to realize the organizational form and operating mechanism of this structure.Through analysis, it is found that these concepts also have some commonalities, which are mainly reflected in the following: firstly, talent training mode has a goal, which is essentially to achieve the goal of talent training; secondly, talent training mode has several constituent elements, and the elements interact with each other. Dialectical unity, but the specific content of the elements is different; the third is that the talent training model is formed under theoretical guidance. Educational ideas and theories in different periods will cause changes in the training model. Fourth, the talent training model is standardized and operable, and can be implemented in the process of talent training. Therefore, the talent training model is between educational thoughts and theory and talent training.

(2) The point of view of this article

Based on this kind of understanding, combined with the consensus of experts and scholars, it can be concluded that the talent training model is the scientific construction of the structure, elements, and operation of educational activities under certain education concepts. Due to the different needs of talent training, the problems that need to be solved are different, the corresponding educational activities will be different, and the talent training model will be different. In addition, educational activities are the basic unit of talent training model. Different educational activities are combined and connected to form different talent training models.

In modern society, government departments, research institutes, and enterprises and institutions have also played a positive role. The college talent training model reflects the interaction between the subjects to a certain extent, and reflects the openness of the talent training model. Talent training is one of the important functions of the university. The university is the subject of actively building a talent training model. The role of other subjects has been restricted and regulated by the university. As the leading force, the university brings together resources and conditions of all parties to create superiority for talent training work. surroundings.

Science and Technology

(1) Main point of view

As a discipline, the connotation of science and engineering is inseparable from the concept of the discipline. On the one hand, science and engineering refers to knowledge classification and learning subjects, and on the other hand, it refers to cultivating people, and focuses on standardized and shaping with strong properties. As a discipline, science and engineering is one of the branches of knowledge, and is closely related to talent training activities.

The science and engineering section mentioned in this thesis specifically refers to one of the discipline branches in the field of higher education undergraduate majors. Thai university disciplines are mainly based on the directory of the Ministry of Education's discipline of talent training. The Ministry of Education of Thailand issued the "Undergraduate Professional Catalog of High Schools". Discipline categories and first -level disciplines are the basic basis for national degree authorization and discipline management, and degree awarding units to carry out degree awarding and talent training.

The Education Project Classification System (CIP for short) of the Ministry of Education of the United States is formed by screening and finishing on the basis of existing courses and practices of all higher education institutions. The actual changes in professional settings based on the needs of talent training (Bao Yan, 2004). German higher education also reflects the current construction of Germany through statistics, and statistics are separated from the aspects of "teaching" and "learning". They are divided into three levels. "Learning" is a professional group and learning scope. And learning professional catalogs, "teaching" is a professional group, teaching and research scope and professional field catalog (Hu Chunchun et al., 2007). The academic or professional groups in the CIP project group and the German statistical classification are not classified according to the knowledge system. It is completely different from the subject category in the Thai discipline directory and is not standardized or academic. Therefore, this thesis uses the discipline of the discipline of Thai talent training disciplines, and the specific scope is based on the undergraduate professional catalog issued by the Ministry of Education of Thailand.

(2) The point of view of this article

Science and engineering is a branch of the discipline. It is a general term related to engineering -related disciplines and is closely related to talent training activities. Science and engineering education can also be called engineering education, which aims to cultivate professional education at all levels of engineering and technical talents and management talents. In order to ensure the smooth development of the study, the references, cases and samples of this thesis will be selected according to the professional or professional categories or majors under the professional category in the undergraduate majors in ordinary colleges and universities.

Elaboration of the International Talent Training Standards for Undergraduate Professionalism

The core of talents is knowledge, ability and quality. The discussion on the international talent of science and engineering is also mainly based on knowledge, ability and quality. The influence and representative of Thailand's undergraduate international talent training model are mainly the framework standards for the ENGINEEERINGCRITERIA 2000 in the Washington Agreement, the framework standard of the European engineering education professional certification system and the capability outline of the CDIO engineering education model, and the excellent engineer The training of undergraduate science and

engineering talents in education and training plans.

