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Prof. Maria Alessandra Ragusa

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Contents

Original Articles

Discussion on English Education and Teaching in Colleges and Universities from a Multicultural Perspective

Yijia Gu

University of Leeds, LS2 9JT, UK

Abstract: The development of economic globalization makes the culture show a diversified development trend, and the traditional mode of teaching English in colleges and universities can hardly adapt to the development needs of the times. Therefore, there is an urgent need to reform and innovate the concept, teaching mode, teaching methods and content of English teaching in colleges and universities. In the process of teaching, there is a close connection between culture and English teaching. Exploring the reform of English teaching mode in colleges and universities under the perspective of multiculturalism can help to improve the quality of teaching and activate students' learning motivation. On this basis, this paper firstly analyzes the necessity of English teaching innovation in colleges and universities under the multicultural perspective. Secondly, it focuses on analyzing how to innovate the teaching mode of English education in colleges and universities under the perspective of multiculturalism.

Keywords: multiculturalism; college English; teaching innovation

Introduction

The advancement of economic globalization has made cultural exchanges between countries closer and closer, and multiculturalism has also brought a greater impact on education and teaching in China's colleges and universities, and various disciplines are gradually tending to diversified development. In China's university curriculum system, English is a basic course and also a language skill to enhance the cultural communication ability of college students. However, from the point of view of the current situation of English teaching in colleges and universities, it is still at a relatively low level of development, which makes it difficult for students to flexibly cope with the development trend of multiculturalism. Therefore, under the multicultural background, English teachers in colleges and universities must pay great attention to teaching innovation. By exploring a new and efficient teaching mode, students' intercultural communication level can be improved.

1. The Necessity of English Teaching Innovation in Colleges and Universities from a Multicultural Perspective

1.1 Cultivating Students' Cultural Awareness

English is a language subject with both humanistic and instrumental characteristics. In teaching English in colleges and universities, teachers must combine the students' individual needs and subject bases, build a real language environment for students, and make students understand the essence of English by presenting them with the local cultural background. By presenting the local cultural background to students, they can make students understand the essence of English. By building a western cultural background for students in English teaching, they can help students understand the charm of different languages and cultural characteristics, and improve their cross-cultural communication ability and cultural awareness.

1.2 Improve students' outlook

Under the perspective of multiculturalism, innovative English teaching in colleges and universities can help students improve their cultural thinking. As a major subject in the teaching system of colleges and universities, English belongs to the category of humanities. In the daily teaching process, it also involves history, literature, local customs and geography and other related contents. English teaching based on a multicultural perspective can not only broaden students' learning horizons and knowledge, but also cultivate students' cultural communication skills and cultural appreciation in the process of penetrating multidisciplinary content.

2. Innovative Path of English Teaching in Colleges and Universities under the Perspective of Multiculturalism

2.1 Change the teaching concept and enrich the way of cultural transmission

Innovative means of teaching English in colleges and universities under the perspective of multiculturalism can realize the cultivation of high-quality talents. Teachers must adhere to the innovative teaching concept, based on multicultural characteristics, and break the traditional single teaching mode. Teachers can combine the characteristics of English courses in multimodal contexts to present students with teaching resources such as pictures, videos, texts, and audios, so that students can mobilize their multi-senses to experience multiculturalism. At the same time, the use of multimodal discourse in the teaching process can also effectively improve students' language application ability and build a real English environment for students.

First, teachers should fully combine the concept of cultural education to build a cultural atmosphere in the classroom and cultivate students' multicultural understanding and cultural literacy. The design of each link in the process of classroom teaching must fully reflect the humanistic characteristics of the English language subject, and stimulate students' motivation to participate by creating an English cultural atmosphere of knowledge. For example, teachers can integrate exotic cultures in teaching, so that students can understand the cultural background of English from different perspectives, and enhance the efficiency of students' English learning under the drive of culture.

Secondly, from the perspective of cultural inheritance language is the main carrier, and cultural inheritance is also the main embodiment of the value of language transmission. English teaching in colleges and universities is not only to help students learn basic knowledge, but also to help students establish cultural awareness and form the concept of multiculturalism. The collision of Chinese and Western cultures can also help students think deeply about how different languages should be flexibly applied in different contexts, and promote students to independently summarize the personalized differences of each language in different cultural contexts.

2.2 Optimize the curriculum of colleges and universities and enrich the content of English teaching

Under the perspective of multiculturalism, English teaching in colleges and universities should further optimize the curriculum and improve the teaching content. Multiculturalism is an opportunity for the development of English curriculum reform system in colleges and universities. Whether it is for English majors or general English courses, cultural awareness cultivation should be integrated into the teaching of listening, speaking, reading and writing [2]. Various colleges and universities should set up English literacy elective courses for all students, such as appreciation of English and American literature, comparison of Chinese and Western cultures, cross-cultural communication, etc., to enhance students' cultural comprehension and humanistic literacy, based on the actual teaching situation.

At the level of enriching teaching content, apart from textbook resources, a large number of English teaching resources can also be found in daily life, such as English songs, movie and television works, British and American literature, celebrity speeches, sports competitions and so on. These are also English learning resources that students are interested in and can be used by teachers for teaching. In the process of teaching, teachers should not only utilize diversified teaching resources to enrich the content of classroom teaching, but also guide students to reasonably screen and identify learning resources. Integrate the cultivation of students' intercultural communication skills and cultural awareness into the goals of English teaching.

Language and culture are inextricably linked, and the lack of cultural teaching will affect students' learning and cognition of English. Therefore, in the process of teaching, teachers should deeply explore the cultural materials in the teaching materials. For example, they can design learning tasks through direct explanation, situational dialogues and cooperative exploration to guide students to deeply experience English culture.

For example, teachers can incorporate the history and cultural background of English into English teaching. After that, students are guided to read the original English books, so that they can have a deeper understanding of the background of the development of British and American culture and strengthen their learning ability. So that students in the process of multicultural collision always firmly love the Chi-

nese traditional culture.

2.3 Innovative Curriculum Evaluation Mechanism and Sound English Teaching System in Colleges and Universities

The goal of English teaching in the context of multiculturalism is to avoid students' blind pursuit of culture, to enhance students' ability to identify culture, and to selectively absorb Western culture. On the basis of helping students to form the ability of cultural communication and the awareness of cultural tolerance, students' cultural awareness is enhanced [3]. Therefore, in English teaching in colleges and universities, teachers should also innovate the evaluation mechanism of the curriculum, and improve students' cultural understanding ability by optimizing the evaluation indexes and evaluation modes. In the traditional evaluation of English in colleges and universities, it is usually based on the final examination results. However, under the multicultural perspective, teachers should integrate cultural evaluation indicators into the evaluation process. Through the combination of process evaluation and summative evaluation, help students establish the concept of cultural equality.

In the process evaluation, teachers should focus on judging students' cultural learning attitudes, judging whether students fully understand the characteristics of other regional cultures; whether they are able to take the initiative to explore and compare cultural differences. Through a reasonable course evaluation mechanism, students' cultural self-awareness is strengthened. Avoiding the phenomenon of students' errors of total refinement in the learning process, students' cultural discernment and cultural criticism ability is enhanced.

Conclusion

The innovation of English teaching in colleges and universities under the perspective of multiculturalism should be based on the diversified teaching mode, and the teaching concept should be changed on the basis of enriching English teaching resources. Based on the multicultural background, cultivate students' cross-cultural communication ability and cultural awareness, and further improve students' English communication ability. Therefore, English teaching in colleges and universities should always permeate the concept of multiculturalism, strengthen the ideological leadership of students, cultivate students' cross-cultural communication skills, and realize the reform and innovation of English education and teaching in colleges and universities.

References

[1] Zang Qing A Study on the Impact of Multicultural Blending in the Information Age on College English Teaching [J] Food Research and Development, 2021,42 (24): 242.

[2] Dong Yan A Study on the Impact of Multicultural Blending on Contemporary English Teaching in Universities [J] Food Research and Development, 2020,41 (20): 249-250.

[3] Hu Jiaying, Wang Dan Practice of English Education and Teaching in Universities from a Multicultural Perspective [J] Food Research and Development, 2020,41 (16): 231.

“Children + Intellectual Creation” Information Technology Interdisciplinary Course Design Based on Innovation and Talent Training

Jia Zhang

Lijia Experimental Primary School in Chongqing Liangjiang New District, Chongqing, 401120, China.

Abstract: Childhood is a golden period for the development of students’ innovative qualities. It can solve the shortcomings in the cultivation of innovative talents in China and change the dilemma of the shortage of high-level innovators in the long term on cultivating a sense of innovation, innovative spirit, and a foundation for the development of innovative ability. This paper is based on the cultivation of innovative preparatory talents, with the overall development target of student kindergartens and elementary schools for nine years, and the design of the information technology interdisciplinary course “children + intellectual creation” as a breakthrough. From the three dimensions of innovation awareness, innovative spirit, and innovation ability, this paper designs the “children + intellectual creation” course goals, course structure and content, classroom evaluation, etc., and sorts out strong teachers to form the foundation of “children + intellectual creation”; Promote collaboration and develop the “children + intellectual creation” wing; Promote collaboration and show the “children + intellectual creation”; The four implementation strategies, such as “children + intellectual creation”, are expected to enlighten the interdisciplinary course design of information technology based on the cultivation of innovative preparatory talents.

Keywords: Innovative talents; Course system; Children + intellectual creation; Kindergarten; Elementary school

1.Introduction

National leader emphasized in the report of the 20th National Congress of the Party that it is necessary to insist that science and technology are the primary productive force, talent is the first resource, and innovation is the first driving force. Childhood is a golden period for the development of students’ innovative qualities. It can solve the shortcomings in the cultivation of innovative talents in China and change the dilemma of the shortage of high-level innovative talents in the long term on cultivating a sense of innovation, innovative spirit, and a foundation for the development of innovative ability. Through the construction and implementation of a “children + intellectual creation” course system based on the cultivation of innovative preparatory talents, it will greatly enhance students’ ability to implement projects, cooperate and communicate, and critically and creatively, thus laying a solid foundation for the cultivation of innovative talents.

2.Concept definition

2.1 Innovative candidates

Innovative talents refer to talents who have a sense of innovation, innovative spirit, ability to innovate, and can achieve innovative results. Talents ready to innovate refer to children and young people who initially have a sense of innovation, innovative spirit, and ability to innovate at the basic education stage. The goal of cultivating innovative talents is to cultivate students’ sense of innovation, innovative spirit and ability to innovate through methods and methods that meet the characteristics of education development in the new era and students’ cognitive rules, and lay the foundation for them to become innovative talents who can actively innovate, solve problems, and promote social progress.

2.2 “Children + intellectual creation” course based on innovation to prepare talents

The “Children + intellectual creation” course, which is based on the cultivation of innovative and prepared talents, is a child-centered, interdisciplinary theme integrated course conducted in “kindergarten+elementary school”. The “Children + intellectual creation” course system combines the characteristics of children’s cognitive development with the development needs of the new era. Through a real learning

environment and activities, children's interest and creativity are stimulated, students' ability to solve unknown and complex problems is cultivated, and students' potential and creativity in innovative fields is demonstrated.

3.Construction of a "Children + intellectual creation" Course Based on Innovation and Preparation of Talents

3.1 "Children + intellectual creation" course goals

The goal of the "Children + intellectual creation" course, which is based on the cultivation of innovative talents, is to cultivate children with an initial sense of innovation, innovative spirit, and ability to innovate at an "early age". The course goals are divided into three levels: sense of innovation, spirit of innovation, and ability to innovate. First, innovation awareness refers to the ability to observe, discover, understand, and grasp the value of new ideas, new technologies, new products, etc. Its Level 2 dimensions are divided into innovation observation, innovation discovery, and innovation understanding. Second, the spirit of innovation refers to the courage, will, and ideals to innovate expressed in the process of implementing the ability to innovate. Its Level 2 dimensions are divided into the courage to innovate, the will to innovate, and the ideal to innovate. Third, the ability to innovate refers to the ability to transform a sense of innovation into innovative practice. Its Level 2 dimensions are divided into practical innovation, cooperative communication, critical thinking, and problem solving. The goals fully take into account the learning needs, ability levels and interests of students in each academic segment. The goals are specific, measurable, and achievable, and are interrelated and supported by the entire course system.

Table 1: "Children + intellectual creation" Course Goals Based on Fostering Innovative Talents

Level 1 dimension	Level 2 dimensions	Overall description
Sense of innovation	Innovation observation	Awareness of innovation refers to the ability to observe, discover, understand, and grasp the innovative value of new ideas, new technologies, new products, etc.
	Innovative discoveries	
	Innovative understanding	
Innovative spirit	Courage to innovate	The spirit of innovation refers to the innovative courage, will, and ideals expressed in the process of implementing innovative abilities.
	The will to innovate	
	Innovative ideals	
Ability to innovate	Practical Innovation	The ability to innovate refers to the ability to transform a sense of innovation into innovative practice.
	Cooperative communication	
	critical thinking	
	Problem Solving	

Based on the overall goal of the "Children + intellectual creation" course to train innovative talents, the author sets goals and implementation suggestions according to kindergartens, lower elementary schools, middle elementary schools, and upper elementary schools. Each academic level is divided into three levels: sense of innovation, spirit of innovation, and ability to innovate. The "sense of innovation" in the kindergarten class sorts out target rules and implementation suggestions from the three perspectives of "innovation observation," "innovation discovery," and "innovation understanding." For example, in the "Innovative Observation" section, the goal rule is to cultivate young children's sensitivity to the surrounding environment and be able to observe and describe novel things in the environment; the implementation proposal is to organize observation activities to guide young children to observe changes and innovations in the natural world, places of life, daily activities, etc. The "innovative spirit" of kindergartens sorts out target rules and implementation suggestions from the three perspectives of courage to innovate, will to innovate, and ideals to innovate. For example, the "Will to Innovate" goal rules are to cultivate young children to relentlessly pursue innovation and cultivate their perseverance and determination to overcome difficulties; the implementation proposal is to design challenging activities with a certain level of difficulty, encourage young children to persevere in solving problems, and stimulate their enduring interest and investment in innovation. Kindergartens' "ability to innovate" sorts out goals, rules, and implementation suggestions from the four perspectives of practical innovation, cooperative communication, critical thinking, and problem solving. The goal rules of "problem solving" are to cultivate young children's ability to analyze problems and find solutions, and encourage them to propose innovative solutions when faced with problems; the implementation proposal is to organize exploratory games and activities to encourage young chil-

dren to find various ways and methods to solve problems, and guide them to experiment and reflect.

At the lower level of elementary school, that is, in the first and second grade, according to the overall goal of the "Children + intellectual creation" course, which is based on the training of innovative preparatory talents, the goals have been raised on the basis of the specific goals and implementation recommendations of kindergartens. The goal rules for the lower elementary school level, such as the "Innovative Observation" section of "Innovation Awareness," are to cultivate students' ability to carefully observe and keenly perceive the surrounding environment and things; the implementation proposal is to guide students to be able to observe, describe, and record surrounding things and phenomena, discover fresh and interesting points in them, and express their own observations. The goal rules of the "will to innovate" section of elementary schools, such as the "innovative spirit," are to cultivate students' will and perseverance to explore and pursue innovation; the implementation proposal is to help students maintain a positive attitude in the face of difficulties and challenges during the teaching implementation process, persist in experimentation and exploration, be brave in accepting failure, and learn and grow from it. For example, the goal rules of the "problem solving" section of "innovation ability" are to cultivate students' ability to analyze problems and find solutions, and encourage them to propose innovative solutions when faced with problems; the implementation proposal is to organize exploratory games and activities to create an environment where students can analyze the causes and key points of problems, propose various solutions, and be able to evaluate and select the best solutions for implementation. In the next middle and upper grades of elementary school, suggestions suitable for the implementation of each academic level are also put forward in accordance with progressive and detailed requirements.

3.2 "Children + intellectual creation" Course Structure and Content

Under the guidance of the overall goal of the "Children + intellectual creation" course, which is based on the cultivation of innovative and prepared talents, the structure and content of the "Children + intellectual creation" course is designed. The course is divided into school segments. The number of lessons for each topic in kindergarten is 1 lesson; the number of lessons for each topic in the first and second grade of elementary school is 2 lessons; the number of lessons for each topic in the third and fourth grade of elementary school is 3 lessons; and the number of lessons for each topic in the fifth and sixth grade of elementary school is 4 lessons. The content is based on the goals and implementation suggestions for the primary school and kindergarten segments of the "Children + intellectual creation" course based on innovation and preparation of talents, and design the specific content of the corresponding school segments. For example, the kindergarten section design is shown in Table 2.

Table 2: Kindergarten class structure and content of the "Children + intellectual creation" course based on innovation and talent training

School class	Semester	Themes	Equipment and software	interdisciplinary
Kindergarten small class	Semester 1	Intelligent interaction for me	smart speaker	Information technology, language, society
Kindergarten small class	Semester 2	I'll fill in the digital painting	Banbantong, digital coloring software	Information technology, art
Kindergarten middle class	Semester 1	I'll play somatosensory games	Banbantong, somatosensory game console	Information technology, health
Kindergarten middle class	Semester 2	Plant friends, I'll check	Mobile phone or tablet, plant recognition app or applet	Information technology, science
Kindergarten Master Class	Semester 1	I'll measure the classroom items	Mobile phone or tablet, rangefinder app or applet	Information technology, science
Kindergarten Master Class	Semester 2	I'll use the intelligent control	Smart speakers, smart bulbs, smart switches	Information technology, language, society

In the elementary school level, the "Children + intellectual creation" course for cultivating innovative talents is also designed with different topics according to the upper middle school levels. In the first and second grade of elementary school, according to the goals and implementation suggestions, I will recognize the four themes of Intelligent Literacy (first semester of the first year), AI painting, I will draw (second semester of the first year), AI Flying Flower Order (first semester of the first year), and I will draw three-dimensional graphics (first semester of the first year). Each topic was completed in two lessons. In the 3rd and 4th grade of elementary school, according to the goals

and implementation suggestions for the 3rd and 4th grade, Design Me is a 3D Little Tour Guide (3rd grade) and turning waste into treasure (4th grade). Each topic was completed in three lessons. In the 5th and 6th grade of elementary school, according to the goals and implementation suggestions for the 5th and 6th grade, I will study the design study theme (5th grade) and create a text that can be generated (6th grade). Each topic was completed in four lessons.

3.3 "Children + intellectual creation" Classroom Evaluation

The "Children + intellectual creation" classroom evaluations are all based on the design of student self-assessments and teacher self-evaluation forms based on the development dimensions of innovative and preparatory talents. Student self-assessment takes the form of student responses, student practice, student participation, and student effectiveness. Teacher self-assessment is implemented in the form of teacher organization, teacher guidance, teacher questions, and teacher reviews.

4.Implementation Strategy for the "Children + intellectual creation" Course Based on Students' Innovative Development

4.1 Strong teachers form the foundation of "children + intellectual creation"

In order to ensure the effective implementation of the "Children + intellectual creation" course based on innovation and talent preparation, it is necessary to strengthen teaching staff building and enhance teachers' "children + intellectual creation" teaching level and ability. The first is to strengthen teacher training, that is, organize "Children + intellectual creation" training courses for teachers on a regular basis, including training in course design, teaching methods, and evaluation methods to help teachers understand the latest educational concepts and teaching methods. The second is to establish a teacher exchange mechanism. In particular, to encourage exchanges and cooperation between kindergarten and lower elementary school teachers, share teaching experience and teaching resources, and jointly promote the improvement of teaching quality.

4.2 Diligent optimization solidifies the core of "children + intellectual creation"

The "Children + intellectual creation" course needs to be continuously optimized in practice to meet students' age, interests, and ability characteristics to improve the quality and effectiveness of teaching. First, it is necessary to improve the course content, gradually improve the course content according to the age and stage of development of the students, and focus on cultivating students' ability to innovate and practice. Course content should be adjusted and improved in a timely manner based on students' feedback. Second, it is necessary to innovate teaching methods and adopt a variety of teaching methods, such as group cooperation, project-based learning, etc., to stimulate students' innovative potential. Emphasis is placed on developing students' independent learning and teamwork skills. Third, it is necessary to diversify evaluation methods and establish scientific evaluation methods based on student and teacher self-evaluation forms, such as platform-based developmental evaluation of students and evaluation of students' learning achievements in units of academic years.

4.3 Promote collaborative exhibition of the "Children + intellectual creation" wing

The design and implementation of the "Children + intellectual creation" course requires collaboration with platforms, fields, and parents to expand course outreach and enhance the effectiveness of course implementation. The first is to promote cooperation with various contests and other platforms, so as to promote practice and practice to make students' learning more valuable. The second is to promote links between school function rooms, reading rooms, campus culture, and actual campus scenarios and courses, so that classrooms can truly solve real-world problems in schools. The third is to promote home-school cooperation based on innovation to prepare talents. It is possible to establish home-school cooperation projects and carry out meaningful practical activities with parents, such as science and technology innovation competitions, social practice, etc., so that students can exercise their ability to innovate in practice. It also provides parents with an opportunity to understand their children's learning situation.

5.Conclusion

A country is founded on talent, government thrives on talent, and industry is strong. To achieve the “Chinese Dream,” it is necessary to cultivate and develop innovative talents with an innovative spirit, sense of innovation, and ability to innovate. We have to see that currently there is still too little attention being paid to cultivating innovative talents at an early age, and that we still need to get more close and support from schools, families, and society. This paper is based on the “Children + intellectual creation” information technology interdisciplinary course design for the training of innovative talents. It is hoped to provide further research inspiration for teachers to train innovative talents in young age groups. It is hoped to provide further research inspiration for teachers to train innovative talents based on information technology disciplines.

References

[1] Qian Zhi, Wu Yebai, Song Qing, Zhu Yong. Problems and countermeasures in early training of top innovative talents in Shanghai [J]. Scientific development, 2022 (02): 15-22.

[2] Chen Peng, Dai Jianjun, Hu Rendong. 15-year consistent system for cultivating innovative talents: Course planning [J]. Chinese Journal of Education, 2014 (08): 12-17.

[3] Ye Zhihong. Basic understanding of early cultivation of top innovative talents [J]. Educational Research, 2007 (06): 36-42.

[4] Wang Yigao. A Preliminary Study on Innovative Talent Theory [J]. Comparative Education Research, 2000 (01): 6-10.

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A Study on the Causes of Attention Lapses in College Students' Online Learning

——Qualitative Analysis based on Grounded Theory

Yuqing Yang, Yichun Zhang*

College of Education Science, Nanjing Normal University, Nanjing 210097, China.

Abstract: The development of digital technology provides the conditions for college students' online learning, and the attention lapses has become one of the core factors affecting the effect of online learning activities. Through qualitative interviews, it is found that college students are negatively affected by internal and external factors in online learning. The paper finds out the shortcomings of current online teaching, and puts forward corresponding suggestions for promoting the online and offline blended teaching mode in this digital age.

Keywords: Online Learning; attention lapses; Grounded Theory; Qualitative Analysis

1. Introduction

Nowadays, online learning has gradually become one of the mainstream learning methods. A common problem in college students' online learning is the attention lapses. It refers to the behavior of college students in the process of mobile learning, which is interfered by factors unrelated to learning or due to their own reasons, causing them to shift their attention to other things and stop their learning[1]. Studies have proved that attention lapses is an important factor affecting the quality and effect of students' mobile learning .

2. Literature Review

2.1 Definition of Attention

"Attention" is a psychological concept, part of the cognitive process. According to the definition of psychology, "Attention is the orientation and concentration of mental activity or consciousness to a certain object.". Directivity and concentration are two characteristics of attention. The types of attention include selective attention, persistent attention and distributive attention. The persistence of attention is also called the stability of attention, which is an important indicator to measure the quality of a person's attention.

2.2 Study on the theory and law of attention

The famous Yerkes-Dodson Law finds that attention and stimulus levels show an inverted U-shaped curve. Many studies focus on the use of attention theory in classroom teaching. From the perspective of research, it involves multiple teaching stages such as primary school, junior high school, senior high school, vocational school and university in the vertical direction, and involves multiple subject categories in the horizontal direction.

2.3 Study on learners' attention

Researchers have studied the characteristics and influencing factors of learners' attention. Seitlinger et al. found that learners' learning engagement is closely related to their attention in classroom learning [2]. Bolkan et al. believe that learners' learning motivation directly affects the degree of attention [3]. Hagenauer et al. found that teachers' positive emotions and good interaction between teachers and students can promote students' concentration[4]. Besides, researchers Karst and others believe that there is a significant correlation between classroom size, classroom atmosphere and learners' classroom attention[5]. Allison et al. found that teaching time is an important factor affecting students' classroom attention[6].

2.4 Study on causes and intervention of attention lapses

Domestic and foreign scholars investigate the factors of students' attention distraction, mainly considering two factors: one is endogenous factors, including the characteristics of adolescent attention development, learning goals, learning states, interests and hobbies[7]; The other is exogenous factors, including subject characteristics, learning environment, teacher factors and family environment.The intervention research on attention loss mainly focuses on the teachers, modern teaching equipment and students.

3. Research design and process

3.1 Research methods and tools

In this paper, qualitative research methods are adopted to conduct in-depth interviews with college students in natural situations to collect the respondents' real experiences and feelings in online learning. Based on the basic principles of grounded theory, NVivo11, a qualitative analysis tool, was used to conduct open encoding, axial encoding and core encoding of the original interview data.

3.2 Research objects and samples

This study takes college students as the research object, and the selection process of the interviewees strictly follows two criteria: the interviewees must have online learning experience, and have the problem of attention lapses in online learning. When reaching the state of "theoretical saturation" of qualitative research, the number of research samples was 13 (see Table 1).

Table 1. Demographic information of respondents (n=13 in formal interview)

Basic Information	Options	Number of People	Basic Information	Options	Number of People
Gender	Male	3	Grade	Grade 1 master	12
	Female	10		Grade 2 master	1
Major	Liberal arts major	4	Age	20~25 years old	11
	Science major	9		26~30 years old	2

3.3 Research process

The qualitative research includes three types: teacher-student interview, peer interview and focus group interview. Then, based on the Grounded Theory, the original materials were encoded at three levels. The main process steps are as follows:

3.3.1 Interview

The method of semi-structured interview was used. The interview activities mainly adopt the form of face-to-face interview. The interview outline was designed to focus on three questions: "Have you ever experienced a loss of focus during online learning?" Give an example of your own inattention." "What is the cause of your loss of focus while studying online?" "What other factors do you think might affect your concentration while studying online? "

Under the guidance of the interview outline, conduct in-depth communication with the interviewed college students. On the one hand, respondents were asked to recall and describe in detail the learning experience about the loss of attention in online learning; On the other hand, in the interview process, according to the answers of the interviewees, appropriate guidance and follow-up on relevant questions are carried out. The whole interview process was recorded to ensure the accuracy and completeness of the interview data, which was convenient for later sorting.

3.3.2 Coding

After the interview, the interview documents were sorted out and the recordings were transcribed into words. Then the interview data were imported into the "internal materials" of NVivo11 software, and the original text data was encoded at three levels.

First, Open Coding is carried out. The original data are decomposed, and the similar phenomena in the text are given a localized name according to the definition, that is, the interview text is classified semantically. The author continued to decompose, compare, conceptualize and categorize the interview text until all the text coding was completed.

Next comes the Axial Coding. Since nodes formed by open coding are often isolated from each other, it is necessary to associate classes. This stage is mainly to establish the interrelation between concepts and concepts and between concepts and categories, encode the main axis category to grasp the cause and vein of the development of events.

Finally, Core Coding is performed to discover and clarify core categories. Core categories occupy a central position in all categories and are relatively stable phenomena that frequently appear in data. By means of exploration and coding, a general node is further established to ensure that the category of the core node is easily related to other categories.

3.3.3 Coding reliability test

The coding reliability test in this study is mainly conducted in two ways. Firstly, the "Coding Consistency Percentage" was used to measure the degree of coding consistency of the original materials. In addition, the "Coding Comparison" function of NVivo was used to compare the text materials encoded independently by the two researchers, and the result showed that the coding consistency percentage was between 83.71% and 98.81%. After the coding, we contacted the interviewees again, and 10 interviewees agreed to judge the coverage of their own experiences and situations by coding, and all of them said that the coding results reflected their real situations and feelings.