(1) ENGINEERINGCRITERIA2000

ENGINEERINGCRITERIA2000 requirements for undergraduate graduates of science and engineering:

A's ability to apply knowledge such as mathematics, science and engineering;

B formulate and implement experimental solutions, and the ability to analyze and explain data;

C Under the conditions of economy, environment, society, politics, ethics, hygiene and safety, processability and continuity, design a system, one component or a process capabilities according to needs;

D's ability to work in multidisciplinary teams;

E can identify, plan, and solve engineering problems in engineering problems;

f to understand the ability of professional ethics and social responsibility;

G The ability to express and communicate effectively;

H obtaining understanding project in the global economy, environment, and social influence; I recognize and have the ability to learn for lifelong learning;

J's ability to understand contemporary problems;

K uses technology, skills and modern engineering tools in engineering practice.

(2) EUR-ACE framework standard

The first European Engineering Education Professional Certification Program (Eur-Aceproject) proposed in 2004 that the European Engineering Education Certification Network was officially established in 2006, and certification work has been implemented since 2007. The 2008 EUR-ACE framework standard was revised and fixed. Now some Thai universities in Thailand are actively establishing an alliance with European higher education institutions to join the European engineering education professional certification system.

The requirements of undergraduate graduates in the EUR-ACE framework standard:

A knowledge and understanding: know and understand the science and mathematics principles of engineering majors; systematically master the key knowledge and concepts of engineering majors; integrate the knowledge of engineering, including the forefront information; and have awareness of expanding the knowledge of multidisciplinary engineering.

B project analysis: Under the established method, the knowledge learned to identify engineering problems, conceive the ability of the plan and solve it; use the ability to analyze the knowledge of the knowledge of the knowledge of the project, process and methods; The ability to model method.

C project design: Use the knowledge of the knowledge learned to meet the design schemes that meet the established needs or specific needs, or realize the ability of these design schemes; master the design methods and use their abilities.

D survey; the ability to retrieve and use databases and other information resources; design and implement appropriate experiments and explain the ability of data and draw conclusions; work skills to work in the workshop and laboratory.

E engineering practice: the ability to select and use appropriate equipment, tools, and methods; combine theory and practice to solve the ability of engineering problems; master the appropriate skills and methods and understand their limitations; understand the non -technical meaning of engineering practice.

F skill migration: effectively exert the role of individuals and the role of as members

in the team; apply various methods to conduct effective communication with the field of engineering and the whole society; in engineering practice Engineering solutions serve the development of society and the environment, and are committed to using them as professional ethics, responsibilities and standards for engineering practice; awareness of project management and business activities, such as risk management, change management, mastering their limitations; understanding Go to and have the ability to learn independently and lifelong learning.

(3) General standard for training of undergraduate science and engineering talents

The Ministry of Education of Thailand proposed universal standards for undergraduate majors.

Undergraduate science and engineering talent training common standards are:

A has good professional ethics, the pursuit of excellent attitude, a strong sense of social responsibility, and a good humanistic literacy;

B with related mathematics, natural scientific knowledge, and certain economic management such as engineering work such as engineering work;

C has good quality, safety, efficiency, environment, occupational health and service awareness;

D master solid engineering basic knowledge and basic theoretical knowledge of this major, understand the production process, equipment and manufacturing systems, and understand the development status and trend of this major;

E has the ability to analyze, propose plans, and solve the actual problems of the engineering. It can participate in the design and operating system design, and has the ability to operate and maintain;

F has a strong awareness of innovation and preliminary capabilities for product development and design, technological transformation and innovation;

G has information acquisition and career development and learning ability;

H understands the technical standards of this professional field, policies, laws and regulations of related industries;

I have good organizational management capabilities, strong communication, environmental adaptation and teamwork ability; J response to the preliminary ability of crisis and emergencies;

K has a certain ability to exchanges, competition and cooperation in international vision and cross -cultural environment.

To build a model of international talent training model for science and technology, we must first cultivate the knowledge, quality and ability that international talents should have, and use international human resources in the cultivation path and environment to create opportunities for students' development.