4. Results and analysis

4.1 Frequency analysis

The word frequency analysis program is compiled using Python7.0, the jieba thesaurus is used for word segmentation, and all entries are read one by one, only the contents closely related to the research topic are reserved. Words that are closely related to the topic but not recognized by the jieba word segmentation program are added to the user thesaurus. In the end, 101 related words were separated. The high-frequency words reveal the relevant words that respondents repeatedly mentioned, including teachers (417), courses (168), environment (56), mobile phone (113), etc.

4.2 Coding analysis

This study follows the principle of "local concepts", which are integrated into 21 free nodes. In the secondary spindle coding, we

Table 2. Three-level coding and Node distribution of "college students' attention lapses in Online Learning" (Part)

Core Coding	Axial Coding	Open Coding	Reference Nodes
Teachers' Teaching Style and Teaching Form	Teaching Style	Teachers operate concisely.	8
		Teachers combine their lectures with life and specific situations.	22
		The teacher is good at assigning class tasks.	15
		The teacher's teaching style is not dull.	17
		Teachers have divergent thinking.	9
	Teaching Form	Only with PPT.	34
		Dialogues and interaction.	23
Content Quality and Duration Setting of Course Resources	Content	The curriculum is too theoretical.	7
		The content of the course is not attractive.	17
	Duration	The course duration is too long.	28
	Quality	Whether the course is useful or not.	32
Class Environment	Other Classes	The previous class affects the next class.	6
	Online Functions and Requirements	Barrage has an impact on the class.	17
		Whether the class has cameras on.	25
	Emergencies	Urgent matters disturb the class.	8
	Physical Environment	Class environment: dormitory or laboratory.	18
	Peer Influence	Roommates' behavior affects individual focus.	5
Learners' Physiological Characteristics	Learning Status	Personal thinking is divergent.	20
		There is a golden age of concentration.	14
Time-space Separation between Teachers and Students	Teacher-student Emotional Connection	The relationship between teachers and students is weak.	5
	Teacher-student Action Interaction	The interaction behavior and movement habits of teachers and students are reduced.	22

examine the relationship between nodes, and establish the relationship between nodes, forming 5 meaning classes. In the three-level core coding, we systematically analyze the concepts formed by the main axis coding, and select the more dominant and explanatory core categories(see Table 2).

5. Discussion

Based on real interview materials, this study reveals the essence and the underlying reasons of college students' attention lapses in online learning. It is found that the combined effects of five internal and external factors affect the concentration and dispersion of college students' attention in online learning, and the reason model is shown in Figure 1.

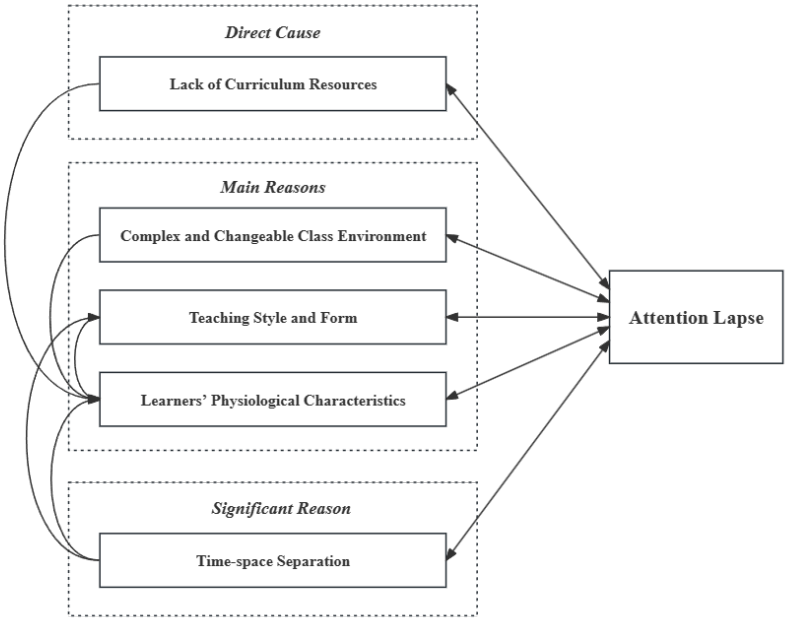

Figure1. Cause model of "college students' attention lapses in online learning"

5.1 Lack of curriculum resources is the direct cause

From the original interview text and coding results, we find that if the content quality of online learning resources is not high and the course duration is not reasonable, it will directly affect the learning interest, learning continuity and learning enthusiasm of college students in online learning. The deficiency of resource content is not only reflected in knowledge content, but also in the media and content structure of resource presentation.

5.2 Dull teaching style, complex and changeable class environment and insurmountable physiological characteristics are the main reason

Teachers who only teach PPTs, do not engage in interaction, and do not link the teaching content to specific situations and real-life situations can dampen learners' learning enthusiasm. The changing physical learning environment is also the core factor that easily causes learners to lose focus in online learning. The insuperable physiological characteristic is the internal reason that makes it difficult for college students to focus their attention in online learning.

5.3 The time-space separation between teachers and students is a significant reason

The weakening of the connection between teachers and students leads to the decrease of learners' concentration. In the application of online platforms, the interaction between teachers and students is mostly in the barrage and comment area on the application platform, resulting in asynchronous interaction. The asynchronous communication between teachers and students cannot better promote the discussion

between teachers and students, resulting in students unable to get timely help when they encounter problems.

6. Revelation and Conclusion

The above conclusions have important implications for the improvement of college students' online learning attention, as well as the intervention and optimization of online learning effects.

First, optimize the design and development of online learning resources. One is to strengthen the internal logic design of online learning resources. The second is to strengthen the interactive and interesting design of online learning resources, such as embedded prompts, embedded questions and answers or other forms of interesting interactive forms. The third is to strengthen the structured design of knowledge and appropriate media design, such as presenting knowledge points in structured form, minimizing the multimedia elements unrelated to the course content, etc. Fourth, the resource design should be as short and concise as possible to facilitate learners' understanding and memory[8].

Second, teachers should enhance digital teaching ability to promote learners' deep learning. Online teachers need to design moderately challenging learning tasks and use process evaluation to guide students to participate in the whole process[9]. In addition, to explore the task type, project type, group learning mode, give full play to students' subjectivity; Through mutual evaluation, students can think deeply, and help students construct meaning through continuous communication and reflection, so as to realize the establishment of self-efficacy and accomplishment in online learning.

Third, strengthen teachers' guidance and support for college students' online learning. The first is to strengthen teachers' support for learners' online learning activities, such as setting up some task-driven and learning evaluation links in online learning. The second is to provide learners with online learning paths and teacher support to promote learners' learning transfer, such as providing high-quality online learning platforms and resources, giving some learning guidance and learning strategies; The third is to cultivate a learning community and guide college students to form learning groups that cooperate and supervise each other, such as online learning groups formed through various learning platforms and educational apps[10].

7. Reflections of researchers

In this study, the original text was obtained through purpose sampling and in-depth interview. Although the samples reached the "theoretical saturation" of qualitative research, such saturation is only an ideal state, because the number of interviewees and source constraints cannot guarantee complete saturation of nodes.

In addition, the research object is the whole college students, and the classification sampling of the interviewed college students needs to be further refined and improved. Future studies will further refine the sampling classification of college students, increase the number of respondents, and conduct more in-depth empirical researches on the problem of out-of-focus attention in college students' online learning.

References

[1] Stewart A , Bosch N , Chen H ,et al.Face Forward: Detecting Mind Wandering from Video During Narrative Film Comprehension[C]//International Conference on Artificial Intelligence in Education.2017.

[2] Õnne Uus,Paul Christian Seitlinger,Timo Tobias Ley. Cognitive capacity in self-directed learning: Evidence of middle school students' executive attention to resist distraction[J]. Acta Psychologica,2020,209.

[3] Bolkan S ,Griffin J D . Catch and hold: instructional interventions and their differential impact on student interest, attention, and autonomous motivation[J]. Communication Education,2018,67(3).

[4] Gerda H ,E S V . "I don't hide my feelings, even though I try to": insight into teacher educator emotion display.[J]. Australian educational researcher,2014,41(3).

[5] Karst K ,Bonefeld M . Judgment accuracy of preservice teachers regarding student performance: The influence of attention allocation[J]. Teaching and Teacher Education,2020,94(C).

[6] Roda A . 'More [Time] is better or less is more?' Neoliberal influences on teaching and learning time[J]. Journal of Education Policy,2016,32(3).

[7] Unsworth N , Robison M K , Miller A L .Individual Differences in Lapses of Attention: A Latent Variable Analysis[J].Journal of

Experimental Psychology General, 2020.DOI:10.1037/xge0000998.

[8] Crisp E , Hardman P .Optimizing feedback for learner motivation and mastery: Design standards and the role of technology[J]. New Directions for Teaching and Learning, 2023, 2023(173):55-65.

[9] Knezek G , Christensen R , Smits A ,et al.Strategies for developing digital competencies in teachers: Towards a multidimensional Synthesis of Qualitative Data (SQD) survey instrument[J].Computers & education, 2023.

[10]Erdogmus C , Akir R , Korkmaz Z .Students' Knowledge Sharing Behaviours and Sense of Online Learning Community in Online Learning Environments.[J].Participatory Educational Research, 2022, 9.

First author:

Yuqing Yang(1999 -), female, born in Nanjing, Jiangsu Province, postgraduate student of School of Education Science, Nanjing Normal University, research direction is information technology and educational application;E-mail:2353978128@qq.com

Corresponding author:

Yichun Zhang(1970 -), male, born in Nanjing, Jiangsu Province, professor and doctoral supervisor of Nanjing Normal University, research direction is information technology and educational application,E-mail:24513584@qq.com

Blended Education: Integrating Online and Traditional Teaching

Xinyue Fan

Communication University of China, Nanjing CUCN, Nanjing Jiangsu, 210000. China

Abstract: With the rapid development of technology, blended education, as an educational model integrating online learning and traditional teaching, has gradually garnered widespread attention. This paper explores the definition, development background, and the impact of blended education on teaching methods and learning outcomes. The paper also addresses the challenges of blended education in teacher professional development and educational institution management, providing some solutions to ensure educators can fully harness the potential of blended education.Finally, the paper summarizes the development trends of blended education, emphasizing its significance in future education. Blended education is not only an innovation in teaching methods but also a reflection of the continuous evolution of the education system, providing students with a more enriching, flexible, and personalized learning experience.

Key words: Blended education, online learning, teaching method innovation, learning experience.

1. Background introduction

1.1 Overview of Traditional Education Model

The traditional education model, typically grounded in conventional classroom teaching and standardized education, has long been in existence and widely employed in education systems around the world. While there are variations in this model to some extent across different countries and cultures, it fundamentally shares some common traits.

The traditional education model, to some extent, relies on limited educational resources, including teachers, classrooms, and instructional materials. When resources are inadequate or unevenly distributed, certain students may be unable to access high-quality education. It emphasizes standardized educational content and assessment methods, with students often receiving the same materials and lesson plans. Evaluation methods tend to focus on memorization and standardized testing, leading students to pursue grades rather than genuine learning experiences. Learning at the same pace, with the same content and teaching methods without considering individual differences, may result in some students falling behind while others find the learning experience unengaging.

The traditional education model, able to persist over the long term, undoubtedly has its rationale as it provides students with a stable and orderly educational environment in certain aspects. However, it also comes with significant limitations. Consequently, an increasing number of educators and researchers are beginning to explore innovative educational approaches, such as blended learning.

1.2 The Rise of Blended Learning

When the traditional education model is no longer suitable for the evolving needs of students and technological advancements, emerging education models like blended learning have come to the forefront, becoming a focal point in contemporary education. Their rise signifies innovation and progress in the field of education. These innovative educational models aim to provide more flexible, diverse, and personalized learning experiences to meet the varied needs and potentials of different students.

Certainly, this is also inseparable from technological advancements. The transformation in the field of education, coupled with the rapid development of technology, has provided students and educators with unprecedented opportunities and resources.

2. Blended learning, integrating online and traditional teaching.

2.1 Definition and Characteristics of Blended Learning

Blended learning, also referred to as “hybrid learning” or “blended classrooms”, represents a revolutionary transformation in the field

of education today.

Blended learning combines traditional face-to-face instruction with online learning to provide a more diversified learning approach. Traditional face-to-face teaching typically takes place in physical classrooms, where teachers directly impart knowledge. On the other hand, online learning utilizes internet technology to deliver educational resources, allowing students to access knowledge in a virtual learning environment. Blended learning integrates these two methods to create a more diverse educational experience[1].

Obtaining real-time feedback and assessment is one of the core features of blended learning. Online learning platforms typically offer opportunities such as quizzes, assignments, and online discussions, allowing teachers and students to promptly assess learning progress. This real-time feedback is crucial for students' academic performance, helping them understand their strengths and weaknesses and enabling timely adjustments and improvements.

Flexibility and interactivity are equally notable characteristics. Blended learning allows students to more flexibly arrange their study time and location. Teachers also benefit from the flexibility of blended learning, as they can use online tools and resources to expand course content, providing more learning resources and opportunities. The online interaction between teachers and students breaks geographical constraints, enabling students to collaborate with classmates from around the world, share diverse cultures and perspectives.

Blended learning can also assist teachers in gaining a better understanding of each student's learning progress and needs through data analysis and personalized recommendations. Teachers can adjust instructional content and methods based on students' performance and feedback to ensure that each student achieves optimal learning outcomes. This fine-tuned personalized learning has the potential to enhance students' academic achievements, reduce learning gaps, and meet the diverse needs of individual students.

These characteristics make blended learning an ideal choice to meet the demands of modern education. Blended learning not only provides a more flexible and personalized learning experience but also contributes to improving students' academic achievements and critical thinking skills. It also offers teachers additional tools and resources to support their teaching. In the future, the application of blended learning is expected to continue expanding, shaping the direction of educational development. This approach brings more innovation and transformation to the field of education, addressing the evolving learning needs and providing students with a richer and more effective learning experience.

2.2 Different Models of Blended Learning

Blended learning, as an innovative educational model, encompasses various models and variations to cater to the diverse needs of different schools, educational institutions, and students. In this section, we will explore the different models of blended learning to better understand its diversity and applications.

Flipped Classroom Model[1] is a common approach in blended learning, disrupting the traditional sequence of teaching. In this model, students no longer passively receive knowledge in the classroom. Instead, they acquire foundational knowledge and learning materials before class through online materials, videos, or other resources. During class time, teachers use the valuable face-to-face interaction for discussions, answering questions, and engaging in interactive activities. This model helps enhance student engagement and critical thinking skills, fostering deeper understanding and application of knowledge.

Blended Self-Paced Learning Model allows students to complete courses at their own pace and according to their learning needs. Course materials are typically provided online, emphasizing student autonomy and self-management skills. This model is suitable for students who require more flexibility and can tailor their learning to their study habits, but it also demands strong self-management and time-management skills.

The Rotation Model combines traditional classroom teaching with online learning, where students are divided into groups that rotate between traditional classrooms and online learning. This model provides students with the opportunity to learn in different environments while maintaining face-to-face interaction with teachers and classmates.

The Enriched Virtual Classroom Model integrates elements of both online learning and physical classrooms. Students access course content through online learning platforms and participate in online discussions, quizzes, and other interactive activities. This model combines

the convenience of online learning with the hands-on experience of physical classrooms, offering students a rich learning opportunity.

The Blended Practice Model combines theoretical learning with hands-on practice, making it suitable for vocational training and practical skill development. Students have the opportunity to simulate real-life scenarios in the classroom and then validate their learning through practical application.

The various models of blended learning offer multiple ways to integrate online and face-to-face learning. Educators and students can select the most suitable blended learning model according to specific circumstances to enhance learning outcomes and meet academic and career development needs. In-depth exploration and implementation of these models are likely to contribute to further innovations and improvements in the field of education.

2.3 Challenges and Solutions in Blended Learning

While blended learning is a noteworthy educational innovation that provides students with more flexible and personalized learning opportunities, like any educational model, it also faces its own set of challenges.

Firstly, it faces challenges related to technology and infrastructure. Blended learning relies on advanced technological infrastructure, and there is inconsistency in the technological facilities across different regions. This may result in varying degrees of technological gaps, making it challenging for some students and teachers to access the necessary technological tools and resources.

Governments and educational institutions can take measures such as providing subsidies or grant programs to help schools acquire necessary technological equipment. Schools can implement device-sharing programs, allowing students to borrow or share devices provided by the school to compensate for potential technological deficiencies at home.

Blended learning also emphasizes students' self-directed learning and self-management skills, but not all students possess these skills. Some students may feel lost without clear guidance, leading to a decline in learning effectiveness.

This requires educators to provide support and guidance to students at appropriate times, helping them plan their learning paths, effectively manage study time, set goals, and address learning challenges. Additionally, schools can offer self-directed learning courses and provide resources for self-directed learning, such as study strategy guides, time management tools, and online learning communities, to help students master and develop these critical skills.

In the blended learning mode, accurately assessing students' learning outcomes and obtaining meaningful feedback can be a challenge[4].

Traditional examination and assessment methods may no longer be applicable; educators need to develop new assessment approaches to comprehensively evaluate students' academic performance. Using learning management systems and analytics tools to track students' progress can be an effective method. Continuously monitoring and improving blended learning courses, making adjustments based on student and educator feedback, allows students to be aware of their learning progress at any time. It also enables teachers to follow up on data regarding students' learning needs, helping them better support students.

In summary, the challenges faced by blended learning are real, but they can be overcome through effective solutions. Educational institutions, governments, educators, and parents should actively address these challenges to ensure the successful implementation of blended learning. By providing technical support, training teachers, fostering students' self-directed learning abilities, developing new assessment methods, and enhancing privacy and security measures, blended learning will continue to play its role in better realizing students' potential, improving their academic achievements, nurturing their innovation and comprehensive abilities, and providing them with more opportunities.

3. Prospects for the Future

Blended learning will continue to play a significant role in the future, bringing new opportunities to education. Students will have the freedom to choose topics of interest, autonomously plan their learning processes, and develop skills in self-directed learning and problem-solving.

Blended learning will place a greater emphasis on cultivating practical skills and hands-on experiences. Students will have opportunities to engage in real projects, experiments, and practical applications to address real-world challenges. This will contribute to a more

globalized educational experience where students can access educational resources from around the world, gaining insights into different cultures and societies, thereby fostering a global perspective.

We hope to see more students benefiting from these innovative educational models, achieving better academic outcomes and personal development. Additionally, we hope to witness increased support from educational institutions and governments for the development of these models. More research and evaluation are also desired to understand how these models operate, make timely adjustments in response to emerging situations, and ensure that every student has access to high-quality education.

References

[1] Hui Jin (2017). Theory and Practice of Online Learning. Tsinghua University Press.

[2] Picciano, A. G., & Dziuban, C. D. (2007). Blended learning: Research perspectives. Needham, MA: Sloan Consortium.

[3] S Hew, K. F, & Cheung, W. S. (2014). Students' and instructors' use of massive open online courses (MOOCs): Motivations and challenges. Educational Research Review.

[4] Yuanqiang Sun (2021). A Study on the Construction of a Model for Factors Influencing Online Self-directed Learning among Higher Vocational College Students from the Perspective of Blended Learning. Educational Information Technology.

A Study on the Practice Oriented Innovation and Entrepreneurship Education Model for College Students

Pingan Gao

Changsha Normal University, Changsha 410100, China.

Abstract: With the continuous development of China's education industry, the per capita level of education in China is constantly increasing, and the number of college students is increasing year by year, resulting in great social employment pressure and a severe employment situation. Many college students are facing the situation of unemployment upon graduation. In this social context, many college students have sprouted the development path of entrepreneurship, and many universities have also launched education courses related to entrepreneurship, which can provide many reference opinions for college students who want to start their own businesses. The only drawback is that most entrepreneurship education only stays at the theoretical level and lacks practical content, leading to the widespread situation of "talking on paper" in entrepreneurship education. Based on this, this article mainly explores the innovation and entrepreneurship education model for college students, focusing on the significance and specific educational content of innovation and entrepreneurship education for college students, analyzing the reform path of this education model, and finally reaching the conclusion that the innovation and entrepreneurship education model for college students needs to be practical oriented.

Keywords: practical education; College students; Innovation and Entrepreneurship Education

At present, China's higher education system has created a series of courses that focus on the employment problem of college students, such as innovation and entrepreneurship education models, career path development plans, school enterprise cooperation education models, etc. These education models are all carried out to enable college students to survive in society. The innovation and entrepreneurship education model encourages students to start their own businesses, helps students analyze the material and spiritual conditions they need to prepare for entrepreneurship, combines their professional analysis with market trends, and helps students understand the development direction and prospects of the industry in advance. Entrepreneurship education is different from other education models in that the risks and costs of entrepreneurship for college students are high, so the vast majority of universities do not have practical courses. Entrepreneurship education only stays at the level of theoretical education, which is a problem worth in-depth research for college students.

1.Analysis of Innovation and Entrepreneurship Education for College Students

Carrying out innovation and entrepreneurship education for college students is because they are the best group for entrepreneurship. Due to age, college students are the most active, hardworking, brave, and creative group in current society. They have not yet received the baptism of society, and their ideological and spiritual freedom is very free from secular constraints. These qualities are commendable in the current social context. Innovation and entrepreneurship education is a novel educational model that can effectively inspire the learning mindset of college students, cultivate their spiritual qualities of not being afraid of failure or difficulties, and equip them with the ability and literacy to start their own businesses. This is a rare life experience for college students, whether they succeed or not in entrepreneurship. From an objective perspective, the national education policy has also begun to encourage college students to engage in independent entrepreneurship. Due to the rapid development of social and economic forms, many traditional industries are no longer suitable for social needs, and many enterprises have completed information construction reform. The related industrial chains are constantly increasing, which are closely related to the daily lives of college students, such as the internet industry, operations, marketing, self media, and so on. From this perspective, college students have natural entrepreneurial advantages. In addition, they also have technological and ideological advantages, which are influenced by the internet industry. More and more students are applying for the internet industry, and many of them have mastered very professional skills and knowledge. At the same time, influenced by the internet, college students generally have thinking leaps, innovation and action abilities, making them very suitable for innovation and entrepreneurship education.

2.Innovation and Entrepreneurship Education Model for College Students

The innovation and entrepreneurship education model for college students can be carried out from three aspects: innovation education model, quality education model, and practical education model. The innovative education model refers to the fact that universities should not be limited to traditional university education systems, but should develop specialized education courses tailored to students' personal development and future trends, such as innovation and entrepreneurship education. Quality education focuses on cultivating students' comprehensive qualities and abilities, including their technical and personal qualities. Technical literacy mainly refers to the technical abilities required by students' entrepreneurial direction. Personal qualities include many aspects, such as college students' analytical ability in the industry, their ability to control the market economy, their ability to withstand pressure, and their ability to withstand setbacks. The practical education model is mainly designed to address the lack of practical education content in current innovation and entrepreneurship education in universities, mainly including internships, social research, entrepreneurship simulation, etc., aiming to enable students to integrate theoretical knowledge and inner thoughts, laying a solid foundation for their future entrepreneurship.

3.Reform Methods of Innovation and Entrepreneurship Education Model for College Students

3.1 Emphasis on knowledge integration and application courses

In the teaching of innovation and entrepreneurship, it is very important for teachers to impart the development and operation methods of enterprises to students. Students should not be allowed to explore independently, but should be helped to integrate and apply the knowledge of enterprise management they have learned, so as to avoid detours. Teachers can integrate various aspects of content to carry out innovation and entrepreneurship education, such as the power of alumni, school enterprise cooperation, business power, etc. Universities can increase students' understanding of entrepreneurship through lectures, school enterprise cooperation internships, and other methods. Universities can hire industry elites to give lectures on students' majors, impart experiences and lessons, and answer questions and doubts for students. Universities can also invite well-known entrepreneurs in the industry or business owners who have cooperative relationships with universities to carry out entrepreneurship mentoring courses at the university, where they share their experiences with students and advise them to have the courage to not be afraid of difficulties and the patience to not rush for success.

3.2Conduct simulated entrepreneurship practice

In order to increase students' practical opportunities, innovation and entrepreneurship education in universities needs to actively carry out simulated entrepreneurship practice activities, simulating the entrepreneurial process through business plan competitions, business case competitions, and other methods. The content of simulated entrepreneurial practice needs to be consistent with the future entrepreneurial process, ensuring the authenticity of entrepreneurship, and examining whether students have made sufficient preparations. In the simulated entrepreneurship practice competition, students need to understand the necessary conditions for enterprise operation, understand the business model and employment system of the enterprise, understand the impact of market economy changes on enterprise development, and calculate various expenses for enterprise operation. These factors are decisive factors for students to complete independent entrepreneurship. Universities and entrepreneurship education teachers should give full attention and attention.

3.3Establishing an Innovation and Entrepreneurship Education Association

Universities can also encourage students to independently establish entrepreneurial education clubs and unite their efforts to discuss entrepreneurial matters. Club learning has always been a part of the higher education system, where students can relax their mindset and actively participate in entrepreneurial discussions. At the same time, students can also make friends with classmates with similar entrepreneurial intentions in clubs, exchange experiences with each other, grow together, and progress together, which is very helpful for students' future development.

Conclusion

In summary, innovation and entrepreneurship education for college students should focus on combining theory with practice, and require the joint help of schools, society, the state, and enterprises to popularize innovation and entrepreneurship education knowledge for students, let them understand the forms of entrepreneurship, and help them make plans based on their own future development intentions. For schools, carrying out innovation and entrepreneurship education models needs to combine their own educational characteristics and carry out innovation and entrepreneurship education with professional characteristics based on students' majors. Universities also need to formulate educational policies and plans for innovation and entrepreneurship education, improve the evaluation system of innovation education, fully leverage the significance and value of innovation and entrepreneurship education, and lay a foundation for the future development of college students.

References

[1] Zhang Hongyuan. Research on the Innovation of Innovation and Entrepreneurship Education Models for College Students in the Context of the Internet [J]. Knowledge Library, 2023,39 (18): 183-186.

[2] Song Wei. Research and Exploration on the Practice Model of Innovation and Entrepreneurship Education for Vocational College Students [J]. Popular Literature and Art, 2023, (17): 150-152.

[3] Huang Xiaoying. Analysis of the Reform and Development Path of the Innovation and Entrepreneurship Education Model for College Students in the New Media Era - Review of "Research on the Development Model and Reform and Innovation of Innovation and Entrepreneurship Education for College Students" [J]. News Enthusiasts, 2023, (04): 115.

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Practice and Thinking of Reading Promotion in Higher Vocational College Library

Jia Lin

Shandong Vocational College of Communications, Jinan 261100, China.

Abstract: This paper mainly focuses on the practice of reading promotion and innovation in higher vocational college library. Firstly, the importance of reading promotion in higher vocational colleges is expounded. Then, this paper analyzes the problems existing in reading promotion in higher vocational college libraries, including insufficient reading resources, insufficient reading space and low student participation. Finally, this paper puts forward the innovative practice strategy of reading promotion in higher vocational colleges library, including enriching reading resources, improving reading space and planning diversified reading activities. These innovative practices will help higher vocational college libraries to better meet the reading needs of students and the society, and promote lifelong learning and knowledge inheritance.

Keywords: library of higher vocational college; reading promotion; innovation practice

Vocational college library plays a vital role in the modern education system, aiming to provide students and staff with support and resources for knowledge acquisition, academic research and lifelong learning. However, with the advent of the digital age, the way of information acquisition and learning mode are undergoing fundamental changes, which also makes the higher vocational college library face unprecedented challenges. In order to better adapt to this change and continue to play its educational function, the library reading promotion needs to innovate constantly to meet the needs of the new generation of students.

1. The importance of reading promotion in higher vocational college library

The library of higher vocational college is the warehouse of knowledge, and reading is one of the main ways to acquire knowledge. Through reading promotion, the library can promote knowledge inheritance and provide students with necessary academic support for students. Reading promotion helps to improve students' reading literacy, including reading comprehension, critical thinking and information literacy. These skills are critical to the students' academic and professional success. Reading promotion can guide students to explore the knowledge in different fields, broaden their horizons, cultivate interdisciplinary thinking ability, and contribute to a more comprehensive talent training. Vocational college students and teachers need academic research, which relies on extensive literature reading. Reading promotion in libraries can help them to better find and utilize academic resources. Reading promotion involves not only academic books, but also the understanding of industry trends, market trends, etc. This helps to help foster innovation and entrepreneurship and lay a solid foundation for future career development. Library reading promotion can cover literary, artistic and cultural fields, help students to appreciate and understand different cultural and artistic works, and enrich their humanistic qualities. Reading is not only a process of self-improvement, but also helps to cultivate students' sense of social responsibility and citizenship. By reading, they can better understand social problems and actively participate in social improvement.

2. The problems existing in reading promotion in higher vocational college libraries

Many students may not be motivated enough to go to the library, and they prefer to get information through the Internet, which leads to low participation in reading promotion. Some higher vocational college libraries may not be rich enough in reading resources and lack of attractive books and periodicals, which affects the effect of reading promotion. The reading space in the library may not be spacious, comfortable, or may not provide enough privacy and quiet, which will affect students' reading experience. Some libraries may lack effective planning and organization of reading promotion activities, causing these activities to attract students' interest. With the rise of digital reading, libraries need to balance the supply of resources for paper reading and digital reading to meet the needs of different readers. Some students may lack basic reading literacy, such as reading comprehension and information retrieval skills, which will require more training and support. Students

may be more attracted to social media and online entertainment platforms and ignoring the importance of reading. Libraries often lack personalized reading recommendation systems, which makes it difficult for students to find books and resources that fit their interests.

3. Practice of reading promotion and innovation in higher vocational college library

3.1 Rich in reading resources

Higher vocational college libraries can innovate and practice through the following methods, enrich reading resources, so as to improve the effect of reading promotion, digitize the library documents, establish digital libraries, and provide online resources such as e-books, journals and academic papers, so as to facilitate students' remote access and retrieval. Proactive access to open access resources such as open access journals and academic databases provides free academic materials to students. Continuous purchase of the latest books, magazines and journals, especially materials related to the school curriculum, to ensure that the content of the library collection remains updated. Establish partnerships with other libraries and implement resource sharing to enrich mutual reading resources. Audio books, video courses, online presentations and lectures are provided to meet students with different learning styles and needs. Considering the diversity of students, multilingual reading resources are provided to meet the needs of students from different cultural backgrounds. Create topic navigation pages for specific disciplines, research areas, or areas of interest that summarize relevant resources to make it easier for students to find the information they need. Promote and train students to use digital reading platforms so that they can freely browse and borrow e-books and online journals. Establish a feedback mechanism with students to understand their reading interests and needs, so as to enrich the resources of the library. Not only focus on books and periodicals, but also can include newspapers, magazines, research reports, multimedia materials and other different types of literature, to meet the needs of different disciplines and, these innovative practice can improve the richness of higher vocational college library reading resources, attract more students to participate in reading, and improve their academic accomplishment.

3.2 Innovation in reading space

Higher vocational college libraries can innovate and practice through the following methods, improve the reading space, and provide a more comfortable and attractive environment, so as to promote the promotion of reading, and divide the learning area in the library, including the quiet area, cooperative learning area, rest area, etc., so as to meet the learning needs of different students. Updated library seating and furniture to ensure students can sit comfortably, providing ergonomic seats and workbenches. Study rooms and group study rooms were established for individual student study and group discussion, and an appointment system was provided to ensure availability. Innovative design elements such as shelf shapes, murals, artworks make the library an attractive place. Using natural light and indoor green plants to create a pleasant environment is helpful to reduce the pressure of students and improve their learning efficiency. Free Wi-Fi and charging devices are provided to meet the technical needs that students may need during reading. Create a display area to display new books, special documents, students 'works, etc., to attract students' interest. Music and media rooms for students to promote creative and diverse learning experiences. Increase the night and weekend opening hours to accommodate the study time and habits of different students. By dividing social interaction areas to promote communication and cooperation among students, coffee corners and leisure areas can be set up. These innovative practices can make vocational college library a more attractive and multi-functional place for learning and reading, and provide students with better academic and cultural experience.

3.3 Planning and organization of reading activities

Higher vocational college library can through the following methods innovation practice, planning and organization of various attractive reading activities, to promote reading promotion, monthly set up different topics, such as science and technology, literature, history, etc., organize related reading activities and exhibitions, which can stimulate students' interest, attract them more widely participate in reading. Writers, scholars, or experts are invited to the library to give lectures, interviews, and sharing sessions to encourage students to interact and discuss with the authors. Schedule a full day or week of reading marathon, encourage students to read continuously, and provide incentives

to motivate participation, which can increase students' reading volume and motivation. Create various book clubs covering different types of books and areas of interest to encourage students to discuss and share reading experiences with each other, which can facilitate communication and interaction between students. Reading competitions, including speed reading competitions and book review competitions, are held to stimulate students 'sense of competition and interest in reading, which can increase students' enthusiasm for reading. Organize a book exchange meeting for students to participate in, so that students can exchange or share their own books and enrich their reading materials, which can promote social interaction and sharing among students. Actively hold literary competitions, such as writing competitions and poetry recitation competitions, to encourage students to create and perform, which can promote students' creativity and expressive ability. These innovative practices can increase students' interest in reading, promote their active participation in library reading activities, while enriching their cultural and academic experiences.

Sum up

To sum up, in the innovative practice of reading promotion in higher vocational college libraries, we put forward the application of the rich reading resources, the innovation of reading space and the planning and organization of reading activities. These innovative measures will help higher vocational college libraries to better meet the reading needs of students and the society, improve their reading literacy, and promote knowledge inheritance. However, this is just the beginning. In the future, higher vocational college libraries need to innovate constantly, adapt to the rapid changes of society and technology, in order to maintain their educational mission. We call on librarians and educators to work together to actively explore more innovative practices, build more interactions and communities, and promote the vigorous development of reading culture. Through these joint efforts, the higher vocational college library will continue to become a palace of knowledge, leading students to success and growth.

References

[1] Wu Liping. Thoughts and Countermeasures on Reading Promotion in Higher Vocational College Libraries in the New Reading Era [J]. Straits Science, 2014 (2).

[2] Zhao Huiru. Innovation and Discussion on the Working Mode of the Reading Promotion in Libraries of Higher Vocational Colleges [J]. Office business, 2018 (21).

[3] Xie Liyun. Reading promotion service and innovation of higher vocational college library under the perspective of Lide education in the new Era [J]. Huaxi: Literary and Art Education, 2020 (022).

Study on the Implementation Path of "Chinese + Vocational Education" for RCEP Member Countries

Yuhong He

Guangxi Normal University, Guilin 541000, China.

Abstract: With the deepening of economic cooperation among RCEP countries, the importance of Chinese language as a communication tool is becoming more and more obvious. "Chinese language + vocational education" has become a hot issue in international Chinese language education in recent years. Vocational colleges and universities should pay attention to the combination of socio-technical changes, technological advances and traditional Chinese language education when carrying out Chinese language education, and continuously improve the ability of "Chinese language + vocational education". This paper analyses the background of the emergence of "Chinese language + vocational education", explores the main problems faced by "Chinese language + vocational education" in RCEP member countries, and then researches the implementation paths, aiming to promote the effective integration and development of Chinese language education and vocational education in RCEP member countries. The aim is to promote the effective integration and development of Chinese language education and vocational education in RCEP member countries.

Keywords: international Chinese language education; RCEP member countries; Chinese language + vocational education; implementation paths.

Introduction

With the deepening of economic cooperation among RCEP countries and the increasing participation of vocational education in the "going out" of Chinese enterprises, Chinese language has become more and more important as a communication tool. "Chinese language + vocational education" plays a crucial role in improving the quality and effect of talent exchange and economic cooperation among RCEP countries, and "Chinese language + vocational education" for RCEP member countries has become an important new field of international Chinese language education. Therefore, teachers need to design the teaching content scientifically, and on the basis of traditional general Chinese language teaching, innovate the teaching concept, content and mode according to the needs of the society, so as to find and solve the problems of "Chinese + Vocational Education", so that the learners can gain more accurate teaching guidance and improve the overall quality of Chinese language education.

1.Background to the emergence of "Chinese language + vocational education"

With the development of China's economy and the improvement of its international status, Chinese enterprises are going global, and there is more and more co-operation between China and RCEP member countries in various industries. At present, Chinese enterprises are investing more and more in RCEP countries. With the continuous expansion of international trade, the demand for high-quality, internationalised vocational and technical talents is also increasing, and many enterprises need talents with language ability, professional knowledge and technical ability. Vocational education has a great responsibility to provide professional talents and technical support for economic development. Such social demand has driven the development of "Chinese + vocational education" in international Chinese language education, and the importance of combining vocational skills education with Chinese language teaching has been widely recognized. Therefore, how to cultivate high-quality talents with professional skills and Chinese language ability at the same time is a new situation facing international Chinese language education.

2.Problems with "Chinese language + vocational education" for RCEP member countries

"Chinese language + vocational education" is a new area of international Chinese language education, and a new education model that integrates international language education and vocational education, which is quite different from general Chinese language teaching in terms of teaching content and teaching methods, and faces problems such as cross-linguistic, cross-cultural, cross-professional and cross-in-

dustry issues. At the macro level, there are three main problems: the lack of demand research and top-level design, the lack of complete special-purpose teaching materials, and the lack of "dual-teacher" teachers and related training systems.

2.1 Lack of demand research and top-level design

The concept of "Chinese + Vocational Education" was put forward at the International Conference on Chinese Language Education in 2019, and in 2021, the Centre for Sino-Foreign Language Exchange and Cooperation of the Ministry of Education issued the document "Action Plan for the Construction of Teaching Resources for "Chinese + Vocational Skills" (2021 In 2021, the Centre for Sino-Foreign Language Exchange and Cooperation of the Ministry of Education issued the document "Action Plan for Teaching Resource Construction of "Chinese + Vocational Skills" (2021-2025)", which vigorously promotes "Chinese + Vocational Education", and the development of this model has a bright future. At present, some results have been achieved in this field of practice-based research, but most of them are based on the theoretical interpretation of a single discipline or the summary of research in different regions and countries, neglecting the construction of the theoretical system of "Chinese language + vocational education" as an organic unity, especially the connotation of the definition of the need for further deepening.[1] There is a lack of scientific and clear top-level design for "Chinese language + vocational education", and no research has been carried out on the needs of the detailed fields, how to combine the daily communicative nature of language teaching with the professional practicality of vocational education, and how to formulate the system of curriculum standards and teaching materials, There is a lack of scientific argumentation on how to combine daily communication in language teaching with professional practice in vocational education, and how to formulate the curriculum standard system, teaching material system, teaching mode and teacher training. In addition, the political and economic conditions and the foundation of Chinese language education in RCEP member countries are different, which is also a realistic problem in front of researchers.

2.2 Lack of complete special-purpose teaching materials

Chinese language education in RCEP member countries has an increasing demand for special-purpose Chinese language teaching materials, coupled with the differences between enterprises and occupations, the demand has become more and more specific, and the vocabulary structure and writing style of traditional general Chinese language teaching materials can no longer meet the actual needs of vocational Chinese language education. Among the existing special-purpose Chinese language teaching materials, the number of business Chinese language teaching materials is the largest, and their development is also relatively perfect. Other special-purpose teaching materials, such as those for science and technology, aviation, finance, engineering, transport, medical care, etc., are not well developed and lack competency standards and guiding syllabi. In the existing vocational Chinese language textbooks, the writers mainly design the vocabulary, grammatical points and intersection tasks through their own experience, lacking scientific guidance and planning, and the level of proficiency varies.

2.3 Lack of training for "dual-teacher" teachers and related training systems

In the development of "Chinese language + vocational education", the shortage of teachers is also a real problem. The teaching of Chinese for special purposes requires "dual-teacher" teachers, who not only need to have the ability to teach general Chinese, but also need to have the knowledge and skills to teach the relevant speciality, which is a relatively high demand on both knowledge and ability of teachers. Unlike teaching Chinese as a foreign language at home, teaching overseas also requires higher bilingual teaching ability. The diversification of the requirements for teachers' knowledge structure has led to the lack of professional teachers at this stage. At the same time, a teacher training system focusing on "Chinese language + vocational education" has not yet been formed, and there is no complete training for new teachers or transformation and upgrading of existing teachers.

3. Implementation path of "Chinese language + vocational education" for RCEP member

Smooth language communication can greatly improve communication efficiency and set an important foundation for promoting the integration and development of international Chinese language education and vocational education in RCEP member countries, to promote

inter-country economic cooperation, mutual benefit and win-win situation, and to strengthen the theoretical exploration and practical research of “Chinese language + vocational education”, which can be attempted in the following aspects.

3.1 Adequate research and top-level planning for “Chinese language + vocational education”.

In order to develop a highly applicable overall plan for “Chinese language+vocational education”, there is a need to strengthen cooperation with vocational education management and teaching institutions in RCEP member countries, fully investigate their demand for Chinese language in the field of vocational education, and then introduce professional standards, curriculum standards and teaching resources with international influence to solve the contradiction between the urgent need for integration and the preliminary research on the theory and practice of the existing “Chinese+vocational education” model, thereby creating a general environment for cultivating learners who are “able to learn Chinese” and “understand technology”.

3.2 Keeping in view the needs, developing specialised teaching materials for “Chinese + Vocational Education”.

To promote “Chinese language + vocational education”, it is necessary to strengthen the research and development of special-purpose Chinese language teaching materials. We should closely follow the needs of RCEP member countries for Chinese language education and the characteristics of students, and develop specialised teaching materials with strong relevance and high applicability, taking into account the rules of language teaching and the needs of jobs in Chinese language. Form a teaching materials development team with the participation of language teachers and industry teachers, and organically combine the specific skills and work scenarios required by the industry with the learning and practice of Chinese language knowledge points, as well as the testing and evaluation of Chinese language knowledge points. Make full use of modern information technology and take into account the basic conditions of RCEP member countries to develop multi-level specialised Chinese language teaching materials.

3.3 Multi-party collaboration to build a sustainable and diversified “dual-teacher” teacher training mechanism

The “dual-teacher” model requires teachers to be able to teach professional knowledge as well as to have corresponding professional and technical titles and practical abilities, so as to meet the needs of “Chinese + vocational education” for RCEP countries, and to play a positive role in the development of students’ theoretical knowledge and practical abilities. This will play a positive role in cultivating students’ theoretical knowledge and practical ability. The source of “dual-teacher” teachers can be considered from three aspects. On the one hand, Chinese teachers in China should be trained in professional knowledge and skills; on the other hand, Chinese teachers with vocational skills should be trained in Chinese language teaching ability; and on the third hand, local vocational teachers overseas should be trained in Chinese language and Chinese language teaching ability. In terms of job requirements, appropriate job standards are set according to the actual situation of professional requirements, curriculum and job duties. To establish professional teaching teams, each school should formulate its own teaching team building programme according to its own actual situation, and build a “dual-teacher” teaching team combining professional and part-time teachers through multi-party collaboration. The construction of professional teaching team is regarded as an important part of the teaching quality project and long-term development planning. Strengthen the training and management of teachers, encourage teachers to actively participate in training, master the teaching requirements of the information technology era, and better carry out “Chinese + vocational education”.

Conclusion

“Chinese + Vocational Education” is an inevitable path for the internationalisation of vocational education in China and an important direction for international Chinese education, which is of great significance for improving the cultivation of industrial skilled talents in RCEP member countries and solving the localised talent demand of Chinese enterprises for overseas development, and it is a brand-new attempt to improve the internationalisation of the Chinese language. By improving the top-level design, researching and developing special Chinese teaching materials, training professional teachers and other measures, the effectiveness and quality of “Chinese + Vocational Education” can

be improved, and it can provide strong support for the exchange of talents and economic cooperation among RCEP countries.

References

[1] Yuan Meng, Ruofan Shang. “Chinese language + vocational education”: development vein, realistic challenges and path choice[J]. China Vocational and Technical Education,2022(29):28-33.

[2] Yinghui Wu, Shuaiqi Liu. Chinese+” and “+Chinese” in the Development of Confucius Institutes[J]. Research on International Chinese Language Teaching,2022(01):36-39+64.

[3] Education Project Research Group. Constructing a new system of high-quality development of “Chinese + vocational skills” education[J]. China Vocational and Technical Education,2022(12):119-123.

[4] Jihua Song, Yufei Ma, Zhiping Zhu. The construction of vocational Chinese proficiency level standard[J]. Language and writing application,2022(2):2-14.

[5] Qiumin Wen. Research on Response Strategies Based on the Demand for “Chinese + Vocational Technology” in Thailand[J]. Education Observation,2021(42):66-68.

About the autho:

He Yuhong (1980.09- -), female, Zhuang nationality, Luzhai, Guangxi, PhD, lecturer, Guangxi Normal University, International Chinese Education, Chinese Culture and Chinese Communication.

1.Project type: College of Liberal Arts/Journalism and Communication Education and teaching reform project

Topic name: Research on ways to improve Chinese cultural literacy for undergraduate students majoring in Chinese International Education

Project number: VJG0022

2.Project type:The “Scientific Research Project” of Guangxi Liberal Arts Center focus on entrusted projects

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Students' Experience of Using Task-based Approach in Oral Learning at a Public University in China

Xinran Wang, Yan Wu

North China University of Science and Technology, Tang Shan, He bei, China. 063210

Abstract: Task-Based Approach (TBA) is an unconventional language teaching method where learners acquire language skills indirectly by engaging in meaningful tasks. TBA has attracted significant attention from Second Language Acquisition researchers and educators for over four decades, particularly in the context of enhancing reading and writing skills. However, there has been a notable lack of research on TBA that delves into the practical application and theoretical underpinnings related to listening and speaking skills. This study aims to identify students' experience of using TBA as a method in oral learning using a qualitative method. The instrument is an interview protocol includes seven questions. The semi-structured delivered to six random selected students after teaching oral English for 8 weeks. The data were analyzed using Nvivo and the results indicated a useful and beneficial experience of students' toward TBA and gave several significant suggestions for future study.

Keywords: Task-based Approach, experience, oral learning, qualitative study, College English Teaching

1.Introduction

Over the decades, China has witnessed several significant transformations in College English Teaching (Luan, 2014). The first revolution occurred between the 1950s and 1980s when the country's focus was primarily on nation-building, resulting in a scarcity of professional foreign language teachers. During this period, English teaching was underdeveloped due to the government's emphasis on rural development and encouraging citizens to work in rural areas (Tian & Liu, 2019).

The Task-Based Language Teaching (TBLT) approach differs significantly from the conventional Presentation-Practice-Production (PPP) method in language teaching. The PPP method heavily relies on coursebooks, often depriving learners of meaningful activities to practice and express themselves in English classes. While some consider PPP to be somewhat outdated, it remains widely used for teaching oral skills in a second language (Davies, 2006).

In the field of Teaching English as a Foreign Language (TEFL) in China, there are two main streams represented by the traditional method and TBLT (Farzana, 2022). On the one hand, in TBLT, task design plays a pivotal role, followed by clear teacher instructions and well-organized activities. This approach aims to activate students' existing knowledge and progressively improve their fluency in speaking the target language (Liu, 2014). On the other hand, in traditional oral teaching classes, teachers often struggle to shift from the role of "language interpreters" and "class holders" to that of facilitators and helpers. These classrooms tend to be teacher-centered, with limited opportunities for students to practice oral communication. There is a growing call in China and worldwide to transition from teacher-centered to student-centered teaching approaches in second language education. This shift is a significant focus in the field of second language teaching and learning. This study was designed to answer the following research question:

1.1 Research Question

How do students describe their experience in using Task-based Approach in oral learning ?

This study aims to investigate the impact of Task-based Approach (TBA) on students' experience toward TBA using a qualitative method. In summary, this research holds significance in examining how TBA influences the experience in learning oral English of undergraduate students majoring in fields other than English.

2. Literature Review

This section provides an overview of oral teaching and learning within the context of College English Courses. This includes discuss-

ing the current situation, challenges, and expectations related to English instruction and learning. It includes a literature review of Task-Based Approach (TBA) and the foundational theories underpinning TBA, i.e., Constructivist Theory and Second Language Acquisition (SLA) theory. It also encompasses a systematic study on TBA conducted both in China and internationally, thereby summarizing relevant research in this field.

2.1 Situations, Challenges and Expectations of English Teaching and Learning

In China, there is a significant problem of communicative incompetence among English learners. This issue is characterized by a noticeable gap between their formal language proficiency and their practical conversational skills. Anecdotal evidence from English teachers underscores this problem, as students frequently find it challenging to participate in real-life English conversations despite years of English language education (Zhang, 2017). For example, students often express feelings of nervousness and difficulty finding words when engaging in conversations with native English speakers, indicating a deficiency in their confidence and fluency in spoken English communication. Li (2012) has identified a problem among English learners, particularly in China, which revolves around the neglect of thinking skills in oral English education. Even though some students have acquired pronunciation, intonation, and fluency in everyday conversations, they struggle when discussing more profound or intricate topics. This challenge primarily arises from a lack of in-depth English language knowledge and underdeveloped critical thinking abilities. The conventional approach to oral English instruction, commonly known as Presentation, Practice, Production (PPP), is primarily responsible for this issue. This method prioritizes rote imitation and pattern drills, often sidelining creativity and critical thinking (Hu, 1993). While lower-level substitution-based conversations dominate practice sessions, activities that have the potential to nurture students' analytical and innovative abilities, such as discussions, speeches, and debates, are frequently overlooked. Huang (2016) and Sun (2006) have argued that meaningful communication in a second language requires not only conveying thoughts and information but also emotions, an aspect often neglected in second language teaching.

Students, particularly undergraduates, have reported difficulties in oral English education, especially when attempting to apply their language skills in real-world situations beyond the classroom. Feedback from college English instructors indicates that students' proficiency in spoken communication significantly lags behind their reading, writing, and listening abilities (Hu, 1993). Additionally, as someone who teaches at the college level, the author has personally observed a reduction in speaking and listening class hours as many universities have cut back on compulsory College English instruction. Undoubtedly, these issues necessitate comprehensive management to improve the quality of English instruction, particularly in oral communication classes.

Huang (2021) argued that the approach to teaching college-level oral English should prioritize student engagement and learning rather than solely focusing on test results. While Chinese scholars have expressed strong support for student-centered teaching concepts in recent decades, translating these principles into practice, particularly in oral instruction, has proven to be challenging. Huang (2016) emphasized the need for greater emphasis on implementing student-centered approaches in future college oral English teaching.

3. Theoretical foundation

The theoretical foundation of this study includes Constructivist Theory and Second Language Acquisition Theory, i.e. Input Theory and Affective Filter Theory.

The Socio-constructivist theory, initially introduced by Vygotsky in 1978, places a strong emphasis on the use of the target language in a social context. It incorporates concepts like "scaffolding" and the "Zone of Proximal Development" (ZPD). The ZPD emphasizes that optimal learning occurs when teachers and learners interact dynamically. In this framework, the primary role of the teacher is to provide structured questions, explanations, or encourage collaborative peer support, allowing learners to progress just beyond their current level and reach their maximum potential.

Additionally, Input Theory is another underpin theory of this study. Input plays a crucial role in the process of learning a foreign language. It involves determining what to input and how to input it, considering the perspective of the learning process (Swain, 1995). The Input Hypothesis offers several recommendations for Task-Based Approach (TBA) and is integrated into task-oriented lessons. Overall, it empha-

sizes the importance of ensuring that all input is comprehensible (Krashen, 1985).

Additionally, the Affective Filter hypothesis, proposed by Krashen in 1985, suggests that in the process of acquiring a second language, there can be a psychological barrier known as the "affective filter". This filter can hinder language learners from fully utilizing the comprehensible input they receive for language acquisition. Several emotional factors, including motivation, self-confidence, and anxiety, are linked to second language acquisition (Krashen, 1985, p.15). However, when the affective filter is low, learners are motivated, confident, actively engaged in activities, and can acquire new language information more effectively. Krashen (1985) argued that when learners focus on the meaning of their expression, they temporarily forget about their limited language proficiency, thus lowering their affective filter. The TBA encourages students to concentrate on information exchange and negotiating meaning. Completing tasks in group settings can help reduce the fear of making mistakes in public or losing face. In line with the affective filter theory, students can acquire the target language more effectively through these approaches.

3.1 Systematic Studies on TBA

This section provides an overview of various aspects related to Task-Based Approach (TBA). It covers the fundamental concepts, utilization of tasks, and the application of TBA. Specifically, it delves into the nature of tasks, encompassing their definitions, components, types, and characteristics.

3.2 Definition of Tasks

In general terms, a task can be described as a deliberate and structured activity carried out by learners with the aim of achieving specific objectives or results (Nunan, 1989). These activities consist of a series of process-oriented steps that prioritize conveying meaning rather than strict adherence to linguistic form, guiding students towards a predefined endpoint (Breen, 1987). Tasks come in various levels of complexity and can encompass exercises, discussions, or collaborative group work, all intended to support language development (Ur, 1996). Teachers meticulously design these tasks to encourage communication and interaction among learners, ultimately resulting in enhanced language proficiency and outcomes (Willis, 1996).

3.3 Components of Task

Candlin (1987, p.23) outlined that tasks encompass various components, including roles, input, setting, outcome, monitoring, and action. Roles define the interactions and relationships between participants and instructors involved in a task. Input refers to the information or data provided to learners for their task. Setting pertains to the specific classroom context and conditions in which the task takes place. Monitoring involves the guidance and supervision provided by teachers during the task's execution. Outcome and feedback relate to the objectives and evaluation criteria associated with the task. Action pertains to the tangible progress and practical steps taken by students during the task.

Schwartz (1985), and Brown (1985) illustrated the components of tasks in Figure 1.

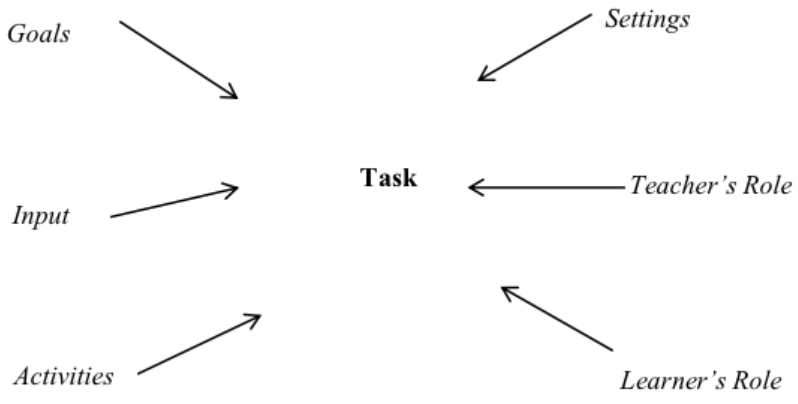

Figure 1 Components of Task

3.4 Types of Task

Nunan (1989) defines tasks as activities that mirror "real-life" situations and must serve a genuine purpose, extending beyond typical classroom exercises. While some task activities might not be everyday occurrences outside the classroom, learners are expected to approach them with seriousness and dedication. Additionally, Nunan (2001) classifies tasks into two categories: activation tasks and rehearsal tasks. Activation tasks encompass classroom activities that promote learner cooperation and meaningful interactions, moving beyond mere responses to language acquisition. On the other hand, rehearsal tasks involve learners practicing and getting ready for genuine interactions and communication beyond the classroom setting.

Willis (1996) outlines six distinct task types, which encompass activities such as making comparisons, arranging and categorizing, making lists, sharing personal experiences, problem-solving, and engaging in creative tasks. To provide further detail, jigsaw tasks involve learners piecing together various fragments of information to create a comprehensive whole. Information gap tasks necessitate that one student or group possesses specific information while another student or group has complementary information. Problem-solving tasks present students with a problem along with a set of information, requiring them to work towards finding a solution. Decision-making tasks challenge students with a problem that offers multiple potential solutions.

In conclusion, this section provides an overview of oral teaching and learning in College English Courses, addressing current challenges, expectations, and reviewing the Task-Based Approach (TBA) along with its underlying theories, such as Constructivist Theory and Second Language Acquisition Theory.

4. Methodology

The research method of this study follows a qualitative method. A semi-structured interview was conducted to identify students' experience towards Task-based Approach. The interview protocol was self-designed based on previous study and this research needs. It contains seven questions and conducted online through ZOOM software.