Virtual Human Resources Management Theory

In the 1990s, network technology was greatly developed and promoted, and the early concept of virtual human resources management was mostly technical. Mcnerney (1995) believes that virtual human resources management is actually the application of independent service technology in human resources, including voice response systems, desktop computers, and multimedia. Connell (1996) emphasizes that virtual human resources management is not just network technology. In the absence of the Ministry of Human Resources, all the technologies used in input, modification, and information used by employees are virtual, including networks, databases, local area networks, browsers , File mirror and multimedia.

Anonymous (1998) proposed that virtual human resources management is essentially the human resources automation under network technology. Greenard (2001) summarizes the top ten technical trends of human resource management, including ASP and technology outsourcing, portal site, free PC and employee high -speed interfaces, mobile desktop TVs, mobile websites, electronic procurement, Internet and network supervision, Bluetooth technology, electronics, electronics, electronics Signature, electronic billing and electronic payment. LEPAK and Snell (1998) proposed that "virtual human resources are partnership and information technology as the carrier to help organizations obtain, develop and use intellectual capital network structures" clarified the four elements of virtual human resources : Network structure, partnership, information technology and intellectual capital. For the first time, the characteristics outside the technology are proposed, that is, the cooperation between organizations. The research on virtual human resource management mainly includes two ways: technology virtual and organizational virtual. Virtual human resource management is based on the strategic development of the organization. Focusing on the core competitiveness of the organization, focusing on improving the efficiency of organizational operation and the flexibility of market changes, and emphasizing that customers are always guided by customers to conduct various human resources management Essence Virtual human resource management includes technical virtual and organizational virtual. Technical virtual mainly focuses on using information technology to achieve electronic virtualization of human resource management functions, thereby improving management efficiency, or letting employees self -management and services, reducing operating costs, allowing human resource management The department focuses on considering strategic goals; organizational virtual includes talent virtual and functional virtual. Talent virtual is to hire external individuals or introduce the intellectual achievements of external organizations as organizational services. Functional virtuality is to submit some functions of human resources management to the outside of the organization.

Discussion

The selection of international talent training mode of science and engineering in Thai universities

In the international talent training model of science and engineering in Thai universities, college designers and embodiments, and students are demanders and recipients, they are the main body of the training model. The international talent training model of undergraduate majors in science and engineering is not only the result of the tendency of the selection of the Academy of Engineering, but also considering the students' willingness to choose, so that the strategic goals of the school's international talent training can be achieved. Development needs. Based on this, this thesis surveyed the tendency of the selection of the international talent training model of the University of Science and Technology in the University of Science and Technology, and the willingness to choose from undergraduate students, including different training channels and environments. In order to facilitate statistical analysis, first calculate the professional courses of talent virtual methods, professional courses in functional virtual methods, and professional courses in technical virtual methods. The corresponding data are equal to the average value of the original data of related investigation questions. Use the same method to calculate the research experiment of talent virtual methods, functional virtual methods, research and experiments of technical

virtual methods, professional practice of talent virtual methods, functional virtual methods, professional education activities, professional education activities of foreign talents, foreign functions virtual methods Educational activities, professional education activities of online talent virtual methods, professional education activities of network technology virtual methods.

Thai University Institute of Technology Choice

The results of the data analysis show (see Table 2-1), in the international talent training model of undergraduate majors in science and engineering, the choice tendency of Thai University of Science and Technology is relatively positive, all higher than the sequence average, especially in the technical virtual method The choice tendency in professional education activities is more obvious

Table 2-1 Thai university college of science and engineering sciences chooses to descriptive statistical results

International Human Resources Utilization Approach	Min	Maximum value	Mean value	Standard deviation
Talent Virtualization	1.63	5.00	3.6916	.75844
Functional Virtualization	1.60	5.00	3.5807	.84950
Technology Virtual	1.17	5.00	3.9778	.84686

This shows that in the international talent training model of undergraduate majors in science and engineering, Thai University of Science and Technology has a relatively positive interest in international human resources. In order to better understand the tendency of the choice of the Academy of Sciences, the following will be analyzed from different cultivation channels and environment.

(1) Cultivation path

The results of the data analysis show that (see Table 2-2), in the international talent training model of science and engineering undergraduate majors in different cultivation methods, the choice tendency of the School of Technology of Thai University of Science and Technology is more positive, which is higher than the sequence average.

Table 2-2 Results of descriptive statistics of the tendency to choose different cultivation pathways in the polytechnics of Thai universities

Training Pathways	International Human Resources Utilization Approach	Min	Maximum value	Mean value	Standard deviation
Professional Courses	Talent Virtual	1.50	5.00	3.7852	.77095
	Functional Virtualization	1.33	5.00	3.6025	.87862
	Technology Virtual	1.20	5.00	3.9733	.85790
Research experiments	Talent Virtual	1.56	5.00	3.5975	.83853
	Functional Virtualization	2.00	5.00	3.6785	.86321
	Technology Virtual	1.00	5.00	4.0000	.96196
Professional Practice	Talent Virtual	1.67			.80713

		5.00	3.8247	
Functional Virtualization	1.29	5.00	3.5016	.87801

In professional courses, the tendency to choose the technical virtual method of science and engineering in Thailand is more obvious, followed by talent virtual methods, and finally the functional virtual method.

In terms of research experiments, the tendency to choose the technical virtual method of science and engineering of Thai universities is the most obvious, followed by functional virtual methods, and finally a talent virtual method.

In professional practice, the tendency to choose talent virtual methods of talent virtuality in Thai universities is more obvious, followed by functional virtual methods.

It can be seen that the School of Technology of Polytechnic in Thailand hopes to actively explore the use of technical virtual methods of international human resources in professional courses and research experiments. Comparison of functional virtual methods, in terms of professional courses and professional practice, the Thai University of Science and Technology has a more active tendency to choose talent virtual methods. In the research experiment, the choice of the tendency of the Science and Technology Academy of Thai universities is the opposite. That is to say, for different cultivation channels, the Thai University Institute of Technology is different in the use of international human resources, instead of simply applying some international human resources to In all professional education activities in the international talent training model of science and engineering.

(2) Cultivate the environment

The results of the data analysis show (see Table 2-3). In the international talent training model of undergraduate majors in science and engineering, the choice tendency of the Polytechnic Academy of Sciences in Thai University is relatively positive, all higher than the average of the sequence.

Table 2-3 Results of descriptive statistics of the tendency to choose different cultivation environments in the polytechnics of Thai universities

Cultivation Environment	International Human Resources Utilization Approach	Min	Maximum value	Mean value	Standard deviation
Foreign	Talent Virtual	2.00	5.00	3.7511	.81202
	Functional Virtualization	1.55	5.00	3.5832	.85167
Network	Talent Virtual	1.00	5.00	3.4993	.91550
	Technology Virtual	1.20	5.00	3.9230	.87040

In foreign countries, the tendency to choose the professional educational activities of talent virtual methods of talent virtuality in Thai universities is more active, followed by functional virtual methods.

On the Internet, the tendency to choose the professional educational activities of technical virtual methods in Thai University of Science and Technology is more active, followed by talent virtual methods.

It can be seen that the Thai University Institute of Technology hopes to develop professional educational activities carried out abroad to connect with education activities in

schools, rather than designed and implemented professional education activities by external institutions; Focusing on the needs of international talent training, the virtualization of professional education activities can not only save costs, but also enjoy high -quality international human resources, which is conducive to further enriching the international talent training model of science and engineering.

Thai university science and engineering undergraduate students choose their wishes

The results of the data analysis show (see Table 2-4). In the international talent training model of undergraduate majors in science and engineering, the tendency to choose functional virtual methods and technical virtual methods of science and engineering undergraduate science and engineering is more positive, which is higher than the average of the sequence. , But the willingness to choose from talent virtual methods is not positive, lower than the sequence average.

Table 2-4 Descriptive statistics of students' willingness to choose undergraduate majors in science and technology in Thai universities

International Resources Approach	Human Utilization	Min	Maximum value	Mean value	Standard deviation
Talent Virtualization		1.00	5.00	2.9707	.85031
Functional Virtualization		1.00	5.00	3.0592	.89623
Technology Virtual		1.00	5.00	3.0293	.94276

This shows that in the international talent training model of undergraduate majors in science and engineering, students of science and engineering undergraduate science and engineering in Thai universities are more willing to choose to participate in professional education activities organized by off -campus institutions, as well as professional education activities for human -oriented or human -computer interaction. This reflects to a certain extent that the implementation of international human resources into the introduction of international human resources into the professional educational activities of the school will not be ideal, and it has not been actively feedback from students. Similarly, in order to better understand students' choice, the following will be analyzed from different cultivation channels and environment.