The sample of this study are six interviewees who were random selected from 30 students. They have been exposed to TBA for 8 weeks. To ensure the validity and reliability of the interview protocol, peers review and expert check was conducted before implementation. The transcription was sent back to six interviewees and asked the correctness of final transcription. The qualitative data were generated and analyzed through Nvivo (11.0) using thematic and coding analysis. The ethical consideration went to both party of interviewer and interviewees. The interviewees were named anonymous from I1 (interviewee 1) to I6 (interviewee 6). The data were used for research purpose only and have been kept strictly by the researcher.

5. Results

This section provides the findings of this study, i.e. a beneficial and rewarding experience of Task-based Approach. This section meanwhile displays the outcomes of semi-structured interview.

According to the frequency of word occurrence, students' experience of TBA is overall positive. Table 1 outlined their general experience through the learning process of TBA.

Table 1 Themes and Sub-themes of Semi-structured Interview

Themes	Sub-category	Frequency of occurrences
Useful in Enhancing Beneficial for Learning Speaking	useful for speaking	23
	express more sentences	31
	improve grammar	16
Experience of Encountering Speaking Barriers	fear of making mistakes	32
	teacher pressure	25
	peer laughter	10
Helpful in Improving Confidence	improving confidence level	13
	more confidence in speaking in public	26

5.1 Useful in Enhancing Beneficial for Learning Speaking

The results of the semi-structured interviews conducted in this study revealed a unanimous agreement among the interviewees, who represented different levels of speaking proficiency, regarding the favorable impact of tasks on their overall speaking abilities. The interviewees consistently emphasized that tasks played a crucial role in improving their speaking skills and supporting their language learning. They credited their enhanced communication skills to regular practice and active participation in various task-related activities.

Responses were stated as: “tasks are useful to me, I like most activities and I think they are very helpful to me”(I1), “tasks are very useful and helpful to me ”(I2), “the tasks are very useful, very useful and helpful” (I3), “tasks are useful and helpful in improving speaking competence”(I4), “tasks help me on speaking ability” (I5), “I think the tasks are very useful”(I6).

Participants emphasized the vital role of tasks in enhancing their speaking skills. In summary, the uniform positive feedback regarding tasks from these interviewees reaffirms the effectiveness of task-based language teaching in nurturing speaking proficiency and highlights its significance in language education environments.

5.2 Experience of Encountering Speaking Barriers

Students’ experiences in doing tasks revealed several barriers in speaking, namely, fear of making mistakes, teacher pressure and peer laughter. The fear of making mistakes of interviewees were demonstrated briefly as following:

“Yes, I am. I think it is very .... embarrassing. I am afraid my classmates and teachers laugh at me (I2)”. “Yes, I am. I am afraid of making mistakes (I3)”. “Yes, I am. Because, I don’t want to make people laugh at me and I hope I can do a good job (I6)”.

Among six interviewees, there were five students answered: “Yes, I am afraid of making mistakes because I worried about teacher...”. One high-score student answered: “ a little bit afraid”. Besides, among the other five students who referred “ Yes ” to this interview question, all of them illustrated the responses of teacher pressure, which caused students’ intense fear.

Students’ experience of accepting TBA also revealed helpful in improving confidence.

5.3 Helpful in Improving Confidence

I1 said: “task is effective to improve my speaking confidence, before, I usually prepare presentation alone, I always worried I can not do a good job because of nervous and something else. Tasks are made up of groups, there are at least one in a group, I can work with others. TBA can improve my confidence because I can prepare 5-8 minutes, I can practice with my friends, when I speak, I don’t feel that nervous”. I4 responded “Yes, I think TBA is helpful of gaining my confidence level, it helped me to be more confident to speak in English”.

I3 responded: “Yes, of course. I think tasks in TBA help to remove my fear of speaking in English. And I have became more willing to speaking in English in using tasks”. I2 said: “Yes, I think so. Tasks help to remove me fear. I like to do tasks, and I can do better in speaking in English using tasks”.

In summary, the qualitative findings corroborated the positive influence of Task-based Approach (TBA) and tasks on students’ self-assurance when speaking English. The interactive and cooperative characteristics of TBA, along with peer support, played a role in reducing apprehension and public speaking anxiety. These results provided additional evidence supporting the effectiveness of TBA in cultivating students’ speaking proficiency and bolstering their confidence in using the English language.

6. Discussion

The analysis of qualitative data revealed that students’ experience with Task-based Approach (TBA) were useful, valuable, beneficial, and rewarding. The findings indicated that tasks proved to be effective in enhancing speaking skills, particularly in improving speaking abilities, enabling the expression of more complex sentences. Additionally, the research identified various obstacles to speaking performance, including the fear of making mistakes, teacher expectations, and peer reactions. Ultimately, the findings highlighted that tasks played a crucial role in boosting students’ confidence, leading to increased confidence levels and the reduction of public speaking apprehension.

One potential explanation for the observed outcomes could be attributed to the integration of language skills. Task-based activities often incorporate various language skills, including listening, speaking, reading, and writing. This integration enables learners to recognize

the interrelationships among these skills and practice using them in a unified manner. Experiencing language in diverse contexts makes learners more versatile and skilled communicators. Furthermore, task-based activities offer learners opportunities for practical and meaningful language use in real-world scenarios. Engaging in communication tasks allows learners to apply the language in context, rendering it more relevant and applicable to their everyday lives. This contextualized practice supports learners in becoming more proficient in effectively conveying their ideas and messages in the language.

Another potential reason for this outcome could be the creation of a comfortable and conducive learning atmosphere. Task-based activities typically foster a positive learning environment for students. This favorable experience motivates learners to dedicate more time and effort to honing their communication skills. Additionally, task-based activities can lead to an increased generation of sentences during oral communication. The regular use of language in meaningful contexts contributes to the production of a greater number of sentences.

Additionally, this study found several barriers of speaking performance, such as, fear of making mistake, teacher pressure and peers laughter. There are several factors that could account for this observation. Firstly, students might be hesitant to engage in speaking tasks due to their fear of making errors. This fear stems from concerns about potential negative judgments from both their peers and the teacher. Making mistakes in a public setting can be embarrassing and can trigger feelings of inadequacy or incompetence. This anxiety related to the fear of being evaluated negatively can create a significant barrier to active participation in speaking activities, as students may view any mistake as a signal of failure or ineptitude. Secondly, the presence of the teacher adds to the pressure felt by students during speaking tasks. They may believe that their teachers' assessment of their performance carries substantial weight, leading to a fear of disappointing the teacher by making mistakes. Thirdly, the fear of being ridiculed by peers is closely linked to the dread of negative evaluation. The fear of being mocked can generate a strong sense of vulnerability and self-consciousness, causing students to hesitate when it comes to expressing themselves openly. Lastly, students with lower scores may have less self-esteem and confidence in their language skills compared to high-achieving students. Consequently, they may be more sensitive to their peers' opinions and judgments. The fear of being ridiculed for making errors or not performing well in front of others can further erode their already fragile confidence, resulting in heightened anxiety during speaking tasks.

7. Conclusion

The study emphasizes the need for EFL instructors to enhance their teaching methods, particularly in the realm of oral communication. It suggests that evaluating students based on their oral performance can offer a more comprehensive understanding of their communication abilities, going beyond just grammar and vocabulary. Specifically, the study highlights that Task-based Approach (TBA) can be a valuable approach to improve students' speaking performance. Therefore, language instructors should consider integrating task-based activities into their speaking lessons to enhance the effectiveness of teaching oral communication. The TBA allows teachers to observe students as they engage in tasks, such as negotiating meaning or expressing opinions, providing insights into their strengths and weaknesses in oral communication. This observation can enable instructors to offer targeted feedback, ultimately improving students' performance in this crucial skill area.

References

[1] Luan Lan, (2014). The College Oral English Teaching Research Based on the Instruction of Negotiated Interaction. Shanghai International Studies University.

[2] Tian, L., & Liu, N. C. (2019). Rethinking higher education in China as a common good. Higher Education, 77(4), 623-640.

[3] Davies, P. (2006). Competency-based language education: From theory to practice. Culture and Identity in Applied Linguistics.

[4] Farzana Alam. (2022). Role of ZPD and TBLT. DOI:10.13140/RG.2.2.20785.86884.

[5] Liu, Y., & Zhang, Y. (2014). An Exploration of Chinese EFL Students' Emotional Intelligence and Foreign Language Anxiety. Modern Language Journal, 98(4), 977-990.

[6] Zhang Wenjuan, (2017). Applying Production-oriented Approach to College English Teaching; An Action Research. Beijing Foreigh Studies University.

[7] Li Xiange, (2012). An Empirical Study on Applying Task-based Approach in the College Oral English Teaching. Zhengzhou: Henan University of Science and Technology.

[8] Hu WenZhong. (1993). The Cross-culture Communication in Foreign Language Teaching. Foreign Language Teaching. Beijing: Beijing Foreign Language University.

[9] Huang, D. (2016). A study on the application of task-based language teaching method in a comprehensive English class in China. Journal of Language Teaching and Research, 7 (1), 118-127.

[10] Swain, M (1995). Three Functions of Output in Second Language Learning. In G. Cook and B. Seidlhofer (eds.) Principles and Practice in Applied Linguistics. Oxford University Press, 125-144.

[11] Krashen, S.D. (1985). The Input Hypothesis: Issues and Implications. London: Longman Group Limited.

[12] Nunan, D. (1989). Designing Tasks for the Communicative Classroom. Cambridge University Press.

[13] Breen, M. (1987). Learner contribution to task design. In C. Candlin and D. Murphy. Englewood Press.

[14] Willis. (1996). A Framework for Task-Based Learning. Longman, Harlow.

[15] Candlin, C. (1987). Towards Task-based Language Learning in C. Candlin and D. Murphy (eds.): Heinle & Heinle.

Xinran, Wang, (October 1988) female, Han Nationality, born in Tang Shan, Hebei Province, teacher of the Foreign Language Department, North China University of Science and Technology, Lecturer, Doctor of Education, mainly engaged in English listening and oral education, L2 accuisition and other aspects of the research.

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Application of Thematic Structure in English Writing

Yumei Huang[1], Jin Xiao[2], Shenghu Ma[3]

1.School of Foreign Studies of Gansu University of Political Science and Law, Lanzhou, Gansu, 730070, China

2.Dunhuang Middle School, Dunhuang, Gansu,736200,China

3.School of Foreign Studies of Gansu University of Political Science and Law, Lanzhou, Gansu, 730070, China

Abstract: English writing becomes more and more important for college students. And we know that the composition consists of sentences and sentences consist of words. Besides, sentences can also be made of theme, rheme and transition.We should arrange them in the appropriate place of a passage, which makes the writing more perfect. Therefore, the application of the thematic structure in a writing plays an important role. We should realize its importance and know the use of it in order to make our English writing easier to read and understand.

Keywords: theme; thematic structure; thematic progression; discourse coherence

1. Introduction

As we all know, writing is one of the five essential means in English learning, and it is a significant way for authors to express their thoughts and perfect their foreign language skills. Therefore, writing a perfect and attractive English composition is a hot topic that many scholars have been discussing for many years. In a composition, it has many constituent elements, such as words selection, sentences constitution, paragraphs formation, discourse coherence, etc. Every step is very essential and important, especially the sentence structure. The sentence constituents are complex, and it has theme (T for short), rheme (R for short) and transition. Themes and rhemes are important parts of discourse function in functional grammar. Meanwhile, they have close relations and they play vital portions in sentences and English writing.

2.Thematic structure

2.1 Definition

Thematic structure is effective and useful in a sentence, because it sends vital and necessary messages to readers. Every sentence is with peculiar thematic structure. Thematic structure has mainly two elements, which are theme structure and rheme structure. When there exists an ordinary sentence, the primary message and the posterior are fixed and do not change because without language environment, the theme and rheme are not together, and substantially all developed texts are composed of two or more sentences. So the rhemes and rhemes, themes and rhemes, and themes and themes of the former sentence and the latter sentence will have relationships and changes, and these relationships and changes are called thematic progression. With the advance of each sentences theme, all the discourse progresses constantly until it forms a whole that can express a certain complete meaning.

2.2 Classification

An English writing is with many types of themes, playing necessary roles in a passage. They can help writers to build a correct relationships among the elements, and they can also help readers to master the meaning of the writing.

The theme can be divided into some types according to some conditions. We can stipulate themes into simple themes, multiple themes and clausal theme depending on the complicacy of its structure. Themes can also be seen as topic theme, interpersonal theme and textual theme according to its function and meaning, and it can also be parted into multiple themes in a way.

2.3 Simple theme

Simple theme means those thematic elements that contain only conceptual elements but not interpersonal elements and textual elements, which are expressed in the form of noun phrases, adverb phrases or prepositional phrases. There are some examples, a. The man in black (T) laughed at me.(R) b. That lady in pink (T) is my relative (R). c. In the playground (T) there are many students (R).

2.4 Multiple theme

Multiple themes are composed of multiple semantic components, which respectively express ideational function, interpersonal function and textual function. The multiple theme has an immanent structure, and can be more profoundly split into textual theme, interpersonal theme, and topical theme. Halliday's concept of complex theme further enriches the theory of theme-rheme structure theoretically. For example, ''And maybe you are wrong''. ''and'' is textual function, ''maybe'' is interpersonal function, and ''you'' is ideational function.

2.5 Clausal theme

The clausal theme is made up of the whole clause -the main clause or clause in a compound sentence. Simply speaking, clausal theme means the whole sentence acting as the theme, that is, the subordinate clause in the conventional grammar. For example, ''If it rains tomorrow(T) //we will not go to see that movie(R)''. Besides, phrases that are not predicate forms of verbs, such as -ed or -ing phrases, can seen as clausal theme. For example, ''That they do not know how to learn English by listening and reading (T)// is a big issue(R)''. All in all, if a sentence contains two or more than two clauses, the former one is called the clausal theme. Like this one ''If winter(T) comes(R1) [T] //can spring be far behind[R]?''

3.Application

3.1 Thematic progression

Most texts are made of two sentences or more , in which case they will have some connection and change between themes, rhemes and rhemes, and between themes. Professor Zhu Yongsheng calls this connection and change progression. With the advance of the primary structure of each sentence, the whole article progresses constantly till it forms a whole which can express a certain complete meaning, and from there, the thematic progression comes into being.

The thematic progression is a way of blossom of a writing depending on the author's decision of theme. And it decides the constitution of a passage and the sentence, so we should cultivate our consciousness of thoughts and ability, which is benefit for us to grasp the structure of text and meaning. The organic relation between the main idea and secondary one in a text determines the progression of sematic aspect, and the most significant view is that the thematic progression can inflex the information chain of the content.

3.2 Parallel development

Parallel development has the settled theme and diverse rhemes. Through selecting the identical theme as the equal starting point, the writer uses different rhemes to describe what the text about from different aspects. Here is an example, ''My friend(T1) is in Netherlands now (R1). He (T2=T1) has been there for three years (R2). He (T3=T1) is a doctor (R3). He (T4=T1) is studying in a famous university(R4)''. And we can use a regular shape to describe this parallel relationship:

T1—-R1
|
T2(=T1)—-R2
|
.
.
.
Tn(=T1)—-Rn

We can also analyze this relationship in detailed sentences, '' Last year I travelled to the Dalian. I had a very wonderful and low flight. I didn't have fun, though''. Every sentence is dominated by ''I '', that is to say, they have the same theme, but each takes a fresh piece of information as its rheme, which makes several parallel sentences. If letter A stands for the main standpoint of the starting sentence and different letters stand for each rheme, this development can be demonstrated as follows,

A ← B

A ← C

A ← D

A ←...

3.3 Continuous development

Continuous development has its own feature: the rheme of the preceding sentence is the primary message of the following. Under this type, the preceding sentence rheme or a portion of secondary message becomes the main one for the following. Here is also an example, ‘‘We visited the Palace Museum (R1). The Palace Museum (T2=R1) is in the Beijing (R2). The Palace Museum (T3=R1) shows us many interesting and attractive cultures of Chinese history(R3)’’. And we can use a regular shape to describe this continuous relationship:

T1—-R1

|

T2(=R1)—-R2

.

.

.

Tn(=Rn-1)

We can also analyze this relationship in detailed sentences, ‘‘Lily gave her mother most of the money she earned from selling handmade cake. The remaining she spent on woolen yarn for her manual creations. Among the things she created, Lily had a sweater. Sweater warms her easily.’’ The rheme or the others of the previous sentence is used as the theme of the following sentence, and a new message is used as the rheme to clarify this theme, and so on, bringing new information and promoting the expression of the thought content. We can deduce that the main message and secondary of each sentence in every sentence conbination are continuous development, and we can make a simple expression to show :

A ← B

B ← C

C ← D

D ← ...

3.4 Concentrated development

Concentrated development has the uniform rheme and different themes. Under this pattern, the main message in individual caluse are diverse, but all of them have the same rheme. Here is an example, ‘‘John (T1) likes basketball (R1). Jim (T2) likes basketball (R2=R1). Each boy member (T3) of my club likes basketball (R3=R1)’’. And we can make a regular shape to describe this relationship:

T1—-R1

T2—-R2(=R1)

.

.

.

Tn—-Rn(=R1)

We can also analyze this relationship in detailed sentences, ‘‘Father sent Bella a souvenir. Mother sent Bella a souvenir. Uncle Shaw sent Bella a souvenir. We all sent Bella presents for her good score.’’ After the essential depict of the theme and rheme in the starting sentence, the second, the third... sentences, each start with a new theme, but they all use the rheme of the first sentence, that is, the different starting points of each sentence all boil down to the same situation or state. We can take a simple expression to show this concentrated relation:

A →Z

B → Z

... →Z

3.5 Cross development

The cross development defines that the theme of the preceding sentence is the rheme of the following sentence. Under this type, the theme in the first sentence will become the rheme in the posterior, and the theme in the posterior will become the rheme in the next one, and so on. Next is an instance, ‘‘That movie (T1) is exciting and attractive (R1), but I (T2) didn’t have favor in watching it (R2=T1). A dog (T3) hit me (R3=T2). I (T4) lower my head and glared at it (R4=T3), but it ignored me(R5=T4)’’. And we can draw a regular shape to describe this relationship:

T1—-R1

|

T2—-R2

.

.

.

Tn—-Rn(=Tn-1)

We can also analyze this relationship in detailed sentences,‘‘looking different animals at the zoo is my favourite habit. I often look them for hours even without many kinds. But this doesn’t disturb me. Some people who have the same habit are unlucky. Instead of watching animals, they get the history of the zoo. I am a bit fortunate indeed.’’The primary message of the preceding one becomes the subordinate information of the secondary, the primary message of the secondary becomes the posterior of the following, and the main message of the next becomes the minor of the next, and so on. We can use a simple expression to show this crossed relation:

A ← B

C ← A

D ← C

4.Conclusion

In a conclusion, we can realize the importance of the thematic structure in an English writing, and we also learn about the classification of the thematic structure, which helps us a lot in our future learning. In English writing, we need to construct the thematic structure correctly and arrange the role of thematic advancement and discourse coherence for enhancing the readability and fluency of English writing.

References

[1] Halliday, Explorations in the Functions of Language[M]. London: Edward Arnold,1973.

[2] Halliday, M.A.K. An Introduction to Functional Grammar [M]. London:Edward

[3] Lyons, Semantics[M]. Cambridge: Cambridge University Press,1997.

[4] Thompson, Geoff. Introduction Functional Grammar [M]. Beijing: Foreign Language

[5] Liu Hongmei. Writing and Language Arts [M]. Peking University Press, 2015 (1) 46-54.

[6] Luo Qingsong. Research on Teaching Chinese Writing as a Foreign Language [M]. China Social Science Press, 2002(1) 87-146.

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An Empirical Investigation into the Relationship Between Positive Traits Among Adolescents and Academic Achievement: A Case Study of T City in China

Jie Yu [1], Tengfei Tian [1, 2]

1.Chongqing Educational Evaluation Institute, Chongqing 400020, China.
2. School of Economics and Business Administration, Chongqing University, Chongqing 400044, China.

Abstract: This study explores the association between adolescents' academic achievement and various positive traits, including learning interest, emotional regulation, learning habits, and interpersonal relationships. A comprehensive survey was conducted among 1465 fifth-grade students (53% male, 47% female) from 30 primary schools and 1243 ninth-grade students (52.5% male, 47.5% female) from 25 junior schools in T City, China, as part of the Educational Quality Monitoring Program. The findings indicate a positive predictive relationship between adolescents' positive traits and academic achievement. However, it is noteworthy that these positive traits demonstrate a negative correlation with the development of test anxiety and academic burden, potentially exerting a negative impact on students' academic performance. Furthermore, the results reveal a significant age difference in the manifestation of positive qualities, with younger students exhibiting a higher positive developmental level compared to their elder counterparts. Additionally, each positive quality exhibits varying effects on academic achievement, displaying differences across categories and subjects. Importantly, the correlation between negative developmental outcomes and academic achievement is not exclusively negative; there is a likelihood of a positive association.

Keywords: Adolescent; Positive traits; Academic achievement; Positive youth development

Introduction

The attainment of academic success holds paramount significance for adolescents as it serves as a pivotal foundation for their transition into fully engaged participants in the economic, social, and civic realms of contemporary society (Li et al., 2010). In light of escalating employment competition and societal pressures, modern Chinese parents have increasingly emphasized the educational trajectory of their children. Consequently, the overall quality of youth education in China has emerged as a subject of enduring national concern. Despite this, research addressing the factors that contribute to students' academic success has not received adequate attention within the Chinese context. Prevailing emphasis has been placed on examination-oriented education, a trend that may detrimentally impact the educational trajectories of youth. Against this backdrop, this paper specifically concentrates on exploring how school engagement serves as a mediating factor in the influence of personal attributes on adolescents' perceived academic competence, employing a positive psychology perspective.

Background

With the objective of shifting the focus of psychology from solely addressing the repair of negative aspects of life to the cultivation of positive qualities (Seligman and Csikszentmihalyi, 2000), positive psychology is vigilant not only in addressing serious psychological issues but also in encompassing the entirety of the human population (Guan et al., 2009). The examination of positive traits, involving research on the inherent strengths and virtues of ordinary individuals, stands out as a primary focus within the realm of positive psychology (Sheldon and King 2001).

In contrast to the traditional scope of psychology, the positivism of positive psychology encompasses three key dimensions. Firstly, it entails a paradigm shift from the traditional focus on negative psychological problems in the early stages of psychological research. Secondly, it calls upon researchers to delve into the exploration of the positive aspects of human psychology. Thirdly, it emphasizes adopting a positive approach to provide appropriate explanations for psychological problems and derive positive significance from such explanations. Existing literature indicates that positive traits constitute a crucial aspect of adolescents' positive development (citation), and positive youth development (hereafter, PYD) seeks to understand how these positive traits can facilitate optimal outcomes in the growth process of adoles-

cents. Consequently, researchers have dedicated considerable effort to studying the composition of adolescents' positive traits and devising measures to assess individual positive qualities.

Notably, PYD has been conceptualized through various academic frameworks, with several theoretical models emerging over the past two decades. Examples include the 4-H Study of PYD—Head, Heart, Health, Hand (Catalano et al., 2002), the Five Cs model of PYD—Competence, Confidence, Connection, Character, Caring (Phelps et al., 2009), and the 24 Character Strengths categorized into six virtues: wisdom and knowledge, courage, humanity, justice, temperance, and transcendence (Seligman, 2004).

While the aforementioned theoretical frameworks may vary in their research priorities, there is an unequivocal trend towards their increasing popularity among individuals dedicated to fostering the positive growth of young people within households, educational institutions, and youth-serving organizations (Bowers et al., 2010). Research affiliated with the 4-H Study of PYD has substantiated that imparting life skills to adolescents yields beneficial outcomes for their positive development (Lerner et al., 2005; Jeličič et al., 2007). Embracing the Five Cs model of PYD, which posits that every adolescent possesses the potential for positive development, underscores that a higher level of Five Cs positive traits correlates with elevated developmental outcomes (Lerner, 2004). The 24 Character Strengths framework posits that cultivating character strengths can mitigate the onset of mental disorders among adolescents (Seligman, 2002) and contributes significantly to individual well-being (Park, 2004), with an increasing body of evidence supporting the positive outcomes associated with these character strengths (Park and Peterson, 2008).

Simultaneously, the 40 Developmental Assets theory contends that adolescents endowed with a greater number of strengths exhibit more favorable developmental outcomes and engage in fewer problematic behaviors (Benson, 2003; Benson et al., 1998; Luster and McAdoo, 1996; Scales and Leffert, 1999).

Moreover, an extensive body of empirical research has consistently demonstrated the positive correlations between positive traits and various dimensions of adolescents' development, well-being, and academic achievement. For instance, the Five Cs model asserts that adolescents characterized by a constellation of positive traits are more likely to attain thriving or idealized developmental goals (Csikszentminhalyi and Rathunde, 1998), thereby contributing to their personal growth, family dynamics, and societal advancement (Lerner, 2004). Park et al. (2004) reported significant positive associations between student academic achievements and a range of strengths, including zest, self-regulation, hope, curiosity, love, leadership, civic spirit, fairness, integrity, insight, courage, love of learning, and prudence.

Contrastingly, Jeličič et al. (2007) identified negative correlations between the Five Cs and indicators of contribution, depression, and problematic behaviors, suggesting a nuanced relationship between positive traits and certain outcomes. Furthermore, Lewin-Bizan et al. (2010) reported that the strengths of social intelligence could serve as a preventive measure or reduce aggressive and antisocial behaviors.

Nevertheless, scholars hold divergent perspectives on the mechanisms through which positive qualities impact the academic success of adolescents. Notably, Li et al. (2010) and Zhang (2013) contend that positive qualities may either directly contribute to academic success or indirectly influence it through school engagement. In essence, the relationship between positive qualities and academic achievement is characterized by complexity and lacks universality. For example, Fredricks et al. (2004) reported a positive correlation between behavioral engagement and academic outcomes. However, recent evidence suggests that the strength of this association is contingent upon factors such as the method of measuring achievement and the racial/ethnic composition of study participants (Shernoff and Schmidt, 2008). Chase et al. (2014) extended this discourse by reporting that the predictive power of school engagement for grade point average (GPA) is less pronounced in African-American students compared to their European American counterparts.

In light of these nuanced perspectives, this study is specifically designed to delve into the intricate correlations between students' academic achievement and positive traits, including learning interest, emotional regulation, learning habits, and interpersonal relationships. Moreover, the study aims to explore strategies for mitigating negative developmental outcomes among adolescents, such as test anxiety and study burden.

Significance of the Study

As previously highlighted, positive traits exhibit a significant association with the healthy growth, well-being, and academic achieve-

ment of students. Furthermore, variables such as learning interests, learning strategies, self-efficacy, school engagement, and family background have been identified as notably interconnected with adolescents' academic achievement. However, prior research on academic achievement concerning these variables has predominantly been conducted in Western countries. Recognizing that the correlation between students' academic achievement and various contributing factors may be influenced by social-cultural aspects, there is a compelling need to investigate the associations between adolescents' academic outcomes and diverse elements of positive traits in different global contexts.

The present study was carried out in China as part of the Educational Quality Monitoring Program, where students predominantly experience Confucian heritage-based classroom environments. Consequently, results derived from Chinese students may exhibit variations when compared to those obtained from students in Western countries with individualistic cultural orientations. Cross-cultural investigations hold the potential to enhance the effectiveness of instructional practices by aiding teachers in leveraging positive traits to promote students' academic achievement.

Methods

Samples and data

The samples for this study were systematically chosen from a pool of 30 primary schools and 25 junior schools located in T City, China. The study encompassed 1465 fifth-grade students (53% male, 47% female) and 1243 ninth-grade students (52.5% male, 47.5% female). Data collection was executed by trained researchers, with participants assembled in their respective school classrooms to facilitate the administration of the questionnaire. Students were instructed to independently complete the questionnaire within a one-hour timeframe and were not permitted to leave the classroom during this period without valid reasons. Data processing involved the utilization of SPSS 21.0, and ConQuest Version 2.0 was primarily employed to calculate the Scaled Scores representing students' academic achievement.

Measures

Academic Achievement

Students' academic achievement was assessed through two sets of testing tools designed in accordance with the National Curriculum Standards for Chinese and Mathematics, respectively. To ensure comparability among students with varying test subjects, raw scores were converted into Scaled Scores. Each subject's (Chinese and mathematics) sample served as the norm, with a Scaled Score of 500 points and a standard deviation of 100 points. In Grades 5 and 9, Cronbach's alphas for Chinese were .76 and .74, respectively, and for Mathematics were .75 and .73, respectively.

Learning Interest

The analysis incorporated items from the Student Learning Interest Questionnaire (Sun, 2010), covering subscales for Chinese, Mathematics, and English. Participants rated the ten items for Chinese and Mathematics on a scale ranging from 1 (strongly like) to 4 (strongly dislike). For instance, an item measuring Chinese interest was "I like Chinese the best of all the subjects." In Grades 5 and 9, the rest-retest coefficients over a 2-month period for Chinese were .80 and .82, respectively, and for Mathematics were .76 and .83, respectively. Cronbach's alphas for Chinese were .82 and .86, respectively, and for Mathematics were .85 and .86, respectively.

Emotional Regulation

Emotional regulation encompassed the subscales of self-efficacy, willpower, and time management skills. Self-efficacy was measured using four items from the General Self-Efficacy Scale (GSES) Chinese version revised by Zhang and Schwarzer (1995). An example item is "I always say 'I do' or 'I can' when I encounter problems in daily life." Willpower was assessed through seven items from the Willpower Scale revised by Lu and Liang (2008), with a sample item being "I can do something important for a long time even if it's boring." Time management skills were gauged by eight items from the Adolescence Time Management Disposition Scale compiled by Huang and Zhang (2001), with a sample item stating, "Every day I can study according to my own plans." Response formats ranged from 1 (strongly inconsistent) to 4 (strongly consistent). Higher scores indicated higher levels of self-efficacy, willpower, and time management skills. In Grades 5 and 9,

Cronbach's alphas for self-efficacy were .78 and .83, respectively; for willpower were .71 and .83, respectively; for time management skills were.72 and .78, respectively.

Learning habits

Learning habits were assessed using six items from the learning habit scale (Yan, 2011). Response formats ranged from 1 (never) to 4 (always), with an example item being "How often do you actively take part in group (class) discussions?" Higher scores reflected more favorable study habits. In Grades 5 and 9, Cronbach's alphas for learning habits were .71 and .89, respectively.

Interpersonal relationship

Interpersonal relationship was defined through a composite of three subscales: teacher-student relationships, peer relationships, and parent-child relationships. Eighteen items from the teacher-student relationships scale, developed by Chu (2006), gauged teacher-student relationships. The response format ranged from 1 (strongly disagree) to 4 (strongly agree), with an example item being "I get along very well with my Chinese/mathematics teacher at my school." Higher scores indicated a more positive teacher-student relationship. In Grades 5 and 9, Cronbach's alphas for Chinese were .79 and .86, respectively, and for mathematics were .77 and .82, respectively.

Peer relationships were measured using 18 items from the self-description questionnaire (Cheng et al., 1997), with the response format ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item was "Can you easily make new friends at school?" In Grades 5 and 9, Cronbach's alphas for peer relationships were .79 and .81, respectively.

Parent-child relationships were assessed through 20 items from the Parent-Adolescent Communication Scale (An, 2004), with an example item being "Some teenagers think they can easily make friends with their father, but other teenagers don't think they can easily make friends with their father." The response format followed a four-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). In Grades 8 and 9, Cronbach's alphas for parent-child relationships were .87 and .85, respectively.

Test anxiety

Test anxiety was assessed using six items from the test anxiety scale (Guo, 2001). The response format for the items ranged from 1 (strongly inconsistent) to 4 (strongly consistent). Scores were categorized as follows: 0-6 points indicated no test anxiety, 7-12 points indicated mild test anxiety, 13-18 points denoted moderate test anxiety, and scores above 18 points indicated severe test anxiety. An example item is "I was on pins and needles a few days before the exam." In the current study, the Cronbach's alpha for test anxiety in Grade 5 was .83.

Study burden

Study burden was gauged using fifteen items from the study burden scale (Zheng et al., 2004). Response formats ranged from 1 (never) to 4 (severe degree). An example item is "How do you think about your daily homework?" Higher scores indicated a more pronounced study burden. In Grades 5 and 9, Cronbach's alphas for study burden were .88 and .89, respectively.

Results

Study Objective

The primary aim of this investigation was to discern the impact of learning interest, emotional regulation (encompassing self-efficacy, willpower, and time management skills), learning habits, interpersonal relationships (specifically, teacher-student relationships, peer relationships, and parent-child relationships), test anxiety, and study burden on the academic achievement of Chinese adolescents in Grades 5 and 9. The study sought to address three central inquiries: first, the applicability of Positive Youth Development (PYD) theory in gauging Chinese youth; second, the roles of positive qualities in connecting to academic competence; and third, the relationships between academic achievement and outcomes associated with negative development. Although item response rates were below 2% across the variables in this report, this had no discernible impact on the overall reliability of the study's conclusions.

Testing correlations between learning interest and academic achievement

To assess the hypothesis positing a significant correlation between learning interest and academic achievement, we adhered to the guidelines outlined by He Juan (2009) and Tang Yawei (2012) for testing interaction effects. According to He Juan (2009), the first criterion necessitates a positive correlation between the predictor and the outcome. Tang Yawei's (2012) second criterion asserts that learning interest

should positively predict adolescents' academic achievement; that is, higher levels of learning interest should correspond to better academic performance. Figures 1 and 2 encapsulate the outcomes of the significant correlation tests conducted. Subsequent analysis revealed a decline in students' learning interest with increasing age, particularly in the domain of mathematics.

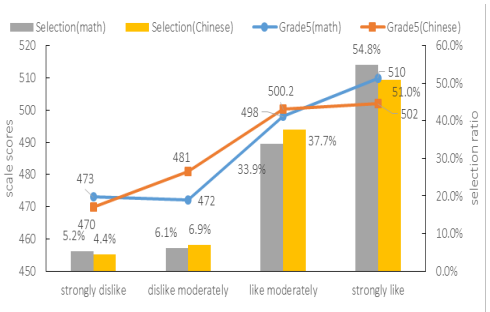

Fig1 correlations between learning interest and academic achievement

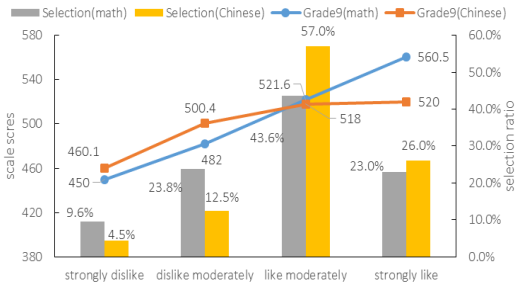

Fig2 correlations between learning interest and academic achievement

Correlation Testing: Emotional Regulation and Academic Achievement

Our hypothesis posited a variance in the developmental levels of positive qualities among adolescents during different periods. Figure 3 illustrates that the levels of students' self-efficacy, willpower, and time management skills in Grade 5 surpass those in Grade 9.

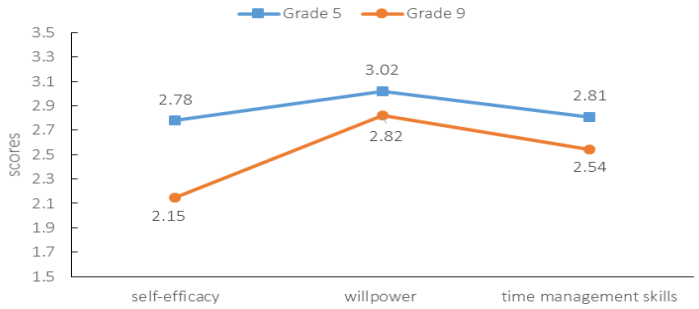

Fig3 the average scores of emotional regulation

Testing the Relationship between Positive Qualities and Expected Academic Competence

Subsequently, we conducted an analysis to assess the significance of the relationship between positive qualities and expected academic competence in Grades 5 and 9. Through in-depth correlation analysis, we observed that a heightened level of self-efficacy, willpower, and time management skills among youth was associated with improved academic achievements in both Chinese and mathematics. The coefficients supporting this finding are systematically outlined in Table 1.

Table 1 Correlations between the emotional regulation and academic achievement of adolescents

	Grade5(math)	Grade5(Chinese)	Grade9(math)	Grade9(Chinese)
self-efficacy	0.051**	0.039**	0.143**	0.039**
willpower	0.162**	0.167**	0.083**	0.072**
time management skills	0.182**	0.186**	0.063**	0.052**

Note：**p < .01

Correlation Testing: Learning Habits and Academic Achievement

Examining the correlations between learning habits and academic achievement revealed age-related differences in the developmental levels of learning habits. As depicted in Figure 4, the older the youth, the less favorable their learning habits. Specifically, the learning habits of adolescents in Grade 5 were superior to those in Grade 9.

To further investigate the relationship between learning habits and academic achievement, participants were categorized into two groups based on their learning habits: those with good learning habits and those with poor learning habits. The grouping criteria involved designating the highest-scoring 27% as the "good learning habits" group and the lowest 27% as the "poor learning habits" group. The analy-

sis unveiled that youth with commendable learning habits exhibited superior academic achievement compared to their counterparts with less favorable learning habits in both Grade 5 and Grade 9, as illustrated in Figure 5.

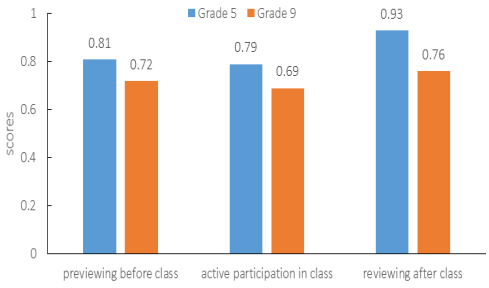

Fig4 average score of thre learning habits

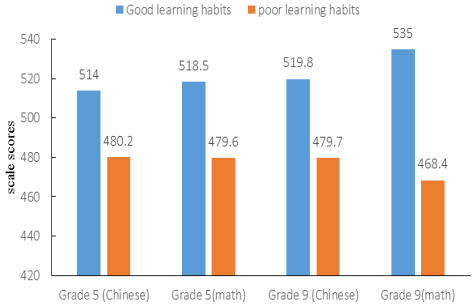

Fig5 correlations between learning habits and academic achievement

Correlation Testing: Interpersonal Relationship and Academic Achievement

Examining the correlations between interpersonal relationships and academic achievement unveiled notable distinctions between Grade 5 and Grade 9, as depicted in Figure 6. The average scores for teacher-student relationships (Chinese), teacher-student relationships (math), peer relationships, and parent-child relationships among Grade 5 adolescents were higher than those of their Grade 9 counterparts. However, the analysis also revealed a nuanced pattern, indicating that while adolescents in Grade 9 tended to have positive peer relationships, their teacher-student relationships were less favorable.

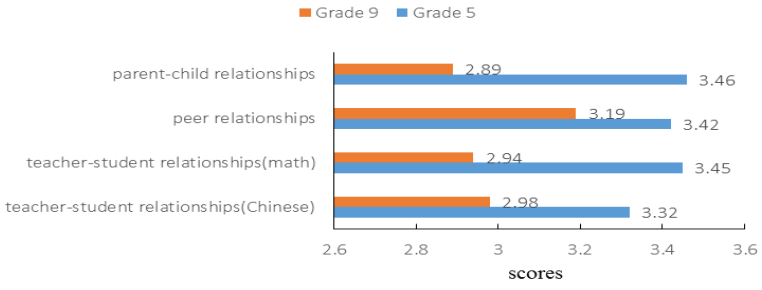

Fig6 average score of interpersonal communication

Correlation Analysis: Teacher-Student Relationship, Peer Relationships, and Parent-Child Relationship with Academic Achievement

Upon conducting correlation analyses between teacher-student relationships, peer relationships, parent-child relationships, and adolescents' academic achievement, we identified a positive correlation between these relationships and the performance in Chinese and mathematics among the youth. In simpler terms, a stronger teacher-student relationship, positive peer relationships, and supportive parent-child relationships were associated with higher scores in both Chinese and mathematics, as outlined in Table 2.

Table 2 correlations between the interpersonal communication and academic achievement of adolescents

	Grade5(math)	Grade5(Chinese)	Grade9(math)	Grade9(Chinese)
teacher-student relationships	0.143**	0.158**	0.216**	0.143**
peer relationships	0.157**	0.161**	0.103**	0.074**
parent-child relationships	0.088**	0.119**	0.178**	0.098**

Note:**p < .01

Correlation Testing: Negative Development Outcomes and Academic Achievement

Following the examination of correlations between various positive qualities and academic achievement, we extended our analysis to explore the correlation between academic achievement and negative development outcomes, specifically, test anxiety and study burden. As illustrated in Figure 7, our analysis of the correlation between adolescents' test anxiety and academic achievement revealed that students with mild test anxiety exhibited the highest academic achievement, followed by those without test anxiety, and then students with moderate and severe test anxiety.

The findings indicated that as the level of adolescents' test anxiety gradually increased, academic achievement declined, particularly in mathematics. Moderate and severe anxiety had a discernibly negative impact on their academic performance. Consequently, it is imperative for stakeholders such as schools, teachers, and parents to guide youth in adopting a correct perspective toward tests and provide additional psychological counseling to mitigate the adverse effects of anxiety on academic achievement.

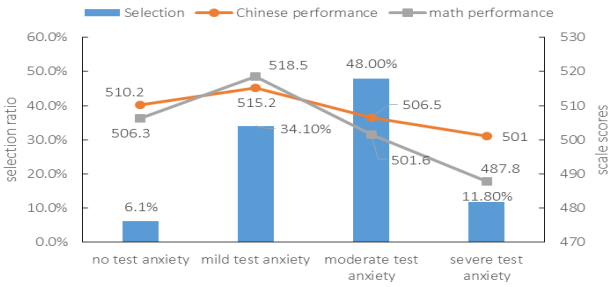

Fig 7 correlations between test anxiety and academic achievement

Correlation Testing: Study Burden and Academic Achievement

Our final round of testing revealed a substantial relationship between aspects of study burden in Grades 5 and 9 and academic achievement. As depicted in Figure 8, adolescents with higher levels of subjective study burden demonstrated lower scale scores; however, they exhibited superior learning performance in Grade 5. Notably, approximately 41% of youth in Grade 5 perceived their study burden as not heavy, while only around 20% considered it of "moderate degree" or "severe degree."

In Grade 9, a noteworthy shift was observed, where 75.2% of youth who perceived their study burden as "relatively heavy" or "a little heavy" achieved the highest scale scores. Conversely, 24.8% of youth who considered their study burden as "not heavy" or "heavy" obtained lower scale scores, as illustrated in Figure 9.

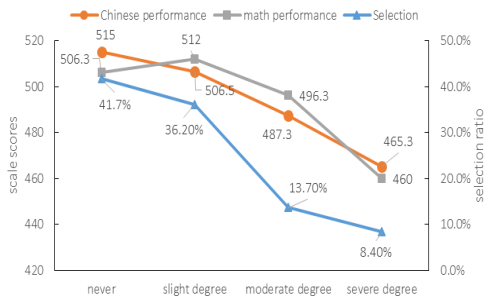

Fig8 correlations between study burden and academic achievement in Grade5

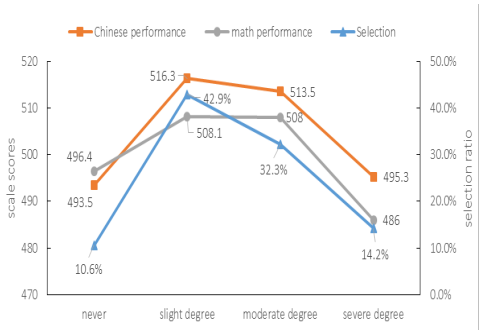

Fig9 correlations between study burden and academic achievement in Grade 9

Discussion

Positive Traits and their Impact on Adolescents' Academic Achievement

Positive traits play a pivotal role in fostering adolescents' academic success, as indicated by the positive correlation between Positive Youth Development (PYD) benefits and learning outcomes, social behavior, and overall competence. The findings revealed that higher scores in positive qualities tests were associated with enhanced academic achievement (Lerner et al., 2008; Zhang, 2013). However, it is noteworthy that students exhibited varying levels of PYD at different ages. This study highlighted that students demonstrated better positive qualities in Grade 5 compared to Grade 9 across dimensions such as learning interest, self-efficacy, willpower, time management skills, learning habits, teacher-student relationship, peer relationships, and parent-child relationship. These results align with prior research (Rotgans and Henk, 2011; Tang, 2011; Yan, 2011).

In Grade 9, there was not a significant increase in the positive developmental level of teacher-student relationships. This phenomenon could be attributed to the growing independence of students with age, coupled with the advancement of knowledge and skills. Additionally, the developmental levels of various positive qualities were not uniform. Grades 5 and 9 exhibited that the developmental levels of willpower

and peer relationships were superior to other positive qualities within the same dimension.

Distinct Values of Positive Qualities in Influencing Academic Achievement

It is essential to emphasize that each type of positive quality holds unique value and exerts varying influences on academic achievement. Our findings underscore the significant positive roles played by students' learning interest and learning habits in shaping their academic success—a result corroborated by previous studies (Feng, 2002; Murray and Carol, 2003; Hu, 2013; Yan, 2014). Learning interest, being an internal driving force, effectively motivates individuals to complete actions, with students exhibiting high levels of learning interest achieving excellent academic outcomes (Zhang and Zhang, 1996; Hidi, 2001; He, 2009). According to Bloom, two prerequisites for student learning are cognitive ability, encompassing the acquisition of appropriate knowledge for new subjects, and emotional readiness, which includes learning interest and self-confidence. Previous research has indicated that learning achievement is dependent on 20 percent intelligence factors and 80 percent non-intelligence factors, where learning habits play a crucial role among non-intelligence factors, encompassing faith, will, habits, interests, personality, and more (Fan, 2007).

A plausible explanation for the influence of positive qualities on adolescents' academic achievement lies in the differences in breadth and strength among these qualities. Therefore, while emphasizing the overall impact of positive traits, it is imperative not to overlook the unique contributions of specific positive qualities.

Complex Relationships Between Positive Qualities and Youth Development Issues

Our investigation unveiled a negative correlation between positive qualities and reported problems in youth development programs, such as test anxiety and study burden (Park, 2006b; Li et al., 2010). However, the development trajectories of positive qualities and problem behaviors did not follow a simple negative phase relationship, as supported by previous studies (Phelps, 2009). While test anxiety generally had a negative impact on academic achievement, earlier research suggested that maintaining moderate anxiety required a special mindset, with the intensity needed for competition fostering learning at the highest level (Guo, 2001). The influence of study burden on academic achievement did not differ across grades but exhibited variations across subjects. In Grade 5, study burden negatively impacted students' academic achievement. Conversely, adolescents who perceived their study burden as "heavy" or "a bit heavy" achieved the best outcomes in Grade 9, supporting findings from prior studies on study burden (Tang and Fu, 2007; Liu, 2011). However, the extent of the negative impact of study burden on academic achievement was more pronounced in mathematics than in Chinese, a result inconsistent with previous research (Lerner et al., 2008; Zhang, 2013). Further exploration is needed to understand how the outcomes of negative development influence adolescents' academic achievement.

Methodological Limitations and Suggestions for Future Research

The methodology employed in the current study has its limitations, necessitating further exploration in future research. Firstly, our assessment focused solely on academic ability, confidence, and connection, constituting only a fraction of the Positive Youth Development (PYD) construct in the 5C model. This approach may constrain our ability to comprehensively validate this construct. Including inquiries related to positive cognitive abilities, promoting a healthy lifestyle, personal and social values, and family environment could offer a more nuanced understanding of their influence on adolescents' academic achievement.

Secondly, our study did not delve into potential explanations for the absence of certain influencing factors on adolescents' academic achievement, such as school-running levels, school management abilities, and the integrated quality of teachers. Future research could benefit from exploring these additional dimensions to provide a more comprehensive picture.

Finally, it is crucial to underscore the importance of considering the educational quality divide between urban and rural areas. Future investigations should pay careful attention to this urban-rural gap in education quality to ensure a more inclusive and representative analysis.

Findings

The findings of the present study yield several noteworthy conclusions. Firstly, positive qualities exhibited a positive correlation with favorable developmental outcomes, indicating their predictive capacity for positive academic achievements. Simultaneously, positive qualities demonstrated a negative correlation with negative developmental outcomes, serving as negative predictors for test anxiety and academic

burden.

Secondly, a significant age disparity in positive qualities was observed, with younger students displaying a higher positive developmental level compared to their older counterparts.

Thirdly, the study revealed that each positive quality exerted distinct effects on academic achievement, exhibiting variations across categories and subjects.

Fourthly, it is imperative to recognize that the correlation between negative developmental outcomes and academic achievement is not solely negative; in fact, it may tend to be positive in certain instances.

Consequently, positive qualities play a pivotal role in fostering youth's academic achievement. Irrespective of the existing academic competence of adolescents, researchers should persist in acknowledging the significance of enhancing students' academic competence through the development of relevant educational contexts, encompassing their school, family, and social environment. Educational policymakers and school personnel should devise initiatives aimed at cultivating positive qualities in students, with special attention to the most influential predictors of non-intelligence factors identified in our study, such as learning interest and learning habits. Concurrently, policies and programs should address the outcomes of negative development as an effective strategy for positively influencing some students' academic achievement.

References

[1] An, B.X. (2004).Parenting style, parent-adolescent communication and their effects on adolescents' social adjustment. Shanxi Normal University of dissertation for professional master degree.

[2] Benson, P. L. (2003).Developmental assets and asset-building community: Conceptual and empirical foundations. In R. M. Lerner & P. L. Benson (Eds.), Developmental assets and asset-building communities: Implications for research, policy, and practice. (pp.19-43). New York: Kluwer Academic/Plenum Publishers.

[3] Benson, P.L., Leffert, N., Scales, P.C., & Blyth, D.A. (1998). Beyond the 'Village' rhetoric: Creating Healthy communities for children and adolescents. Applied Developmental Science, 2 (3), 138-159.

[4] Bowers, E. P., Li, Y.B., Kiely, M. K., Brittian, A., Lerner, J. V., Lerner, R. M. (2010). The Five Cs Model of Positive Youth Development: A longitudinal analysis of confirmatory factor structure and measurement invariance. J Youth Adolescence, 39,720–735.

[5] Catalano, R.F., Berglund, M.L., Ryan, J.A. M., Lonczak, H.S., & Hawkins, J, D. (2002).Positive youth development in the United States: research findings on evaluations of positive youth development programs. Prevention & Treatment, 5(1), 15.

[6] Chase, Paul A., Hilliard, Lacey, J., Geldhof, G. John., Warren, D. J. A., and Lerner, R. M.(2014) . Academic achievement in the high school years: The changing role of school. J Youth Adolescence, 43,884–896. DOI 10.1007/s10964-013-0085-4.

[7] Cheng, G.P., Zhu, X.L., & Ye, L.L. (1997).The revision of the Shanghai norm of the self-descriptive questionnaire. Psychological Science, 20(6), 499-503.

[8] Murray, C., & Wren, C.T. (2003).Cognitive, academic, and attitudinal predictors of the grade point averages of college students with learning disabilities. Journal of Learning Disabilities, 36(5), 407.

[9] Chu, X.Y. (2006). Experimental research in influence of different climates on junior high school students' learning interests of physical education and relationship between students and theirs. East China Normal University of dissertation for professional master degree.

[10] Csikszentmihalyi, M., & Rathunde, K. (1998). The development of the person: An experiential perspective on the ontogenesis of psychological complexity. In W. Damon (Series Ed.) & R.M. Lerner (Ed.), Handbook of child psychology: Vol.1 Theoretical models of human development. (5th ed., pp. 635–684). New York: Wiley.

[11] Fan, W. (2007). Raising the study habit of elementary students: A practice research. Central China Normal University of dissertation for professional master degree.

[12] Feng, H.Y. (2002).Investing and analyzing the present state of students' study habits in senior middle school. Journal of Sichuan Teachers College (Philosophy and Social Sciences), 3,114-117.

[13] Fredricks, J. A., Blumenfeld, P., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of Educational Research, 74, 59–109.

[14] Guan, Q., Meng, W.J., & Keller, John. (2009). Development of the positive mental characters scale for Chinese school students. Chinese Journal of Special Education, 4, 71-76.

[15] Guo, X.C. (2001) Study on bothering the test anxiety about middle school students' effect on the study achievement. Guangxi Normal University of dissertation for professional master degree.

[16] He, J. (2009). The college student's learning interest and correlate way's research. Shanxi University of dissertation for professional master degree.

[17] Hidi, S. (2001). Interest, reading, and learning: theoretical and practical on Side Rations. Education Psychology Review, 13,191-20.

[18] Hu, J.D. (2013). Relationships between students' interest and school achievement in junior physics. The Science Education Article Collects, 3, 165-176.

[19] Huang, X.T., & Zhang, Z. J. (2001). The compiling of adolescence time management disposition inventory. Acta Psychologica Sinica, 33(4), 338-343.

[20] Jeličič, H., Bobek, D., Phelps, E.D., Lerner, J.V., & Lerner, R.M. (2007).Using positive youth development to predict contribution and risk behaviors in early adolescence: Findings from the first two waves of the 4-H study of positive youth development. International Journal of Behavioral Development, 31(3), 263–273.

[21] Rotgans, J. I., & Schmidt, H. G. (2011). Situational interest and academic achievement in the active-learning classroom. Learning and Instruction, 21, 58 -67.

[22] Lerner, R.M. (2004). Liberty: Thriving and civic engagement among America's youth. Thousand Oaks, CA: Sage Publications, Inc.

[23] Lerner, R. M., Lerner, J.V., Almerigi, J. B., Theokas, C., Phelps, E., & Gestsdottir, S., et al. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4-H study of positive youth development. Journal of Early Adolescence, 25(1), 17-71.

[24] Lerner, R. M., & Israeloff, R. (2008). The good teen: Rescuing adolescence from the myths of the storm and stress years. Random House Digital, Inc.

[25] Lewin-Bizan, S., Bowers, E., & Lerner, R.M. (2010). One good thing leads to another: Cascades of positive youth development among American adolescents. Development and Psychopathology, 22, 759–770.

[26] Li, Y.B., Lerner, J. V., & Lerner, R. M. (2010). Personal and ecological assets and academic competence in early adolescence: The mediating role of school engagement. J Youth Adolescence, 39,801–815.

[27] Liu, D. (2011).The relationship among attitude toward academic burden, resilience and learning engagement for senior middle school students. Hebei Normal University of dissertation for professional master degree.

[28] Lu, G.H., & Liang, B.Y. (2008). Development of hardiness scale. Studies of psychology and behavior, 6(2), 103-106.

[29] Luster, T., & McAdoo, H.P. (1996). Family and child influences on educational attainment: A secondary analysis of the high/scope Perry Preschool data. Developmental Psychology, 32(1), 26-39.

[30] Park, N. (2004). Character strengths and positive youth development. The annals of American academy of political and social, 591, 40-54.

[31] Park, N., Peterson, C., & Seligman, M. (2004). Strengths of character and well-being. Journal of Social and Clinical Psychology, 23, 603-619. doi:10.1521/jscp.23.5.603.50748.

[32] Park N., & Peterson C. (2006a). Character strengths and happiness among young children: Content analysis of parental descriptions. Journal of Happiness Studies, 7, 323-341.

[33] Park N., & Peterson C.(2006b).Methodological issues in positive psychology and the assessment of character strengths .In A .D

.Ong &M .van Dulmen (Eds .), Handbook of methods in positive psychology.(pp. 292-305). New York: Oxford University Press.

[34] Park, N., & Peterson, C. (2008). Positive psychology and character strengths: Application to strengths-based school counseling. Professional School Counseling, 12, 85-92. doi: 10.5330/PSC.n.2010-12.85.

[35] Phelps, E., Zimmerman, S., Warren, A.E.A., Jelicic, H., Eye, V. A., & Lerner, R.M. (2009). The structure and developmental course of positive youth development (PYD) in early adolescence: Implications for theory and practice. Journal of Applied Developmental Psychology, 30(5), 571–584.

[36] Ren, J., & Ye, H.S. (2004). Activeness: The core of value of modern psychological study. Journal of Shaanxi Normal University (Philosophy and Social Sciences Edition), 33(4):106-112.

[37] Scales,P., & Leffert, N.(1999). Developmental assets: A synthesis of the scientific research on adolescent development. Minneapolis, MN: Search Institute.