(1) Cultivation path

The results of the data analysis show that (see Table 2-5), in the international talent training model of science and engineering undergraduate majors in different cultivation pathways, the choice of students with undergraduate students in Thai universities has different choices.

Table 2-5 Descriptive statistics of students' willingness to choose science and technology undergraduate majors under different cultivation paths

Training Pathways	International Resources Approach	HumanMin Utilization	Maximum value	Mean value	Standard deviation
Professional Courses	Talent Virtual	1.00	5.00	2.9820	.89520
	Functional Virtualization	1.00	5.00	3.0817	.96030
	Technology Virtual	1.00	5.00	3.0386	.96044
Research experiments	Talent Virtual	1.00	5.00	2.9868	.87158
	Functional Virtualization	1.00	5.00	3.0644	.94252
	Technology Virtual	1.00	5.00	2.9828	1.07534
Professional Practice	Talent Virtual	1.00	5.00	2.9391	.94564
	Functional Virtualization	1.00	5.00	3.0701	.95640

In professional courses, students of science and engineering in Thai universities are more positive for the choice of functional virtual methods and technical virtual methods, which are higher than the average of the sequence. The willingness to choose the talent virtual method is not positive, lower than the sequence average.

In terms of research experiments, Thai universities' undergraduate students have a positive willingness to choose functional virtual methods, higher than the average of the sequence, and the willingness to choose from talent virtual methods and technical virtual methods is not positive, lower than the average sequence value.

In terms of professional practice, the students of the undergraduate majors of the University of Science and Technology in Thai universities are more positive for the choice of functional virtual methods, higher than the average of the sequence, and the willingness to choose the talent virtual method is not positive, lower than the sequence average.

It can be seen that in different cultivation channels, students undergraduate students of science and engineering in Thai universities are in the professional education activities of talent virtual methods. In the introduction of international human resources, they will show their willingness to have a lower willingness to choose. That is, the professional educational activities designed and implemented by external institutions show greater interest. In professional courses, students of science and engineering undergraduate science and engineering in Thai universities have also showed more positive interest in technical virtual methods, that is, human -based interaction or human -computer interaction, but in terms of research experiments, they have a low willingness to choose They hope to break through the limitations of time and space and enjoy more international human resources, but they will be different in choice for specific professional education activities.

(2) Cultivate the environment

The results of the data analysis show (see Table 2-6), the willingness to choose the talent virtual method and functional virtual method of talents abroad in the University of Science and Technology of Science and Technology in Thai universities is relatively positive, higher than the sequence average; in the network environment, Thai universities The students of science and engineering undergraduate majors in the choice of technical virtual education professional education activities are more positive, higher than the average of the sequence,

but the willingness to choose the talent virtual method is not positive, lower than the sequence average.

Table 2-6 Descriptive statistics of students' willingness to choose science and technology undergraduate majors in Thai universities in different cultivation environments

Cultivate environment	theInternational Human Resources Utilization	Min	Maximum value	Mean value	Standard deviation
foreign	Talent	1.00	5.00	3.0148	1.01019
	Functional virtual	1.00	5.00	3.0764	.97585
network	Talent	1.00	5.00	2.8827	.89905
	Functional virtual	1.00	5.00	3.0013	.95657

It can be seen that in different cultivation environments, students undergraduate students in Thai universities do have a positive interest in professional educational activities carried out abroad. They hope to immerse themselves in the original international education and cultural environment. Only in a single cultivation link with international human resources; on the Internet, students undergraduate students in Thai universities hope to give full play to the advantages of information technology, span the restrictions of time and space, and participate in more mature and effective majors on computers or network platforms Educational activities, not just communicating and communicating through the Internet.