[38] Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. American Psychologist, 55, 5-14.

[39] Seligman, M.E.P. (2002). Authentic happiness. New York: Free Press.

[40] Seligman, A. (2004). Modest claims: Dialogues and essays on tolerance and tradition. University of Notre Dame Press.

[41] Sheldon, K.M., & King, L. (2001). Why Positive Psychology Is Necessary. American Psychologist, 56 (3), 216.

[42] Shernoff, D. J., & Schmidt, J. A. (2008). Further evidence of an engagement-achievement paradox among U.S. high school students. Journal of Youth and Adolescence, 37, 564–580.

[43] Sun, F.P. (2010).The research of the relationship between academic emotions and academic achievement and their influencing factors. Ningbo University of dissertation for professional master degree.

[44] Tang, L.C., & Fu, L. J. (2007). Empirical study on the relationship between lessons burden and academic

[45] achievement. Shanghai Research on Education, 12, 32-36.

[46] Tang, Y.W. (2012).The relationship among college students' achievement goals, interest and performance. Northeast Normal University of dissertation for professional master degree.

[47] Tang, P. (2011). Adaptability Study of the Subject Interest Scales of Chinese and Mathematics for 7-9 Grades. Hunan Normal University of Dissertation for Professional Master Degree.

[48] Yan, Y. (2014). A study on the relationship among junior high school students' academic Emotions, learning interest and mathematics grades. Northeast Normal University of dissertation for professional master degree.

[49] Yan, Y.Q. (2011). Development of the junior middle school student learning habits scale and the correlation research. East China Normal University of dissertation for professional master degree.

[50] Zhang, C. (2013). Positive youth development: Composition, measurement and the roles. Northeast Normal University of dissertation for professional doctor degree.

[51] Zhang, F., Deng, C. Q., & Shen, M.W. (2004). Development the student attitude scale for studying burden. Psychological Science, 27(2), 449-452.

[52] Zhang, J. X., & Schwarzer, R. (1995). Measuring optimistic self-beliefs: A Chinese adaptation of the General Self-Efficacy Scale. Psychologia: An International Journal of Psychology in the Orient, 38 (3), 174-181.

[53] Zhang, K. & Zhang, B.Y. (1996). Impact of intersect on text comprehension. Acta Psychologica Sinica, 28(3), 284-289.

Yu Jie, born in October 1989, female, Lecturer, Master, currently working in Chongqing Educational Evaluation Institute, engaged in the research of teaching Chinese as a foreign language and Education.

Tian Tengfei, Chongqing Educational Evaluation Institute.

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The Impact of Smart City Policies on Urban Technological Innovation Capacity: A Case Study of the Pearl River Delta Region Based on the Double Difference Method

Kaihang Yu

Beijing National Day School, Beijing 100039, China.

Abstract: With the acceleration of the global urbanization process, smart city policies are playing an increasingly important role in urban planning and management. The purpose of this paper is to explore the impact of smart city policy on the innovation ability of city science and technology, and to analyze the policy by using the method of difference-difference. First of all, this paper reviews the development of smart city policy and its implementation in different regions of China. Secondly, this paper systematically studies the impact of smart city policies on urban science and technology innovation through the difference-difference method and empirical research. The study found that smart city policies can significantly promote technological innovation activities in cities, improve innovation capacity, and promote economic growth. Finally, the paper explores the potential impact of smart city policies on urban sustainable development, as well as some possible policy recommendations. To sum up, smart city policies play a key role in shaping a city's scientific and technological innovation capacity and are of great significance for future urban development. The findings of this study can help policymakers better understand the impact of smart city policies to develop more targeted and effective policy measures to promote the integration of urban science and technology innovation with sustainable development.

Keywords: smart city, DID policy evaluation, scientific and technological innovation

1. Introduction

1.1 Research Background

With the advancement of technology, the concept of "Smart Cities" was first proposed by IBM in 2010. A "Smart City" refers to the application of intelligent computing technologies such as the Internet of Things, cloud computing, big data, and integrated spatial geographic information in urban planning, design, construction, management, and operation. This integration enables key infrastructure components and services of cities, including urban management, education, healthcare, real estate, transportation, utilities, and public safety, to be more interconnected, efficient, and intelligent. This, in turn, provides citizens with a better quality of life and work, creates a more favorable business environment for enterprises, and empowers the government to operate more efficiently and effectively. The concept of "Smart Cities" has gained widespread attention in China due to its potential to address urban challenges, particularly in densely populated areas, and to promote sustainability. In 2012, the Chinese government established the first batch of pilot "Smart Cities" (with participation from 90 cities across 28 provinces). On August 29, 2014, following the approval of the State Council, eight ministries, including the National Development and Reform Commission, the Ministry of Industry and Information Technology, the Ministry of Science and Technology, the Ministry of Public Security, the Ministry of Finance, the Ministry of Natural Resources, the Ministry of Housing and Urban-Rural Development, and the Ministry of Transport, issued the "Guidance on Promoting the Healthy Development of Smart Cities." This guidance required regions and relevant departments to implement the various tasks outlined in the document to ensure the healthy and orderly development of "Smart City" construction.

During the implementation of "Smart City" policies, many cities have experienced smooth policy execution. As of early April 2020, the Ministry of Housing and Urban-Rural Development had announced 290 pilot "Smart Cities," making China the largest implementing country for "Smart City" construction globally. Technological innovation capacity is a crucial indicator for assessing a city's development level, and "Smart City" policies have a significant impact on the development of a city's technological innovation capacity. Many pilot "Smart

City" cities have introduced new initiatives in technological innovation. For example, Shanghai has established an urban optical network, developed various technologies for wireless broadband, such as 5G and WIFI, and accelerated research and application of new technologies like smart technology, cloud computing, and the Internet of Things, promoting the convergence of the three networks. Guangzhou has built the first official wireless city portal website "led by the government and collaborated with operators" to promote efficient and convenient wireless broadband network services for citizens, businesses, and various sectors of society. In August 2022, China Telecom, in collaboration with Shenzhen Nanshan District, launched the benchmark project of an intelligent city, which leverages 5G to enable the digital transformation of Shenzhen, and it was selected as one of the "Top 10 5G Application Cases in 2022."。

1.2 Significance of the Study

After the emergence of "Smart City" policies, these policies have had a significant impact on various aspects of daily life, such as healthcare, transportation, logistics, finance, communication, education, energy, and environmental protection. However, there is relatively limited research on the specific impacts of "Smart City" policies on various specific aspects. Analyzing the effects brought about by "Smart City" policies in specific areas, as found in relevant literature, can promote China's economic and social development in a well-rounded and expedited manner. Technological innovation, as the primary driving force for industry revitalization and transformation, contributes to the cyclical development of urban industries and injects momentum into economic growth. Technological innovation capacity is an important indicator for assessing a city's level of development, reflecting the integrity and rationality of the city's related industrial structure.。

At present, "Smart Cities" are in the qualitative analysis stage, with limited literature available on the impact of "Smart City" policies on specific regions. There is even less research on the impact of "Smart Cities" on technological innovation capacity. This study focuses on investigating the impact of "Smart City" policies on technological innovation capacity. By combining "Smart City" policies with urban technological innovation capacity, this research enriches the study of factors influencing technological innovation capacity in cities. Additionally, the study employs the Difference in Differences (DID) method, using the Pearl River Delta region as an example, to collect relevant data and assess the impact of "Smart City" development on urban technological innovation capacity. The aim is to provide policy recommendations for the innovative development of "Smart Cities."

1.3 Literature Review

After the concept of "Smart Cities" was introduced, numerous articles from both domestic and international sources have researched and interpreted this concept. IBM, as the originator of the "Smart City" slogan, has established an evaluation system for Smart Cities based on seven aspects, covering communication systems, transportation systems, water supply systems, energy systems, municipal services, business development, and residents' daily lives. Scholars have different perspectives on the constituent elements of "Smart Cities." Nam and Theresa (2011) describe "Smart Cities" as cities formed by the combination of technology, people, and institutions. Giffinger et al. (2015) believe that the assessment of "Smart Cities" should primarily focus on six dimensions: convenient transportation and information flow, residents' quality and talents, residents' quality of life, economic development level, social participation and governance level, and natural resources and environmental protection.

Regarding urban technological innovation capacity, various scholars have approached it from different angles. Regarding urban technological innovation competitiveness, Yang Yunchao and others consider it as the concretization of the concept of urban competitiveness in the field of technological innovation, constituting an essential component of urban competitiveness. Kresl et al. define urban competitiveness as the ability to provide more jobs, higher income, better culture, superior governance, and a more beautiful environment to meet residents' needs. In terms of evaluation indicators for urban technological innovation capacity, Sun Yu and others conduct assessments based on four aspects: economic investment, technological support, infrastructure, and educational reserves. Zhang Zhenshan et al. believe that direct evaluation methods should be used to assess urban technological innovation competitiveness. Gonzalez-Pernia et al. construct a technological innovation indicator system from the perspective of inputs such as R&D personnel and R&D funding. Some scholars directly measure urban technological innovation competitiveness based on technological innovation output.

Regarding the impact of "Smart City" policies on urban innovation, some scholars have researched it from the perspectives of technological innovation and scientific innovation. Liu Qiao et al. (2018) suggest that "Smart City" construction promotes the improvement of the technological innovation level in cities and is of great significance for enhancing urban innovation capacity. Cheng Kaiming's research demonstrates a strong positive correlation between urbanization and technological innovation, and "Smart City" policies can accelerate the process of urbanization. Wang Xiaoxia (2022) posits that the progress and level of "Smart City" construction significantly affect urban technological innovation, emphasizing the need for cities to effectively balance "Smart City" construction and urban technological innovation during the process of modernization.

2. Research Design

2.1 Model Construction

This study employs the Double Difference method (DID, also known as the "Difference in Differences" method) to assess the technological innovation capacity of pilot cities [2]. The Double Difference method (Difference in Differences) involves calculating the difference between the "experimental group" and the "control group" under the intervention increment using data from observational studies. The Double Difference method can be understood as a simulation of random assignment experiments to verify causality in the absence of randomized trials. This research method is widely used in policy effect evaluation studies to investigate the specific impacts of a given policy. In the model, the "experimental group" refers to the subjects affected by the relevant policies, while the "control group" refers to those not affected by the relevant policies. The first difference involves performing two difference calculations (subtraction) for both the experimental and control groups before and after policy implementation, representing the relative changes in each group before and after the intervention. The second difference involves taking a second difference calculation of the two sets of differences, thereby eliminating the inherent differences between the experimental and control groups, ultimately revealing the static effect brought about by the policy. The basic model of the Double Difference method can generally be represented as:

$$Y_{it}= \alpha_0+\alpha_1 du +\alpha_2 dt +\alpha_3 du*dt +\varepsilon_{it}$$

In this context: The experimental group is assigned a value of 1, while the control group is assigned a value of 0, corresponding to assigning dt in the model as 1 and 0, respectively. Pre-policy implementation is assigned a value of 0, and post-policy implementation is assigned a value of 1, corresponding to assigning du in the model as 1 and 0, respectively. The first difference yields two sets of differences, α1+α3 and α1. The second difference involves taking another difference of the two sets of differences obtained from the first difference, resulting in the static difference α3. The model's significance is as described in Table 1.

Table 1: Explanation of the DID Model

	Pre-policy implementation（U=0）	post-policy implementation(U=1)	Difference between the two
Experimental group（T=1）	$\alpha_0+\alpha_2$	$\alpha_0+\alpha_1+\alpha_2+\alpha_3$	$\alpha_1+\alpha_3$
control group（T=0）	α_0	$\alpha_0+\alpha_1$	α_1
DID			α_3

In this study, the sample is divided into the "experimental group" and the "control group," where the former comprises cities that have implemented smart city policies, and the latter includes cities that have not implemented these policies. Since the number of patent applications in a city each year often provides a visual representation of the city's technological innovation capacity, the number of patent applications in a city is chosen as the variable to measure innovation levels. Virtual variables are introduced in the model, with the experimental group (pilot cities) assigned a value of 1, indicating that the corresponding cities have implemented the policy, and the control group (non-pilot cities) assigned a value of 0, signifying that the corresponding cities have not yet implemented the policy. Time dummy variables are also introduced, with the year of policy implementation set as 1 and the other years set as 0. Based on the fundamental double difference model, the double difference model constructed in this paper is as follows:

$$PT_{it}= \alpha_0+ \alpha_1 T_{i.t}+\alpha_2 U_{i.t} + \alpha_3 DID+\sum\alpha_i X_{i.t} + \lambda_{i.t}$$

PTi.t represents the number of patent applications in a city and serves as the explanatory variable for measuring the city's innovation level. Tit represents the time of smart city policy implementation (in 2012, with a value of 1 for the post-implementation period in the experimental group and 0 for the rest), and its coefficient reflects the implementation effect of smart city policies in the pilot cities. Ui.t represents the implementation of smart city policies, assigned a value of 1 for the experimental group and 0 for the control group. Xi.t represents the set of control variables. DID represents the policy effect virtual variable, which is the product of T and U. α0 is a constant, where i denotes one of the sample regions, and t represents a specific year within the sample regions. λi.t represents the random error term.

2.2 Variable Setup and Data Description

This study primarily focuses on nine cities in the Pearl River Delta region, with each city serving as the fundamental unit of analysis. These nine cities are Guangzhou, Shenzhen, Zhuhai, Foshan, Dongguan, Zhongshan, Huizhou, Jiangmen, and Zhaoqing. Additionally, this study collected patent application data for these cities, sourced from the official website of the National Intellectual Property Administration. The data consists of the total number of Chinese patents applied for by each city on an annual basis from 2006 to 2020, including patents in the categories of invention, utility model, and design. These data are used to assess the technological innovation capacity of each city. Furthermore, the list of smart city pilot cities, published in 2012, was obtained through a search on the Baidu search engine.

Since the concept of smart cities was introduced in 2009, China officially established its first batch of smart city pilot cities in 2012. The initial group of smart city pilot cities included 90 cities at the district and county levels. This study defines the research area as the Pearl River Delta region and designates the five pilot cities in this region that implemented the policy in 2012 as the experimental group (comprising Guangzhou, Shenzhen, Zhuhai, Foshan, and Dongguan). The study also defines the four non-pilot cities in the same region that did not implement the policy as the control group (comprising Zhongshan, Huizhou, Jiangmen, and Zhaoqing).

In this paper, the dependent variable established is the number of patent applications, denoted as PT, which serves as an assessment of a city's technological innovation capacity. The independent variable is DID, representing a policy effect dummy variable, and it can also be expressed as the product of T and U. It is set to 1 for the year of policy implementation and subsequent years, while it is set to 0 for other years. Additionally, to control for other factors that may influence a city's technological innovation level, this paper introduces control variables, denoted as X. These control variables specifically include: (1) the city's economic development level, measured using the city's economic growth rate. A higher growth rate signifies a higher level of economic development. (2) City size, measured by the total population at the end of the year. A larger value indicates a larger city size. (3) Government support, assessed using financial innovation investment in science and technology. A larger value indicates greater government support for research and development. (4) Cultural and educational level, determined by the number of regular higher education institutions in the city. A larger value represents a higher level of cultural and educational development. The names and explanations of each variable are provided in Table 2.

Table 2: Variable Categories Descriptions and Explanations

Variable Category	Variable Name	Variable Description	Data Source
Dependent Variable	Patent Applications（PT）	Assessment of City Technological Innovation Capacity	National Intellectual Property Administration Website
Independent Variable	Policy Effect Dummy（DID）	Set to 1 for post-policy implementation years, 0 for others	Policy implementation year obtained through Baidu search engine
Control Variables	Regional GDP（RGDP）	City's Economic Development Level	Guangdong Provincial Statistical Information Website
	City Size（POPU）	Total Population at Year-End	
	Government Support(RIEF)	Government Investment in City Technological Innovation	
	Cultural and Educational Level(NOC)	Number of Regular Higher Education Institutions in City	

2.3 Descriptive Statistics of Variables

This article includes panel data of 9 prefecture-level cities in the Pearl River Delta region from 2006 to 2020, among which there are 5 pilot cities as the experimental group, and 4 non-pilot cities as the control group. The descriptive statistics of the data are shown in Table 3:

Table 3 Data Statistics Information

	Sample Size	Minimum	Maximum	Mean	Standard Deviation
treated	135	0	1	0.56	0.50
Jsbl (Explanatory Variable)	135	0	1	0.33	0.47
LnPT (Log of Patent Applications)	135	3.74	12.44	8.74	1.74
LnPOPU (Log of Year-end Total Population)	135	4.74	7.47	6.26	0.60
LnGDP (Log of Gross Regional Product)	135	2.50	10.23	7.93	1.55
LnRIEF (Log of Government Support Level)	135	0	7.32	4.04	1.58
LnNC (Log of Cultural and Educational Level)	135	0	4.41	1.95	1.01
Effective N (listwise)	135				

3. Results Analysis

To verify the hypotheses proposed earlier, the results analysis section will conduct a baseline regression analysis and parallel trend test on the collected data. The following text will specifically explain the rationale and operational process of these two methods.

3.1 Baseline Regression

For the errors in the model, this paper mainly considers factors such as time trend effects and selection bias. Time trend effect refers to the phenomenon where the technological innovation capability of both control group and experimental group cities is improving year by year. Selection bias refers to the fact that cities implementing smart city policies inherently possess higher technological innovation capabilities. Subsequently, a baseline regression was conducted on the sample data. This involved analyzing the baseline regression results for four models. Model 1 did not fix time and individual, Model 3 considered the implementation of policy more than Model 1, Model 4 fixed time and individual but did not consider control variables (such as factors of urban economic development), and Model 6, while fixing time and individual, also considered control variables, thereby eliminating the impacts of selection bias and time trend effects. Models 2 and 5 both considered time but not individuals, with Model 5 taking into account more control variable factors compared to Model 2. The results of the baseline regression analysis of the data are shown in Table 4.

Table 4 Baseline Regression Results

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
did	2.422*** (0.239)	1.837*** (0.253)	1.944*** (0.303)	-0.116 (0.089)	0.133 (0.176)	0.158** (0.792)
treated			0.716** (0.287)		0.682*** (0.166)	
Level of Economic Development					0.322*** (0.068)	0.738*** (0.136)
Government Support					0.610*** (0.109)	0.003* (0.077)

City Size					-0.654*** (0.156)	-0.987*** (0.284)
Cultural and Educational Level					-0.093* (0.056)	0.206*** (0.073)
Time Fixed	Not Controlled	Controlled	Not Controlled	Controlled	Controlled	Controlled
Individual Fixed	Not Controlled	Not Controlled	Not Controlled	Controlled	Not Controlled	Controlled
Constant	7.929*** (0.138)	8.123*** (0.129)	7.689*** (0.166)	8.775*** (0.036)	7.569*** (0.946)	8.594*** (2.241)
Observations	135	135	135	135	135	135

Note: *, **, *** respectively indicate that the regression coefficients are significant at the 10%, 5%, 1% confidence levels.

3.2 Analysis of Baseline Regression Results

The regression results show that smart city policies can enhance a city's technological innovation capabilities. The sixth column of Table 4 shows that the key variable of smart city policy, did, is significant at the 5% level. Among the control variables, the level of economic development is significant at the 1% level, and government support is significant at the 10% level, while city size and cultural and educational level are significant at the 1% level. The implementation of smart city policies allows the government to invest more in urban construction and gather talent, thereby enhancing the city's overall innovation capability, and naturally, its technological innovation capability will also correspondingly improve. The significant impact of economic development level on a city's technological innovation capability is mainly because a higher GDP indicates that the government can invest more funds in the field of technology, attract numerous scientific researchers, and thus advance the city's scientific research drive, ultimately leading to an improvement in the city's technological innovation capability. Government investment in science and technology indicates direct support from the government for the city's technological sector, which can greatly increase the city's technological innovation and research and development, thereby promoting the city's technological innovation capability. A higher number of higher education institutions in a city suggests that the city can cultivate more scientific researchers, who will later also contribute to enhancing the city's technological innovation capability.

3.3 Parallel Trend Test

The primary purpose of the parallel trend test is to verify whether the implementation of the policy has a significant impact on the innovation capability index of the cities in the experimental group. As the economy grows rapidly, the innovation capability index of the control group cities will also increase. The parallel trend test can show whether the innovation capability index of the experimental group grows faster relative to the control group. This reflects the additional role of the policy in enhancing the city's technological innovation capability.

For the parallel trend test, this paper also used Stata software to process the data. Subsequently, a graph of the innovation capability index against the corresponding years was plotted to more intuitively demonstrate the impact of policy implementation. The graph, combined with the data, shows that the results conform to the parallel trend test. The graph is shown in Figure 1 below.

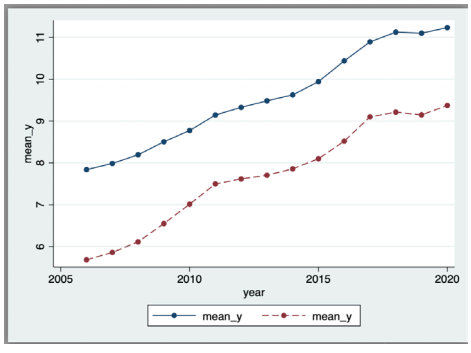

Figure 1 Parallel Trend Test Graph

3.4 Robustness Check

There are two commonly used methods for robustness checks. The first method involves using a lag effect test, and the second method involves changing the dependent and independent variables from the variable's perspective. This paper chooses to replace the dependent variable with the number of patent grants and conducts a robustness check. The specific results are as shown in Table 5:

Table 5 Robustness Check

	Model 1	Model 2
did	0.250* (0.155)	0.559*** (0.156)
Control Variables	Not Controlled	Controlled
Time Fixed	Controlled	Controlled
Individual Fixed	Controlled	Controlled
Constant	0.649 (4.424)	6.617*** (0.064)
Sample Size	135	135

Through the robustness check, it can be concluded that whether control variables are included or not, the impact of the smart city policy pilot cities on the city's technological innovation capability is significant, being significant at the 10% level and 1% level, respectively. This further verifies the robustness of the data.

4. Conclusions and Policy Recommendations

4.1 Research Conclusions

Enhancing technological innovation capabilities is a key factor in promoting high-quality development of a city, and this point has also been mentioned in many policies and related documents by the Chinese government. Based on theoretical analysis and taking the Pearl River Delta region as an example, this paper collects panel data of the corresponding cities from 2006 to 2020 and uses methods such as DID (difference in differences) to empirically test the hypotheses initially proposed in this paper. The conclusions of this paper are as follows:

（1）Smart city policies have a positive effect on the technological innovation capabilities of cities. By analyzing and assessing the commonly used policy evaluation method of the difference-in-differences approach, this study examined 15 years of panel data of cities in the Pearl River Delta region and conducted tests such as baseline regression. The results show that smart city policies can significantly enhance the technological innovation capabilities of cities, specifically reflected in the number of patent applications of cities (one way used in this paper to demonstrate the technological innovation capabilities of cities).

（2）Smart city policies have a significant effect on the technological innovation capabilities of cities with both higher and lower levels of development. For cities with higher levels of development, the government has already invested a significant amount of funding in scientific research, and there are many higher education institutions. With this good foundation, the introduction of smart city policies has an additional promotional effect on the technological innovation capabilities of cities. For cities with lower levels of development, where technological development is still in its early stages, smart city policies provide new innovative resources, allowing the city to develop rapidly in the middle stage and enhance the speed of technological innovation development in these cities.

（3）Strengthening investment in scientific research can also improve the level of technological innovation in cities. The analysis of control variables in the third part of the article shows that this aspect has a close relationship with the technological innovation capabilities of cities, which can be specifically reflected in the regression coefficients.

4.2 Policy Recommendations

Firstly, the Chinese government should continue to promote the construction of smart cities and implement smart city policies. The implementation should focus on three main areas. The first point is to strengthen the connection between the central and local governments

to accelerate the implementation of smart city policies, ensuring that these policies are implemented even in remote areas. The second point is to enhance the city's infrastructure, such as transportation, environment, and resource utilization. By continuously optimizing the city's infrastructure, a solid platform can be provided for the implementation of smart city policies. Moreover, improved infrastructure can also play an additional role in the technological innovation development of the city, attracting more scientific researchers. The third point is to extend smart city policies to more cities, not just limited to the Pearl River Delta and the Beijing-Tianjin-Hebei region, and to continue to analyze and assess the effects of these policies.

Secondly, the government's implementation of smart city policies should adopt different strategies for different cities. For cities with higher levels of technology, it is necessary to continuously optimize their technological innovation capabilities and cultivate scientific talent, injecting continuous momentum into the city's technological innovation development and achieving sustainable development goals in technological innovation. For cities with lower levels of technology, it is necessary to focus on two aspects simultaneously: raising the city's economic development and uncovering the potential for technological innovation, accumulating a "latecomer advantage" for the city's development.

Finally, there is the control of potential risks. Smart city policies may not be successfully implemented in every city or region. For cities where the implementation is poor or has failed, subsequent strategies and contingency plans need to be developed. There are two main approaches to consider. The first is to no longer include cities with poor implementation outcomes in the pilot smart city policy. The second is to adjust the policy to make it more suitable for the actual situation of the city. This includes strengthening cooperation with local governments and businesses in that city to create a better market and technological innovation environment. Different methods entail different costs, so it is necessary to consider the current state of available resources and take a comprehensive approach to different situations.

References

[1] Liu Qiao, Shi Daqian, Liu Jianjiang. The Impact of Smart City Construction on Urban Technological Innovation [J]. Technological Economy, 2018, 37(5).

[2] GONZÁLEZ-PERNÍA J L, PEÑA-LEGAZKUE I, VENDRELL-HERRERO F. Innovation, entrepreneurial activity and competitiveness at a sub-national level [J]. Small Business Economics, 2012, 39(3): 561-74.

[3] Shi Lingling, Yang Xianghao. The Impact of Smart City Construction on Urban Innovation Capability in the Yangtze River Delta Region [J]. Logistics Economy, 2021 (2).

[4] Wang Xiaoxia. The Impact of Smart City Construction on Urban Technological Innovation Capability [J]. Science & Technology Wind, 2022 (3).

[5] Yang Yunchao, Liu Xiaonan, Liu Wei. International Comparative Study of China's Urban Technological Innovation Competitiveness [J]. Science and Technology Management Research, 2022 (23).

[6] Wu Chengcheng, Wang Dan, Tan Qing. Study on the Spatial Differences in Technological Innovation Capabilities of the Yangtze River Delta Urban Agglomeration [J]. Journal of Baoding University, 2022, 35(4).

[7] Liao Zhensheng. Study on the Correlation between Technological Innovation and Urban Economic Growth [J]. Science, Technology and Industry, 2023, 23(1).

[8] Ministry of Housing and Urban-Rural Development Announces a List of 103 Smart City Pilot Projects [J]. Modern Building Electric, 2013, 4(08).

[9] Beck T, Levine R, Levkov A. Big bad banks? The winners and losers from bank deregulation in the United States[J]. The Journal of Finance, 2010, 65(5): 1637-1667.

[10] Zhang Qi. Research on the Impact of Smart City Pilots on Innovation Input, Output, and Efficiency [J]. Master's Thesis, Northeast Normal University, 2020(5).

[11] Smart City. Baidu Baike. [Online]. Available: https://baike.baidu.com/item/Smart City/9334841?fr=geala.

[12] Fu Ping, Liu Dexue. Research on the Technological Innovation Effects of Smart Cities — Empirical Analysis Based on Panel Data

of 282 Prefecture-Level Cities in China [J]. Exploration of Economic Issues, 2019, 9(1).

[13] Smart City Introduction Materials. Docin.com. Internet Document Resources. Available: https://www.doc88.com/p-9435297664820.html.

[14] Che Maoran, Pan Yuhong, Peng Jiaying. Study on the Incentive Effects of Government Combined Policies on the Application of Prefabricated Buildings [J]. Practice and Understanding of Mathematics, 2021, 51(17): 251-8.

[15] Tuolei W,Shanlang L,Jingxian W, et al. High-speed rail and city's carbon productivity in China: a spatial difference-in-differences approach.[J]. Environmental science and pollution research international,2023,30(19).

[16] Maylyn M,Matthew C,Mahnoor B, et al. Reducing Physical Therapy Consults for Patients with High Functional Mobility in the Acute Medical Inpatient Setting: A Difference-in-Difference Analysis.[J]. Archives of physical medicine and rehabilitation,2023.

[17] Fan Dan, Zhao Xin. Smart Cities, Factor Mobility, and High-Quality Urban Development [J]. Industrial Technology Economy, 2022, 41(11): 103-112.

[18] Wang Jun. Research on the Development Path and Strategies of Smart Cities [J]. Journal of Liaoning Teachers College (Social Science Edition), 2022(05): 5-7+15.

[19] Wu Tingting. The Impact of Smart City Construction on High-Quality Economic Development of Cities [J]. Marketing World, 2022(13): 32-34.

Kaihang Yu(born November 2006), male, Han ethnicity, native of Beijing, student at the International Department of Beijing National Day School, currently in 11th grade, interested in areas such as mathematical modeling.

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The Impact of Verb-Noun Collocations in the Research Writing of Chinese EFL Learners

Gu Min

School of Foreign Languages, Leshan Normal University, Leshan 614000, China.

Abstract: Verb-Noun collocation in the writings of Chinese EFL Learners' research articles focus on the correct use in general graduate thesis. The research was conducted to assess the impacts of the verb-noun collocation in research writing of Chinese EFL students in University Science of Malaysia (USM). Among numerous methods to collocations research, corpus-based approach have been selected to use a quantitative research design, which is based on TYPE and TOKEN, to identify the various verb-nouns collocation and the frequency of occurrence. This paper collected 11080000 verb-noun collocations from four schools and 18 graduate papers at the University of Nilai, and analyzed the results based on inferential statistics. The findings showed that verb-noun collocations are used to report findings, sum up data, discuss result, analyse, and carry out high frequency research in art and engineering. The result of the present paper reveal that a verb-noun collocation among Chinese EFL students in USM has a significant effect. EFL students, however, continuously confirmed that verb-noun collocation is a challenging aspect in vocabulary development. Brief recommendations have been provided.

Keywords: Collocation, Corpus-bases, Verb-Noun, EFL

1. Introduction

Institutions have increasingly value the significance of teaching, communication, and thesis writing in the area of linguistic and corpus-studies that is needed for foreign language teaching (EFL). Given that, research writings are commonly used to pass on current or preferred discovery and novel information[1]. A wider understanding of research writing should therefore be able to communicate effectively by using collocations, particularly verb-noun collocations.

However, students' writing and academic writing is not simple since concerns related to areas like lexical choices, collocations, and language rules still remain difficult to acquire for EFL learners. In that instance, EFL students achieves language acquisition through advanced lexical responses.

Collocations are an important aspect of EFL learning in language. There are various vocabulary approaches and phrase structures which make language learning extremely challenging for EFL learners. Chao[2] evaluated whether or not the vocabulary development strategy of corporate assistance effect graduates' overall research writings. The findings show that vocabulary development approach is beneficial for the learning of phrases and collocations.

On the other hand, fewer study has been done on the impact of corpus-based activities on teaching collocations and phrasal verbs as a key aspect of vocabulary development in EFL-class. Collocation is not understood by the individual word, it often consists of two or more words as a single grammatical structures. Collocations are therefore a significant component of vocabulary knowledge of foreign language learning.

In addition, there are insufficient study of the difficulty of using collocation by Chinese EFL learners in USM. However Frequency-Based Model of analyzing lexical collocations, have been accepted and adapted by many researchers, on that basis the current research will also focus on one type of collocations (Verb-Noun) and the impact of collocation on research writing of EFL Chinese learners in USM.

2. Literature Review

In general, vocabulary development have become necessary for both words and word combination[3]. The vocabulary development approach emphasizes that the core of language teaching is in the vocabulary size and lexical structures.

The objective of vocabulary teaching is to increase the student's ability to use and also to develop language structures. However, Lewis[3] claims that these vocabulary structures cause significant educational challenges for learners of second language (L2). Various studies

have shown substantial progress in the formation of L2 vocabulary with problems which are critical to the collocation knowledge of EFL students. [4]

3. Collocation Classification and Arrangement

Collocations are classified in two[5]. This covers lexical collocations and grammatical collocation. The lexical collocation include nominals, adjectives, verbs and adverbs. Grammatical collocations include word groups, preposition, or grammatical composition (such a verb, a noun or an adjectives). There are various ways used to identify collocation, a 'phraseological and frequency-based method' that examines the grammar and empirical use of the collocation [6]. The combination of the vocabulary structures is based on the arrangement and the parameters of the arrangement to be examined. In that account, the researcher have selected two criteria for the classification of collocation: transparency and composability. According to Peng (2016), transparency refers to the literal interpretation of collocation and composability relates to the 'where and how' of a restricted collocation that can suitably substitute in its constituent components either technically or figuratively.

Based on these classification methods, the collocation are identified as "free combinations" or group of words, units that might randomly be substituted without changing their meanings. Among the types of collocations, lexical and grammatical collocation are also used by researchers. Lexical collocation (noun, verb and adjectives) include words like "do a research" or "pass the ball", while grammatical collocation refer to groupings with grammatical components (prepositions or determinants), like "in annoyance" and " a concern".

The lexical classification of verb-noun collocations, have advanced approaches to differentiate the arrangements from other groupings. Gao et al. [7] set a standard for the identification of verb-noun collocations, which is whether there are also word combinations related to verb-noun entries in the dictionary. "To acquire knowledge," for instance, in the New Century Dictionary of Collocation (NDCC), the words "acquire' and 'knowledge" can be found separately such as in the text, "Acquire a working knowledge of English" included the description of "obtain" and "We acquire a knowledge step by step contain the notion "understand ". Collocation occurs in the dictionary usage of verbs and nouns, so its elements are considered to be in combination coexist. Hence, it is referred to as a "restricted collocation", which means the close combination between the components of the collocation. If the noun and verb in the dictionary are used separely, it has been described as an unbounded combination, such as 'return to your flat' (lexical collocation).

4. Approaches to Collocations

The study of collocation in research papers includes four methodologies. First, the intuition approaches that is supported by the instinct of the native speakers to decide the correct collocation. Secondly the frequency-based approach, two or more words co-occurrence. The requirements of word pairs are found in many cases together more than the occurrence of single words[8]. The third approach explains collocations as integration of a given grammatical structure regardless of whether they are formally or otherwise considered. And fourthly, there are methods that consider whether the collocation as a phraseology reviews supported by specific types of collocation in word combination which can also be considered marked from other sets of word combinations, as frequently referred to as free combinations and idioms. These collocations are sometimes described as restricted collocations, as those phraseological approaches used to define collocations as classification of word combination according to collocation continuums, typically referred to as free collocations (combination). It is nevertheless an issue of categorization but different word integration and to identify those collocation with restricted meaning.

5. Methodology

This study was conducted in University Sains Malaysia (USM) using the previous research thesis of students between the periods of 2016- 2020 on the academic writings of EFL of Chinese students studying in Malaysia. The participants were mainly from the four (4) faculties: Science, Art, Engineering and Medical, Dental and Health. The application of computer software was used in different stages of the research: to test the Cronbach's Alpha coefficients tested at 0.7 with the aid of SPSS 23.0, Integrated Corpus Software (ICS) programme which aid the removal of verb-noun collocation description and software for inferential statistical analysis to obtained results. The study was based on the quantitative research design, to assess the Chinese EFL-Verb-Noun collocation, which recognized the ICS approach use with 79 verb-noun terms used in research writing and categorised them in accordance with the use as shown in Table 1 below.

Table 1 Verb-Noun Collocation and Use

Verb-Noun	Verbs
To discuss finding	Attest, confirm, content, demonstrate, document, indicate, reveal
To summarize	Assess, conclude, features, highlight,
To show analysis	Analyse, appraise, define, diagnose, identify, investigate, observe
To indicate control	Constrain, control, govern, influence, inhibit, limit, maintain, prohibit, regulate, secure
To state	Comment, convey, elaborate, establish, identify, propose
To show decrease	Alliterate, cease, decline, depress, desert, deteriorate, minimize, subside reduce
Indicate figure	Depict, display, illustrate, gives, lists, present, summarize
Indicate table	Classify, enumerate, gives, lists, presents, summarize
To performed Task	Adequate, comprehensive, exhaustive, extensive, thorough
To indicate positive	Confirm, complement, corroborate, substantiate, support, uphold, validate, verify
To indicate negative	Challenge, contradict, disagree, dispute reject, question

6. Result and Discussion

There were 23 most used verb-noun collocations in research writing which was found as a difficulty term among EFL learners and this was in agreement with Laufer and Waldman [9]that stated verb-noun collocations more frequently than when speaking that writing strongly depends on. The findings in the study shows that most common verb-nouns with high frequency based on the faculties of the EFL graduated post-graduate Thesis.

Table 2 Verb-Noun Collocations finding and frequency

Verb-Noun Collocation Finding	Science %		Art %		Engineering%		Medicine%	
Attest	12	100	0	0	0	0	0	0
Confirm	09	16.4	3	5.5	0	0	43	78.2
Demonstrate	37	67.3	06	10.9	12	21.8	0	0
Indicate	3	5.1	23	38.9	18	30.5	15	25.4
Reveal	17	21.5	47	59.5	9	11.4	6	7.6
TYPE	5		4		3		3	
TOKEN	78		79		39		64	

The table 2 reveals the verb collocation of the word finding in research writing of EFL and found out the verb-noun ‘to attest’ appeared more frequently in the faculty of science of 100% compared to the other faculties. The verb ‘have confirmed’ was frequency with medicine has 78.2%, with Science16.4% and 5.5% with Art in the frequency. The verb-noun ‘have demonstrated’ was frequent in Science with 67.3%, Engineering with 21.8% and Art with 10.9%. Moreover, ‘have indicated’ include the following frequent in the faculty of Art with 38.9, followed by Engineering with 30.5 and Medicine with 25.4% while Science with 5.1%. The verb-noun ‘do reveal’ has high frequency with Art at 59.5%, Science 21.5% and Engineering 11.4% while Medicine 7.6%. In Chinese EFL learners the verb-noun ‘finding’ occurs more in their research writing which shows the learning EFL needs to be more exposed to use of verb-noun collocation in expressing their learning capacity in research writing.

Table 3 Verb-Noun Collocations Summarize and frequency

Verb-Noun Collocation Summarize	Science %		Art %		Engineering %		Medicine%	
Evaluate	0	0	59	100	0	0	0	0
Conclude	29	31.2	20	21.5	13	13.9	31	33.3
Features	37	44.5	0	0	39	46.9	7	8.6
Highlight	15	25	0	0	27	45.0	18	30
TYPE	3		2		3		3	
TOKEN	81		79		79		56	

These graduated students in the four faculties as seen on table 3 of verb-noun collocation of the verb ‘to summarize’ found ‘ have evaluate’ to be 100% used by EFL learners in Art Faculty while other faculties rarely used it as verb-noun. The verb ‘to conclude’ highly used in the faculty of Medicine with 33.3%, followed by Science with 31.2% and Art had 21.5% while engineering with 13.9%. The verb ‘features’

was more frequent in the faculty of Engineering with 46.9%, Science with 44.5% and Medicine with 8.6%. And the verb-noun 'to highlight' indicated faculty of Engineering with most frequent use of the word highlight 45%, followed by Medicine with 30 and Science with 25%. The verb-noun collocation most frequently used from the selected words, to have dominance in the faculty of Engineering is the word 'to summarise', seen as the table 4:

Table 4 Verb-noun Collocation Control and Frequency

Verb-Noun Collocation Control	Science %		Art %		Engineering %		Medicine %	
Constrains	63	50.8	0	0	29	23.4	32	25.8
Control	18	26.1	0	0	12	17.4	39	56.5
Govern	0	0	38	100	0	0	0	0
Regulate	0	0	0	0	31	91.2	3	8.8
Maintain	0	0	12	60	7	35	1	5
TYPE	2		3		3		3	
Token	81		50		79		75	

The verb-noun collocation of control connecting five frequent nouns of constraints, control, govern, regulate and maintain. The noun collocation occurrence was more than 30 times in corpus and their normalized frequency was of TYPE which is the number of different collocate and also TOKEN as the number of occurrences. Thus, TYPE for Control appeared twice in Science, thrice in Art, Engineering and Medicine respectively as well as TOKEN. EFL graduation theses revealed 50.8% 'constraint' was found in the faculty of Science, 25.8% in Medicine and 23.4% in Engineering. The verb 'regulate' in control indicated 91.2% in Engineering and 8.8% with Medicine and 'govern' was 100% in Art alone while 'maintain' was 60% in Art, 35% in Engineering and 5% in Medicine. There is an impact of the verb-noun 'control' as it relates with verbs in all the faculties.

Table 5 Verb-Noun Collocation Analyse and Frequency

Verb-noun collocation Analyse	Science %		Art %		Engineering%		Medicine %	
Analyse	14	53.9	0	0	07	26.9	5	19.2
Appraise	0	0	26	66.7	13	33.3	0	0
Diagnose	39	39.0	0	0	0	0	61	61.0
Identify	17	73.8	3	13.1	0	0	3	13.1
TYPE	3		2		2		3	
TOKEN	53		29		20		69	

Table 5 indicate that the frequency of verb-noun collocation examine were analyse, appraise, diagnose, and identify found in graduate Thesis of 2018-2020. To 'to analyse' was 53.9% in Science, Engineering with 26.9% and 19.2% in Medicine. The verb 'to appraise' was found to appeared 26 time of 66.7% and 13 of 33.3% in Engineering and 'to diagnose' verb-noun was 61% in Medicine and 39% in Science while in the verb-noun 'to identify' was 73.8% in Science as well medicine was 13.1%. The TYPE 3 was for Science, 2 was for Art and Engineering and 3 was for Medicine as well TOKEN 53, 29, 20 and 69 respectively for each faculty.

Table 6: Verb-Noun Collocation for Performed Task and Frequency

Verb-Noun collocation Performed Task	Science%		Art %		Engineering%		Medicine %	
Adequate	16	36.4	0	0	11	25.0	17	38.6
Comprehensive	0	0	31	100	0	0	0	0
Thorough	0	0	16	100	0	0	0	0
Extensive	0	0	15	35.7	27	64.3	0	0
Exhaustive	0	0	5	100	0	0	0	0
TYPE	1		3		2		1	
TOKEN	16		67		38		17	

The table 6 reveals the verb-noun collocation of the word 'Performed Task' in research writing of EFL of Chinese studying Malaysia for words adequately, comprehensively, thoroughly, extensively and exhaustively. The verb 'adequate was often used in Theses of EFL graduate of Medicine with 38.6%, 36.4% of Science and 25% of Engineering. For the word 'to comprehend' 100% was for Art and 'thoroughly was 100% for Art while 'extensive' was 64.3% engineering and 35.7% Art. The TYPE was found out the verb-noun 'to attest' appeared more frequent in faculty of science of 100% compare to the other faculties. TYPE was 1, 3, 2 and1 while the TOKEN was 16 for Science, 67 for Art, 38 for Engineering and 1 for Medicine. The study focus on the EFL thesis writing and reveals more often that the verb-noun of the per-

formed tasks in the faculty of Art to be high. The study conducted a multiple regression analysis was used to obtain the impact of verb-noun collocation in Chinese research writing. The model has F statistics of 192.971 and a p value = 000 < 0.01 and 0.05, meaning the model is statistically significant at 99% or 95% significance level. The coefficient of determination R2 of 0.816 as seen in table implies that the impact of verb-noun collocation was 81.6% determined by the combination of the repressors or independent variables. The remaining 18.4% were variable unexplainable as it affect the other variables of thesis writing control not included in the mode, the analysis of variance and the mode summary are seen as the table 7 and table 8:

Table 7 ANOVAa

Mode	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.903a	.816	.809	.574	.137
a. Predictors: (Constant), Analysis, Control, Summarize, Table, Finding					
b. Dependent Variable: verb-noun collocations					

Table 8 Mode Summary

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	192.971	5	38.594	117.114	.000b
	Residual	43.500	132	.330		
	Total	236.471	137			
a. Dependent Variable: verb-noun collocation						
b. Predictors: (Constant), Analysis, Control, Summarize, performed tasks, Finding						

Table 9 Coefficients of Verb-Noun Collocation

Model	B	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta			
1	(Constant)	-1.552	.235		-6.606	.000
	Finding	.487	.169	.301	2.887	.005
	Summarize	.885	.208	.334	4.264	.000
	Control	.143	.277	.033	.515	.607
	Performed Task	.427	.162	.203	2.642	.009
	Analysis	.207	.179	.123	1.157	.249

The coefficients of the regressors in the table corroborate the nature of the relationship between preparation of budget and budgetary control and each of the independent variables. The coefficient of the constant is negative (β=-.-1.552, p=000). The following were dependent variable finding (β=0.487, p=0.000), the coefficient of the verb-noun (β=0.885, p=0.005), which indicates that it was positively correlated (β=0.143, p<0.607), the coefficient of performed task was positively correlated (β=0.427, p=0.009) and the coefficient of the analysis is positively correlated (β=0.207, p=0. 2496). Therefore, the study shows significant impact of verb-noun collocation on EFL Chinese research writing. The results obtained in this study agreed with Jafarpour, Hashemian and Alipour [10]. The impact of verb-noun collocation was in the different faculties selected that discovered the frequency and numbers of occurrences. Most significant were verb-noun of finding, summarize and performed task whereas control and analysis were insignificant. In Chinese EFL learners the verb-noun found to occur more in their research writing which shows the learning EFL need to be more exposed to use of verb-noun collocation in expressing their learning capacity in research writing. There was dominance in the use of verb- noun collocation, especially in the faculty of engineering, science and medicine while Art was dominant with performing tasks. The emphasis here is likely that despite the learning and the period of years spent in the study, verb-noun collocation is a challenge in research writing among EFL learners because of the need to graduate, focus more often was on the graduation that English as Foreign Learner (EFL). More significantly, in research writing, students use verb-noun collocation more often than speaking, particularly to find, summarize and perform tasks which can be found repeatedly in the exact verb-noun findings and the discussion such as ‘to suggest, reveal, illustrate, have features’. However, verb-noun collocations are part of research writing; the learner must have an adequate knowledge of the application in thesis writing to avoid collocation.

7. Conclusion

In general terms, collocation is a significant aspect of vocabulary understanding, verb-noun combination, and thesis writing by EFL

Chinese studying in Malaysia Sains University (USM). The findings revealed significant impacts in the different faculties of the campus, but still EFL students encountered challenges in application of verb-noun collocation. There is the need to emphasize that adequate teaching of collocation verb-noun be improved where necessary, especially, with research writing using corpus-base and encourages the proper use of collocation in research writing among EFL Chinese students through the acquisition of receptive knowledge and productive writing skills which is vital towards achieving academic excellence.

References

[1] Bakla A, & Yilurum, A. (2020). A mixed-methods study of feedback modes in EFL writing. Language Learning and Technology.

[2] Chao, P. (2010). A study of collocation learning of junior high students in Taiwan via concordance. Paper presented at the 2010 international conference on English teaching, Kaohsiung, Taiwan.

[3] Lewis, M. (1993). The Lexical Approach: The state of ELT and a way forward. London: Language Teaching Publications.

[4] Yamashita, J., & Jiang, N. (2010). L1 influence on the acquisition of L2 collocations: Japanese ESL users and EFL learners acquiring English collocations. TESOL Quarterly, 44 (4), 647-668.

[5] Sidupa C, & Watono A. T, (2018). Semantic Preference of Verb-Noun Collocations: Corpus –based Analysis. Advances in Social Science, Education and Humanities Research, Vol.254, Eleventh Conference on Applied Linguistics (CONAPLIN 2018).

[6] Cowie, Anthony P. (1981). The treatment of collocations and idioms in learners' dictionaries. Applied Linguistics 2 (3): 223–235.

[7] Gao, B., Zhu, L. & Luo, Z. (2019). A Corpus-based Study of Collocation Production of Chinese EFL Learners. International Journal of Education.

[8] Stubbs, M. (1995) "Collocations and semantic profiles: On the cause of the trouble with quantitative methods". Function of Language. 2 (1), 1-33, 1995.

[9] Laufer, B. & Waldman, T. (2011). Verb-noun collocation in second language writing: A corpus analysis of learners' English. Language learning. 61(2), 647-672.

[10]Jafarpour, A.A., Hashemian, M. & Alipour, S. (2013). A corpus-based Approach toward teaching collocation of synonyms. Theory and Practice in Language Studies, 3 (1), 51-60.

Gu Min is lecturer as the School of foreign languages, Leshan Normal University. She has a B.A in Chinese Language and Literature and M.A in TESL. Her research interests include Vocabulary Studies, Effective Teaching Methods, English Teaching, and Linguistics.

Attempting to initiate a preliminary exploration into the cultural attire designs and standards within high school geography education

Qian Cui

Tai hu Middle School, An qing City, Anhui Province, 246000, China.

Abstract: This paper attempts to conduct a preliminary exploration of regional cultural clothing design in high school geography teaching. Firstly, it will introduce human geography and high school geography teaching. Secondly, it is necessary to introduce the design of regional cultural clothing. Thirdly, A preliminary summary of this article has been provided, along with some prospects. It is hoped that more experts and scholars will conduct in-depth research. Through the study of regional clothing characteristics, the influence of geographical environment on cultural development is demonstrated, and these contents can be better applied in high school geography teaching. At the same time, combined with the teaching of geography in high school, how to apply it to geography classroom was also discussed, so as to promote students' understanding and appreciation of geographical cultural diversity and cultivate students' core literacy in geography.

Keywords: Regional culture, Fashion design, High school geography teaching

1.Introduction

With the continuous advancement of economic globalization and cultural diversification, various local cultures are becoming more and more integrated. On this basis, there is an urgent need to explore the clothing design of each region's regional culture. As a discipline that takes into account both natural sciences and social sciences, geography plays an important role in cultivating students' core literacy, namely regional cognition, comprehensive thinking, geographical practice, and human-land coordination. Especially in human geography, when it comes to regional culture and urban and rural landscapes, different regional cultures shape different clothing designs. Different regional cultures are formed within a specific range, such as material clothing design and standards are typical representatives. It is of great guiding significance to study the clothing design and standards of various regional cultures. Fashion design and standards can inject diversified forms into the high school geography curriculum and improve students' regional awareness and comprehensive thinking ability. It can cultivate students' cross-cultural communication skills and enable them to establish a correct view of human-land coordination. Students are also provided with inspiration for innovative thinking and encouraged to innovate and explore in the field of geography. It can promote the integration of various disciplines, broaden the boundaries of disciplines, and enhance their geographical practice. By exploring the clothing design and clothing standards of various regional cultures, the core literacy of students in geography is improved.

2. Human Geography and High School Geography Teaching

Human geography is an important part of geography, focusing on the interaction between human beings and the human and social environment. This paper explores the shaping of geographical space by human activities, the relationship between human behavior and social organization and the geographical environment, as well as the adaptation and change of human beings in various geographical conditions. For high school human geography, it is difficult for students to master the knowledge system of human geography. Teachers need to start from a "high point of view" and logically impart knowledge points to students [1].

The teaching of geography in high school emphasizes that students conduct field trips, experimental observations and practical operations, so as to cultivate students' practical geographical ability and geographical skills, so that they can take the initiative to master geographical knowledge and skills. The teaching of geography in high school encourages students to pay attention to the world's environmental problems and sustainable development, and to establish the concept of human-land coordination. The teaching of geography in high school should lay a foundation for geography, cultivate students' geographical thinking and analytical ability, and pave the way for further study geography. The purpose of high school geography teaching is to cultivate students' ability to analyze and solve geographical problems, and improve their geographical core literacy and geographical thinking ability.

3. Costume design of regional culture

Regional culture refers to the synthesis of various natural elements and human elements in a specific time and space, and the clothing design of regional culture is an important part of its culture. The clothing design of regional culture represents various elements such as its economy, aesthetics, traditional culture, and topography [2]. Regional culture is a unique cultural phenomenon formed in a specific geographical area, including local history, traditional customs, architectural styles, etc. Regional culture is characterized by local characteristics and historical accumulation [3].

Geographical location has an important impact on the design of regional cultural clothing. Different temperatures (diurnal range, monthly range, annual range), precipitation (monthly variation, seasonal variation, interannual variation), temperature difference between day and night (if there are regions, there are cotton jackets in the morning, yarn in the afternoon, and watermelon eaten around the stove in the evening), topography (plains, hills, mountains, plateaus, basins) and so on have a direct and indirect impact on clothing design. For example, in hot and humid areas, locals are learning to wear breathable clothing. The regional cultural background and historical inheritance make the clothing design show unique differences between different cultures, such as Chinese Clothing, its balanced and moderate design, emphasizing status and traditional aesthetics. In Western culture, traditional clothing, such as suits, emphasizes the shaping of the body's contours. Clothing design has rich cultural characteristics, clothing is an important form of cultural expression, which carries a variety of meanings such as society and region. It reflects a unique reflection on aesthetics and so on. By studying the differences in clothing design of regional cultures, we can gain an in-depth understanding of the cultural connotations behind them and enhance our understanding and respect for multiculturalism. At the same time, in the teaching of geography in high school, it can help students understand the impact of geographical environment on human life, and help cultivate students' core literacy in geography.

4. Prospects

This paper only briefly analyzes the regional culture, clothing design, in high school geography teaching. I hope more experts and scholars will conduct more in-depth research. Through study, students can understand and analyze the impact and shaping of human activities on the geographical environment, for example, cultivating students' understanding and thinking ability on issues such as urbanization and population migration. Through the clothing design of regional culture, students can understand the influence of geographical environment on human beings, and understand that different regions have different cultures and different clothing. The artistic and innovative technical ability of students is cultivated, and the core literacy of geography is cultivated.

With the development and progress of science and technology, future research can further explore the application of human geography, high school geography teaching, regional cultural clothing, clothing technology level, virtual technology and other disciplines and fields. For example, explore its integration with sociology, economics and other disciplines, as well as the application of virtual technology in urban planning, environmental protection and other fields. With the continuous progress of technology, the application of human geography, regional cultural clothing, clothing craftsmanship and virtual technology in high school geography teaching has great potential, which can improve students' learning effect and interest, and cultivate their core literacy and comprehensive ability in geography. Through further research and practice, pedagogy and techniques can be continuously improved to promote the development and advancement of the discipline of geography.

References

[1] Zhou Guo lei, Wu Yuxuan, Hou Song mei. Construction of High School Human Geography Knowledge System from the Perspective of "High Perspective": A Case Study of the Section "Urbanization" of the Second Volume of High School Geography Compulsory Course of the People's Education Edition [J]. Geography Teaching Reference for Secondary Schools, 2023, (02): 60-62. in Chinese

[2] Yang Zhi rong. Construction of Cultivation Model for Innovative and Entrepreneurial Talents in Fashion Design under the Background of Regional Apparel Culture [J]. Textile Report, 2021, 40 (07): 92-93. in Chinese

[3] Sien Xu and Xiao Wu. Research on the Visual Design of the Kai ping Diao lou and Villages Tourism Products Based on Regional Culture[J]. Landscape Architecture, 2023, 6(2).

Author Introduction: Cui Qian (1995~), male, Anqing, Anhui Province, Master, teacher, research interests: physical geography.

Music Education and Campus Culture Building: Integration of Theory and Practice

Ruixue Shi

Northwest Normal University, Lanzhou 730070, China.

Abstract: The purpose of this thesis is to study in depth the relationship between music education and school culture construction, and to explore the organic integration of the two through theoretical analyses and practical cases. By analysing the theoretical basis of music education and campus culture construction, and combining it with actual school cases, it puts forward strategies and suggestions for effectively promoting the integration of the two. This study aims to provide theoretical support and practical guidance for promoting students' all-round development and facilitating the construction of campus culture.

Keywords: music education; campus culture construction; theory and practice; aesthetic ability

1. Introduction

In today's society, music education and school culture building are generally regarded as an indispensable part of school education. Music education is not only about teaching musical skills, but also an important way to cultivate students' aesthetic ability and emotional literacy. Meanwhile, campus culture construction aims to create a good learning and living environment and promote students' all-round development. However, how to skillfully integrate music education and campus culture construction, so that music education can better serve the goal of campus culture construction, and realise the organic unity of theory and practice, has become an urgent problem to be solved.