Further discussions of the value of Thai universities and unique related related issues
According to the theory of virtual human resource management, the Thai University Institute of Technology can analyze students' values of the value of professional education activities, but in reality, the value judgment of the value of professional educational activities in the Polytechnic Academy of Sciences in Thai University Thai universities and students do not think that the existing professional education activities in Thai universities will help achieve the goal of international talent training. The unique understanding of the unique level of professional education activities of different training channels for professional educational activities in Thai universities does not match university functions. Therefore, how to realize the value judgment of the School of Technology of Thai universities is consistent with the sense of value of students in Thai universities, and further discussions are required.

(1) Value perception of Thai universities reflects students' development needs
The value of students' value of professional education activities reflects whether these educational activities can meet the needs of students. That is, the more active the tendency of students' development needs, and the more positive the willingness to choose in professional education activities. Therefore, understanding the current status of the development needs of undergraduate students in science and engineering, and prompting targeted guidance and incentives, can enhance students' value perception of professional education activities.

Table 3-1 Research University of Science and Technology University of Science and Technology University of Science and Technology International Vocational Planning tendency to descriptive statistical results

International Professional Planning	Min	Maximum value	Mean value	Standard deviation
Science and technology talents in international enterprises or organizations	1	5	2.51	1.011
Trade or managers related to science and engineering in international enterprises or organizations	1	5	2.31	1.028
Entering international business in ethnic enterprises or organizations	1	5	2.10	.963
Displained by ethnic enterprises or organizations to work abroad	1	5	2.07	.961
Overseas job	1	5	1.93	.9777

According to the data analysis of the student version of the student version (see Table 3-1), it is found that the tendency of 5 kinds of international vocational planning for science and engineering in Thai universities is not active, and they are lower than the average of the sequence, especially the overseas job search tendency is relatively low. Essence This shows that there are relatively little attention to the international employment market for undergraduate majors in Thai universities, and there is a lack of information acquisition of occupational positions related to international engineering. In other words, the international occupation development needs of undergraduate students in Thai universities are relatively low.

Table 3-2 descriptive statistical results of international learning needs tendencies of undergraduate students in Thai universities

International learning needs	Min	Maximum value	Mean value	Standard deviation
International language needs	1	5	3.18	1.144
International cultural needs	1	5	3.09	1.065
International teaching needs	1	5	3.10	1.100
Educational concept needs	1	5	3.07	1.096
International level demand	1	5	3.26	1.144
International cooperation needs	1	5	3.17	1.035
International affairs demand	1	5	2.96	1.071
International qualification needs	1	5	3.11	1.136
International information needs	1	5	3.28	1.100
International Method Demand	1	5	3.30	1.141

The results of the data analysis show that (see Table 3-2), the tendency of 10 kinds of international learning needs for the undergraduate majors in Thai universities. Except for international affairs, others are more positive and higher than the average of the sequence. International affairs highlight the requirements of the knowledge, quality, and ability to have the knowledge, quality, and ability to have the need for international talents. Thai universities' undergraduate students tend to be lower than the sequence average in the needs of international affairs. It is a must for international talents. This aspect is yet to be guided and motivated. This echoes the average of the sequences in international vocational planning students in the international vocational planning.

Therefore, the Chinese Academy of Science and Technology of Thailand should strengthen the analysis of students' development needs, and use scientific methods to motivate students to produce development needs to achieve the goal of international talent training, especially the development needs related to international affairs and international competition. On the other hand, these development needs should be transformed into development motivations, thereby improving students' willingness to choose from the international talent training model of science and engineering.

(2) Internationalization Strategy into the development needs of students

As the core function of the university, talent training needs to be carried out around the internationalization strategy of the school, reflected in the international talent training goals, and implemented in professional education activities. In order to get the recognition and active participation of undergraduate students of science and engineering undergraduate majors in the training model of undergraduate majors in science and engineering in Thai universities, we must let the undergraduate students of science and engineering undergraduate students understand the international strategy of the school and combine it with their personal development goals. In order to enhance students' willingness to choose.

Table 3-3 Internationalization talent training mode of science and engineering undergraduate majors in the selection path of selection path is valued by descriptive statistical results

Choice path		Min	Maximum value	Mean value	Standard deviation
International tactics	Internationalization	1	5	4.01	.930
	Internationalization	1	5	3.52	.976
	Join the International Education Organization	1	5	3.63	1.049
	Establish alliance with international enterprises	1	5	3.39	1.058
Student development	Demand for development	2	5	4.04	.777
	Learning foundation	2	5	3.96	.814
	economic level	1	5	3.55	.853

The results of the data analysis show (see Table 3-3), the emphasis on the internationalization strategy of the Science and Technology of Thai universities is higher than the average of the sequence. It has a significant impact on the tendency of the choice of professional educational activities; the emphasis on the internationalization of the curriculum has a significant impact on the choice of technical virtual education activities. This reflects to

a certain extent that the Thai University of Science and Technology has not fully implemented and implemented the internationalization strategy in talent training. Therefore, the Thai University Institute of Technology should combine international strategies with the training of undergraduate majors in science and engineering, and influence students in professional education activities, so that undergraduate students of science and engineering to perceive the value of professional education activities, realize science and technology in science The value judgment of the Academy of Sciences is consistent with the value perception of undergraduate students of science and engineering.

(3) Social background affects students' development needs

Each student enters the undergraduate major of science and engineering of research universities and has their own social background. These social backgrounds cannot be changed after entering school, or it is difficult to change in the short term. There are also significant differences in the needs of undergraduate students of science and engineering in different social backgrounds in international development needs. This paper will analyze the data of the student version of questionnaires.

Table 3-4 Research University of Science and Technology for Undergraduate Students International Development Demand Family Background Factors T test analysis results

International Development Needs		Level		Oversea experience	
		Father	Mother	Father	Mother
International Career Planning	Science and technology talents in international enterprises or organizations	.128	.232	.032*	.004*
	Trade or managers related to science and engineering in international enterprises or organizations	.178	.378	.004**	.008**
	Entering international business in ethnic enterprises or organizations	.307	.671	.005**	.008**
	Displained by ethnic enterprises or organizations to work abroad	.518	.556	.022**	.037**
	Overseas job	.000**	.001**	.000**	.000**
International Learning Needs	International Cultural Needs	.016*	.056	.411	.051
	International Teaching Needs	.000**	.016*	.138	.059
	Educational Philosophy Needs	.000**	.001**	.014*	.016*
	International Level Demand	.003**	.018*	.047*	.060
	International Cooperation Needs	.001**	.000**	.009**	.007**
	International Affairs	.000**	.001**	.001**	.000**
	International Qualification Needs	.000**	.000**	.117	.019*
	International Information	.001**	.005**	.249	.157

	Needs				
	International Method Demand	.005**	.062	.418	.375

The results of the data analysis show that (see Table 3-4), the level of parental degree and experience of abroad in the family background factors have a significant impact on the international learning needs of undergraduate students of science and engineering in Thai universities and international vocational planning. Parents have not received higher education and parents who have not experienced abroad. They have relatively weak international learning needs and are not active in international vocational planning.

(4) Information Technology Incentive College choice tendency

The results of the data analysis show that the tendency to choose the tendency to choose from the technical virtual education activities in the technical virtual method of technical virtual methods is significantly affected by its attention to the online learning platform. The influence of the interaction system attaches great importance, and it is positive linear. It can be seen that the continuous maturity and development of information technology helps to motivate research universities to use more advanced technologies to use international human resources in the construction of an international talent training model of science and engineering undergraduate majors.

Professional education activities implemented by information technology include talent virtual and technical virtual methods that realize international human resources through information technology. According to the different ways of cultivation and international human resources, the specific forms of technical virtual education activities include: in the professional curriculum, information technology and foreign college students study together, use the literature or books of internationally renowned professionals as professional curriculum learning materials, study abroad abroad College teachers teach videos, learn videos of international enterprise engineers, participate in foreign university teachers online courses, and participate in international enterprise engineers online courses; foreign teachers and international enterprise engineers guide students to conduct research experiments through information technology, form research teams with foreign college students through information technology with information technology 2. Participate in the simulation experiments or research on the computer virtual platform, and solve local engineering problems with local organizations with local organizations through information technology.

Table 3-5 The descriptive statistical results of the choice tendency of professional education activities under information technology support

Cultivation	Professional education activities	Min	Maximum value	Mean value	Standard deviation
Professional Courses	Use information technology to learn with foreign college students	1	5	3.67	.968
	Take the literature or books of internationally renowned professionals as professional curriculum learning materials	1	5	4.25	.920
	Learn from foreign university teachers to teach videos	1	5	4.08	.947
	Learn to teach videos of international enterprise engineers	1	5	3.96	1.032
	Participate in foreign university teachers online courses	1	5	3.81	.910
	Participate in international enterprise engineer online courses	1	5	3.76	.948
	Foreign teachers guide students to conduct research experiments through information technology	1	5	3.65	.987
	International enterprise engineers guide students through information technology to conduct research experiments	1	5	3.59	1.024
	Form research team with foreign college students through information technology	1	5	3.33	1.071
	Participate in the simulation experiment or research on the computer virtual platform	1	5	4.00	.962
	Solve local engineering problems	1	5	3.25	1.297

The results of the data analysis show that (see Table 3-5), the willingness to choose professional educational activities under information technology support for the Science and Technology Academy of Polytechnic Sciences in Thai universities is relatively positive, and they are higher than the average of the sequence. It can be seen that the documents or books of internationally renowned professionals used as professional curriculum learning materials, studying foreign university teachers or international enterprise engineers teach videos under the support of information technology support. It is generally welcomed by the Academy of Engineering.

Conclusion and Recommendations

The current research on the international talent training model of the undergraduate majors of science and engineering has a variety of theoretical perspectives. Some emphasize immersive learning from a cultural perspective, and some emphasize the international recognition and integration of the training system from an institutional perspective. The perspective of sociology emphasizes the impact of social needs on talent training. From the perspective of human resources management theory, this thesis emphasizes the reasonable and effective use of international human resources in the talent training model, so that talent training is more efficient and flexible, and then help enhance the competitive advantage of universities.

The key to the construction of the international talent training model of the undergraduate majors of science and engineering is to cultivate students' ability to participate in international competition and cooperation in the international cultural environment. Whether it is an expert's discussion, the government's measures, and the practice of university, they all reflect the international Human resources's attention and desire. Nowadays, the internationalization of science and engineering undergraduate majors in science and engineering has a variety of forms of science and engineering, but how to build a training model with the characteristics of the university and helps to enhance core competitiveness needs to be further studied.

For university organizations, international human resources are external resources, and the theory of virtual human resources management is exactly to study how to effectively use external human resources to meet the needs of organizational strategic development. Therefore, in accordance with the theory of virtual human resource management, this thesis studied the international talent training model of science and engineering undergraduate majors in Thai universities, and how to choose international human resources based on the international talent training model of science and engineering.

According to the concept of the talent training model, the talent training model is the scientific construction of educational activities. In other words, the talent training model is formed by the combination of several educational activities. As a result, this thesis analyzes different training channels and undergraduate education activities in the environment. The use of international human resources in the talent training model is divided into talent virtual, functional virtual and technical virtual. It can analyze how to choose professional education activities based on international human resources from the two dimensions of value and unique dimensions. Choose international human resources, and then combine professional education activities and connect to form a model that meets the development needs of Thailand's national development and distinctive science and engineering.

References

Liu, X. (2015). An Analysis of the Elements of Cross-Cultural Communicative Competence. *Cultural and Educational Data*, 25, 178-179.

Lusting, M., & Koester, J. (1996). *Intercultural Competence: Intercultural Communication across Cultures.* New York: Harper Collins College Publishers.

Samovar, L. A., Porter, R. E., & McDaniel, E. R. (2010). *Communication between Cultures* (7th ed., p. 2). Boston: Wasworth.

Spitzberg, B. H. (2000). *A Model of Intercultural Communication Competence. In Intercultural Communication: A Reader*. Belmont: Wadsworth Publishing Company.

Wiseman, R. L. (2003). *Intercultural Communication Competence. In W. B. Gudykunst* (Ed.), Cross-Cultural and Intercultural Communication. London: Sage Publications.

Yang, Y. (2014). Research on the Constitution and Model of Cross-Cultural Communicative Competence. Journal of Tianjin Foreign Studies University, 4, 50-58.