Through an in-depth study of the theoretical basis and practical cases between music education and campus culture building, we explore the intrinsic connection between the two and how to realise the synergistic integration of the two through effective strategies and methods. In this exploration process, we combine theory and practice, with a view to providing schools with feasible guidance and insights, promoting more comprehensive training of students in music education, and injecting more vitality into campus culture construction.

2. Theory and practice of music education

The theory of music education centres on the development of aesthetic and emotional literacy through the study of music skills, music theory and music history. The theory holds that music is an art, but also a way of expressing and communicating emotions. Through systematic learning of the basic knowledge and skills of music, students can understand and appreciate music more deeply and enhance their aesthetic level. The theory of music education emphasises the unique charm of music, considering it not only a learning of skills, but also an experience and appreciation of emotion and culture.

In practice, music education goes far beyond the teaching of theory in the classroom and focuses on providing students with opportunities to express themselves through the organisation of diverse music activities, competitions and performances. This practice not only helps students to improve their skills in the field of music, but also hones their performance skills and teamwork. For example, by participating in music competitions, students not only refine their performance skills, but also engage in healthy competition with others, which promotes individual and collective growth.

At the heart of music education practice is the stimulation of students' love and interest in music. This practice enables students not only to improve their skills in the process of participating in music activities, but also to feel the pleasure and resonance brought by music, so as to better develop their individual feelings and emotions. The combination of theory and practice in music education provides a solid foundation for students' all-round development, aiming to cultivate the comprehensive quality of both knowing how to appreciate music and being able to express one's own emotions in music. This combination of theory and practice in music education provides students with a more comprehensive and in-depth learning experience.

3. Theory and practice of campus culture building

The theory of campus culture building focuses on creating a nurturing environment conducive to the all-round development of students. By conveying the school's values and philosophy, campus culture building aims to improve the overall quality of students and enable them to develop in a balanced manner in academic, cultural and sports areas.

In practice, campus culture building is achieved through a variety of means. Among them, it is a common form to organise cultural activities, such as cultural performances and campus cultural festivals, aiming to provide a platform for students to show themselves. These cultural activities are not only entertaining, but also an important way to cultivate students' teamwork spirit, expression ability and innovative thinking. By participating in these activities, students can not only give play to their own strengths, but also learn communication skills and leadership in teamwork. Such practice enables students to better adapt to the requirements of society and have a stronger overall quality.

In addition, social practice and voluntary service are also an important part of campus culture building. Through participation in social practice, students can apply theoretical knowledge to practice and develop practical problem-solving skills. Volunteer service, on the other hand, helps to shape students' sense of social responsibility and make them realise the close connection between the individual and the society, so that they can better integrate into the social family. Through these practical activities, students are able to gain a deeper understanding of society, develop practical hands-on problem-solving skills, and at the same time enhance their experience of co-operation with others.

This series of practical activities aims to provide an all-round enhancement of students' comprehensive quality by cultivating their cultural literacy, sense of social responsibility and practical ability. This is also in line with the modern education concept of cultivating students with the spirit of innovation and the ability of teamwork. The school provides a richer and more diversified learning environment for students through the construction of campus culture, so that they can gain richer life experience in their all-round development.

4. Integration of music education and campus culture building

4.1 Theoretical basis for integration

The theoretical basis for integrating music education and campus culture construction lies in an in-depth analysis of their commonalities. First of all, music education and campus culture construction both aim to promote the overall development of students and cultivate their aesthetic ability, emotional literacy and comprehensive quality. This commonality makes the two have the potential for organic integration.

Incorporating music education into the framework of campus culture construction can not only better convey the cultural connotation of the school, but also more comprehensively fulfil the nurturing role of music education. As an art, music can arouse students' emotional resonance and stimulate their unique perception of beauty. Through music education, students can not only learn music skills, but also cultivate aesthetic interests and improve their ability to express their emotions. For example, through learning different types of music, students can feel the uniqueness of different cultures, thus deepening their understanding of multiculturalism.

The theoretical basis for integration also includes a holistic view of student development. Music education and campus culture construction jointly pursue the cultivation of students' creativity, teamwork and social responsibility. Music education focuses on cultivating students' artistic creativity, while campus cultural construction exercises students' teamwork and organisational skills through organising various cultural activities. Through the theoretical organic integration, a more systematic and complete education system can be formed, providing students with a wider and deeper learning experience. This theoretical foundation provides schools with the opportunity to integrate resources and build a richer educational content, so that students can develop their potential more comprehensively in the learning process.

The theoretical basis of this integration aims to realise the multidimensional development of education, to make the school's cultural philosophy more deeply rooted in people's minds through the vehicle of music, and to enable the students to achieve a more comprehensive individual development through the cultivation of music.

4.2 Practical exploration of integration

In order to organically integrate music education with school culture building, schools can carry out a series of practical explorations

aiming at enabling students to feel the deeper charm of music through diversified musical experiences.

First of all, schools can provide a platform for students to display their musical talents by organising colourful activities such as music competitions, festive celebrations and cultural performances. These activities not only inspire students to participate, but also motivate them to continuously improve their musical skills through competitions. Music competitions may include choral competitions, instrument playing competitions and many other aspects, aiming to cover the interests and talents of different students, so that they can exchange and learn from each other in the competitions. For example, by organising a diversified music competition, schools can provide a platform for students to showcase different styles of popular music, traditional music, band performance, etc., thus motivating students to discover their interests in a wide range of musical fields.

Secondly, schools can also improve students' musical literacy and aesthetic ability by offering additional music courses and organising professional music lectures. This form of practical exploration helps to integrate music education into students' daily learning life, enabling them to learn music theory, history and skills in a more systematic manner. Professional music lectures, on the other hand, provide students with a more in-depth academic perspective and broaden their knowledge and understanding of music. For example, schools can invite professional musicians or scholars to give lectures on music to provide students with a more professional learning experience by providing in-depth analyses of the cultural background and performance techniques of music.

4.3 Case studies of integration

In order to elaborate more specifically on the integration of music education and campus culture building, we have selected a secondary school as a case study for in-depth analysis. This secondary school has achieved remarkable practical results in integrating music education with campus culture building, providing experience for other schools to learn from.

Firstly, the secondary school has provided a platform for students to widely display their musical talents through diversified musical activities, such as school singer competitions, music festivals and cultural performances. These activities not only encourage students to participate actively, but also enhance their musical standards and teamwork skills through competitions and performances. The School Singers' Competition has become a much-anticipated annual event in schools, which further promotes the in-depth development of music education in schools by selecting students with musical talents. For example, the Campus Singers Competition is not only a music event, but also part of the school's campus culture construction, and has become a platform for students to show their personal style and team strength.

Secondly, the secondary school also focuses on offering professional music courses and inviting renowned music experts to give lectures. The music programmes cover a wide range of aspects such as music theory, history and appreciation, aiming to develop students' systematic music literacy. At the same time, inviting music professionals to give lectures enables students to understand the development trend and professional knowledge of the music industry at a higher level, which stimulates their deep love for music. These programmes and lectures not only broaden students' musical horizons, but also provide them with a more profound learning experience.

Through these initiatives, the secondary school has not only enhanced students' aesthetic ability in music, but also succeeded in creating a favourable campus cultural atmosphere. Students felt the charm of music while actively participating in music activities, and at the same time developed the ability of teamwork and self-expression. This successful case of integration provides a feasible reference for other schools and proves the great potential of music education and campus culture building to promote each other. By skilfully integrating music education and campus culture building, this secondary school has created a vibrant and creative campus atmosphere and provided students with opportunities for all-round development.

5. Conclusions and recommendations

Through the research on the integration of music education and campus culture construction, this paper draws conclusions and puts forward relevant suggestions, aiming to provide guidance for schools to realise the organic integration of the two.

Through theoretical research and case studies, the feasibility and importance of the integration of music education and campus culture construction is demonstrated. The integration not only helps to improve students' musical literacy and aesthetic ability, but also promotes the

prosperity of campus culture. As an important means of cultivating students' comprehensive quality, music education and campus culture construction complement each other and jointly promote the progress of school education.

Firstly, it was emphasised that schools should enhance the popularisation of music education. By popularising music education, more students can be exposed to music and expand their aesthetic field. Secondly, it was suggested that schools should take into account their own actual situation and formulate a music education programme in line with the characteristics of the school. Such a programme should take full account of students' interests and strengths, so as to better stimulate students' interest in music. In addition, by organising diversified music activities, such as music competitions and music festivals, students' all-round development in the field of music can be promoted.

Further recommendations are made, including regular evaluation of the effectiveness and adjustment of teaching strategies. Schools should set up an assessment mechanism to comprehensively understand the effects of the integration of music education and campus culture building, and identify and solve problems in a timely manner. By adjusting teaching strategies, the deficiencies in the integration process can be continuously improved to achieve better integration effects.

The integration of music education and school culture construction is an inevitable trend in school education. Through an in-depth study of this integration relationship, it helps to realise the all-round quality cultivation of students and promote greater achievements in school culture construction. This study provides theoretical support and practical reference for related fields, and is expected to achieve positive and far-reaching impacts in school education.

References

[1] Wang Shun. The role of music education in the construction of campus culture in colleges and universities[J]. Journal of Hubei Open Vocational College,2023,36(07):39-40+43.

[2] Hedi. The significance and strategy of cultivating humanistic literacy in music education in colleges and universities[J]. Contemporary music,2021,(11):43-45.

[3]Luo Chengping. Analysis of the penetration path of music aesthetic education in campus culture construction in colleges and universities[J]. Chinese Literary Artist,2021,(10):147-148.

[4] Lin Dian. On Liberal Music Education and Campus Culture Construction in Higher Vocational Colleges and Universities[J]. Contemporary Music,2021,(08):65-67.

[5] Gu Yunyun. Study on the feasible path of music education for campus culture construction[J]. New Wisdom,2021,(10):33-34.

The Comparisons Between Euphemisms of Chinese and English

—— From Aspect of Greetings and Death Euphemisms

Jie Li

Hunan Normal University, Changsha 410081, China.

Abstract: Euphemisms is a kind of language phenomenon evolving from the development and cultural transition of the language, which is essential in our daily life. Euphemisms also exist in Chinese, English and other languages, whose applications are very broad. It can also make the process of communication more colorful. This paper will have an exploration through comparing the expressions, existing reasons and background of greetings and death euphemisms in Chinese and English euphemisms.

Keywords: euphemisms; greetings; death euphemisms; culture in China and English countries

Introduction

Euphemism refers to the process of communication, both sides of the speaker in order to express what they want to say clearly, so as to use some more civilized (civilized) and implicit (implicit) language, to express their own ideas at the same time will not make the bearer of the words feel offended by some negative emotions. In the process of communication, euphemisms can also play a lubricant role, blurring some of the straightforward terms, and saying some words in a roundabout way, which is reflected in both Chinese and English, thus producing some good results and avoiding some awkward atmosphere and unpleasant phenomena in the process of communication. [1] And by comparing the similarities and differences between greetings and death terms in English and Chinese language euphemisms, we can better see the gap in their use and better understand the subsequent cultural and social differences that lead to the differences in their habits of expression.

1. Greetings

In life, greetings are the beginning of communication, and polite and appropriate greetings can make a conversation or a negotiation better, however, the habits of polite expressions between Chinese and Westerners are very different. In English, greetings usually start with “hello” or “hi”, but also with some blessings, such as “Good morning “, “Good afternoon”, “ Good night” and so on. In Chinese, on the other hand, we don’t ask this question. We often say, “Have you eaten?” at meal times. In fact, the intention of this sentence is not to care whether the other person has eaten or not, but to start a conversation in a more natural way. The other person may answer “I’ve eaten” or “I haven’t eaten yet”, or he or she may respond with the same answer, but in English, asking this kind of question signals that you’re suggesting or inviting him or her to join you for a meal, which can lead to unwanted misunderstandings. “Where are you going?” is also a kind of greeting, but in Chinese, people ask each other where they are going, and they don’t really want to know where they are going. Whereas in English such an inquiry would be treated as an invasion of privacy and would not convey the appropriate friendly message, because value is the most important element in the Western value system, and privacy is usually associated with personal information, which shows an individual’s values and interests. Western society upholds individual privacy and individualism, and when privacy is involved, Westerners usually react more strongly.

At the same time, when addressing greetings, English sometimes adds corresponding titles such as “hello, Lucy”, which is also a difference between English and Chinese greetings. Under the deep influence of traditional Chinese culture, there is a strict hierarchy of address related to social status and age. For example, when a subordinate meets a superior, he/she cannot call him/her by his/her first name, but can greet him/her by his/her last name and title; a student cannot call his/her teacher by his/her first name, but is usually greeted by “last name + teacher + good”; a child cannot call his/her elder by his/her first name, but is greeted by him/her according to his/her seniority as “Grandpa “Grandpa”, “Grandma”, “Uncle”, “Auntie” and so on, so as to greet each other, and between the peers is usually with “brother”, “sister”. It is considered impolite to call people by their first names rather than following the hierarchical rules of the Chinese language. In the West, how-

ever, there are no such strict requirements and no clear hierarchical boundaries. They pay more attention to realizing the intimacy between each other, reflecting the concept of human-centered and equal social relationship, as well as the expression of friendship between members of the society when greeting and addressing each other. As in Chinese, English speakers address their seniors or elders by their social titles, such as “Miss Green” and “Miss Brown”. But they think it is impolite to address others by their professions, and they address their superiors directly by their surnames or their first names. For example, in foreign news reports, they use “Mr. Biden” when mentioning U.S. President Joe Biden. [2] In addition, when Chinese people address each other, they sometimes add the word “Lao” in front of their surnames, such as “Lao Wang”, “Lao Li”, etc. This can show the closeness of the interlocutor’s relationship and help to bring the conversation closer. This can show the closeness of the interlocutors and help to bring them closer to each other; however, in Western culture, it is impolite to address others with “old + surname” in a conversation, and it may even be offensive to others. There are two reasons for this, one is that there is no specific expression for “old + surname” in English, so simply adding “old” in front of the surname will confuse the recipients of the message; the other is because of the difference between Eastern and Western cultures, which is contrary to the Chinese expression. Secondly, because of the difference between Eastern and Western cultures, contrary to the Chinese expression, they will feel that the word “old” carries a meaning of its own and is not a separate title, and addressing someone with this word will make the other party have a bad influence, thinking that the speaker is being sarcastic, because in Western culture, people think that “old” in the title has an implied meaning of youth has passed away, uselessness and incompetence. In Western culture, people believe that the presence of “old” in address has the implied meaning of youthfulness and uselessness.

2. Death

In Chinese and Western cultures, there is a general anxiety and fear of death, which is also related to the fact that people do not understand death because of the lack of technological development in the past, therefore, when it comes to the word “death” in the language communication, people tend to avoid saying the word “death” directly, and instead, they tend to avoid saying the word “death” directly. Therefore, when it comes to the word “death” in language communication, people tend to avoid saying “death” directly, and instead use some cryptic words and euphemisms to express it.

2.1 Ancient English-Chinese Differences in the Expression of Death

In the Declaration of Independence, “all men are created equal” and humanism, “people-oriented” point of view, the English-speaking countries to promote democracy, that death is the same for everyone, everyone has to go through death, so the expression of death in the English language in the There is no obvious hierarchical difference in euphemisms. Sometimes the euphemisms for death vary according to the profession. The expression “to be knocked out” is popular in boxing circles and was originally intended to mean that “a boxer who is knocked out and is unable to get back up in the allotted time loses the match”, but this expression has been used for many years to describe the loss of a fight. The original meaning of the expression was “a boxer who is knocked down and is unable to get back up within a specified period of time loses the match”, but the expression later came to mean “death” in English. In wrestling, “to be thrown for a loss” also means to be bound to the ground by one’s opponent, and this phrase is also used later as a euphemism for death.

However, in ancient China, where the monarchy was a feudal dictatorship, there was a strict hierarchy of euphemisms for death. The death of the highest-ranking emperors was expressed in terms of “Daxing”, “ 驾崩 ”, “ 弃天下 ”, “ 宾天 ”, etc. The deaths of vassals or officials were expressed in terms of “Daxing”, “ 驾崩 ” and “ 宾天 ”; For the death of a vassal or an official, “princely” was used; for a low-level official, “death”, “no salary”, “abandonment of salary”, “ 彻乐 ”; ordinary people use “ 走了 ”, “ 过世 ”, “ 百年 ”, and so on.

Therefore, it can be seen that the democracy of the social system of the British and American countries makes the use of euphemisms for death also reflect equality; while China’s feudal society was affected by the traditional feudal hierarchy, its death language focuses on highlighting the differences in the status of the people, so the Chinese euphemisms for death in the ancient times also have a hierarchical definition.

2.1 The development of death euphemisms

With the development of society, language is constantly changing, absorbing new words and new cultures and rejecting old words, thus progressing, and so is euphemism. In the era of globalization, not only between English and Chinese, but also among the cultures of other countries, euphemisms for "death" tend to be simplified and life-oriented. Some euphemisms for "death" in English have gradually disappeared, such as:

To answer the final call, to pass over, to yield up the ghost, etc. At the same time, many new words that are closely related to modern life have come into being and have been adopted by the general public, such as: to pass out of the picture, to run one's race, mercy killing, to pull the plug, etc. In Chinese, the euphemisms used in ancient times to reflect the death of a deceased person have gradually disappeared, such as: to answer the final call, to pass over, to yield up the ghost and so on. In Chinese, the ancient euphemisms for death used to reflect the difference in status and power of the deceased have rarely been used, such as "princely", "daxing", "perish", " 殇 " and " 卒 " are disappearing. In contemporary society, people often use the expressions "passed away", "resigned for a long time", "long sleep", "goodbye forever", etc. to euphemistically express the death of important people. to euphemize the death of important people, and "passed away", "passed away", "end of life" to euphemize the death of ordinary people, these languages are simpler than before, and highlight the progress of social civilization even more! [3].

2.3 Differences in Religious Beliefs Lead to Differences in Euphemisms for Death

The great difference between Chinese and English languages is also due to the different religious and cultural beliefs between China and the West. Most of the English-speaking countries believe in Christianity, so some allusions in the Bible and Christianity have profoundly influenced the expression of death euphemisms. For example, in the Bible, God created human beings out of clay, so when human beings die, they can be regarded as returning to dust, which can be said as: "to return to dust". God is the creator of everything in the world, and when people die, they are called back to God, so death can also be expressed as "to be with God".

In China, Taoism and Buddhism have had a profound cultural influence, but the euphemisms for death are different in these two religions. Taoism believes that there is no extreme difference between "life" and "death" in the world, and that death is seen as a way to get away from the world or to become an immortal, so death is euphemistically called "recluse" or "recluse". Therefore, human death is also euphemistically referred to as "hidden", "recluse", "immortal", etc. But Buddhism pursues the goal of "spiritual enlightenment". But Buddhism is the pursuit of "all the virtues are complete, all the evils are silent and clean," the success of the completion of the perfect, so they do not think that death is a sad thing, and do not think that death is the end, so the emergence of the "round silence," "extinction Therefore, they do not consider death as a sad thing, nor do they think that death is the end, thus the euphemisms of "complete silence", "extinction", "extinction of peace", "demonstration of silence", and "return to silence"[4] appear. It can be seen from different religious and cultural traditions that euphemisms change with different religions. Chinese religions have distinctive regional characteristics and identity characteristics, because this type of euphemisms are generally used only by specific groups of people and audiences, so their frequency of use in people's daily lives is low and people may not be familiar with them.

3. Conclusion

Appropriate use of euphemisms is not only an essential activity phenomenon between people's socialization, but also a compulsory course for our contemporary graduate students, and an important criterion to measure a person's communicative ability. And a proper greeting in euphemisms can give a good beginning and impression to a conversation and add flowers to the whole conversation. Knowing the differences in greetings between Chinese and English can minimize unnecessary misunderstandings in communication. And death is an unavoidable topic of life, both Chinese and English have produced corresponding euphemisms because of its taboo nature, but also due to their religious and cultural differences, understanding it can avoid embarrassment in communication and better improve social skills.

References

[1] Lv Si-Ying. A Comparative Study of English-Chinese Death Euphemisms Based on Conceptual Integration[J]. Young Literati,2018.

[2]Guan YJ. Cultural differences between Chinese and English euphemisms[J]. Science and Technology Outlook,2016.

[3]Shuang Dingfang. New Exploration of Euphemisms[J]. Foreign Languages(Journal of Shanghai Institute of Foreign Languages),1989(03):30-36.

[4] Zhang Rodan. Research on the use of English euphemisms[D]. Jilin University,2004.

Author

Jie Li，Female，Han，Yongzhou，Postgraduate Student，Unit：Hunan Normal University，Changsha，Unit Zip Code：410081，Research Direction：English Language and Literature

The Construction And Practice Of The First-Class Course "Digital Mapping Foundation"

Xu Ting,Fan Hanying,Zhao Qinxia,Liu Yan

School of Resources and Civil Engineering, Liaoning Institute of Science and Technology, Benxi Liaoning 117004, China.

Abstract: Under the background of engineering Education certification, the course "Digital Mapping Basis", a basic course for surveying and mapping majors, is taken as an example to carry out first-class curriculum construction. The course takes OBE (Outcome Based Education) as the teaching concept, takes students' learning outcomes as the guidance, defines teaching objectives and ideological and political education objectives, improves teaching syllabus, and innovates teaching modes and methods. Explore effective ways to implement the construction of first-class curriculum, build student-centered and teacher-led open classrooms, and combine knowledge transfer, skill training, value guidance and education orientation.

Keywords: first-class curriculum; results-oriented education; curriculum thinking and politics

Preface

In October 2019, the Ministry of Education issued the "Implementation Opinions on the Construction of First-class Undergraduate Courses" (No. 8 of Jiao Gao (2019)), proposing to carry out the construction of first-class undergraduate courses in an all-round way, establish new concepts of curriculum construction, promote curriculum reform and innovation, implement scientific curriculum evaluation, and strict curriculum management. It is expected that after about three years, About 10,000 national and 10,000 provincial first-class undergraduate courses have been built [1]. Since the 2016 grade, the surveying and Mapping engineering major of Liaoning University of Science and Technology has introduced the concept of OBE into the construction of professional teaching system, emphasizing student development as the center, student learning as the center, learning effect as the center, and paying attention to the overall development of students.

1. Reconstruct the curriculum outline and clarify the teaching objectives and ideological and political education objectives

"Foundation of Digital Mapping" is a basic compulsory course for surveying and mapping majors. Since 2019, this course has promoted ideological and political content into the classroom, paid attention to the organic unity of ideological and political education and professional education, combined knowledge imparts, skills cultivation, value guidance and education orientation, and strengthened ideological and political education of college students with professional skills imparts as the carrier. The education of socialist core values will be fully implemented in teaching activities. In accordance with the OBE "output oriented" concept, the curriculum is student-centered and results-oriented. The curriculum is revised in accordance with the national standards for undergraduate professional teaching quality and engineering education professional certification standards. The curriculum keeps up with the development of the industry, continuously improves the teaching content, and emphasizes the coordinated development of knowledge, ability and quality. At the same time, with moral education as the core and "craftsman spirit" as the main line, the curriculum implements the requirements of the Ministry of Education on ideological and political curriculum construction, actively promotes the teaching reform of curriculum ideological and political education, cultivates students' professional ethics, compliance with rules and disciplines, and strives for excellence, innovatively carries out the teaching mode of "walking ideological and political", and realizes that professional courses and ideological and political courses are in the same direction. Construct the ideological and political pattern of "three full education".

2. Professional teaching and ideological and political education go in the same direction to build a "big ideological and political" education pattern

Contemporary college students are the builders and successors of socialism in our country and superb craftsmen in various industries. In the construction process, the course "Digital Mapping Foundation" has dug deeply into the ideological and political elements of socialist

core values and the ideological and political connotation of "craftsman spirit", built an ideological and political case base, and permeated every teaching link with various teaching forms and expression methods. So that the spirit of artisans in great countries can be passed on. The curriculum will integrate the ideological and political elements into the teaching content, find the ideological and political mapping and integration points related to the knowledge points of the course chapters, build the ideological and political case base, so as to achieve the teaching effect of "moral cultivation". For example, in the second chapter of leveling, taking China's 2020 Mount Everest elevation survey as the ideological and political entry point, teaching the important historical significance of the latest 2020 Mount Everest survey and the new technology applied, so that students can understand the Mount Everest survey Chinese surveying and mapping equipment. Scientific and technological innovation is the basis of building a modern scientific and technological power. Students are guided to clearly define their personal development orientation, closely align their own development with the development of the country, the nation and society, closely combine their future with the realization of the Chinese dream of the great rejuvenation of the Chinese nation, and realize the organic integration of educating talents and people [2].

3. Typical teaching examples

3.1 Information-based teaching helps the new teaching model and carries out blended teaching

Using information teaching means, the course relies on the Superstar Fanya network teaching platform to establish the "Digital Mapping Foundation" network course, and carries out the exploration and practice of online and offline mixed teaching. Online teaching is constantly enriched with online materials and learning videos, and the experimental teaching adopts the form of virtual simulation experiment to complete the experience of digital mapping and the operation of virtual imitation experiment. There are ideological and political teaching videos on the platform, which tell Chinese stories and promote the Chinese spirit, so as to help students build up cultural consciousness and self-confidence, and form socialist and communist ethics and scientific world outlook. Offline teaching takes OBE as the teaching concept, takes students as the center, takes results as the orientation, carries out the curriculum reform and practice of "promoting learning by competition", "promoting innovation by competition" and "cultivating engineering innovation ability as the orientation". It combines theory, practice and innovation to carry out "three-dimensional classroom" teaching. "Three-dimensional classroom" is the first classroom knowledge dimension, based on knowledge teaching, integration of curriculum ideology and politics; The second classroom practical ability dimension, focusing on practical ability training, surveying and mapping engineering open laboratory, while relying on the surveying and mapping and navigation technology association of our school to carry out the second classroom activities; The third classroom innovation ability quality dimension, in order to cultivate teamwork spirit, to improve professional quality. Emphasize the coordinated development of knowledge, ability and quality. Through the construction of "three-dimensional classroom" teaching activity mode, the establishment of classroom teaching results and training of innovative talents are closely combined.

3.2 Example of ideological and political teaching of large-scale topographic mapping course

This paper takes the knowledge unit of large scale topographic map surveying as an example to demonstrate the implementation process of blended teaching of ideological and political curriculum. The whole teaching process design is "three-dimensional classroom", the first classroom knowledge dimension, using online and offline mixed teaching method. Pre-class online guided comprehensive application courseware, teaching videos, expanded literature materials, simulation experiments, etc., mainly students' independent learning and teachers' interactive question-answering; Offline teaching is mainly based on face-to-face teaching, and various teaching methods such as heuristic, case and discussion are introduced into the classroom. In terms of practical ability in the second classroom, relying on the second classroom of "Surveying and Mapping and Navigation Positioning Technology Association" of our school, the association regularly carries out surveying and mapping skills competitions with the activity purpose of "seeking knowledge, innovation, dedication, cooperation and win-win situation". By carrying out a variety of activities, students can enhance their interest in learning, expand their professional vision, and improve their practical ability. In the process of opening the laboratory, the Mapping and Navigation positioning Technology Association has achieved

self-inheritance and self-development, and achieved a virtuous cycle. The third classroom innovation ability quality dimension, the integration of professional education and innovative education, “the third classroom” to help mapping skills competition. Relying on Liaoning Surveying and Mapping Geographic Information Star Competition and National College Students Surveying and Mapping Innovation and Entrepreneurship Intelligence Competition, the discipline competition can enhance students’ learning interest, be able to do their own role in team cooperation, complete their personal division of responsibilities, have a sense of team, promote students’ professional recognition, achieve professional identity, and improve employment and entrepreneurship ability.

4. Conclusion

This paper takes the basic course of surveying and mapping “Digital Mapping Foundation” as an example to carry out the construction of first-class courses, through clear teaching objectives and ideological and political education objectives, improve the teaching syllabus, innovate the teaching mode and method, and implement the effective way of first-class course construction. In recent years, students have achieved significant results in aspects such as professional identity, practical ability and team cooperation ability. Students’ innovative and practical ability has been comprehensively improved, and team cooperation ability has been enhanced. In provincial and national surveying and mapping skills competitions for college students, their results have been improved year by year.

References

[1]Implementation opinions of the Ministry of Education on the construction of first-class undergraduate courses. Ministry of Education. 2019-10-24

[2]Huang Hailan, Zou Jingui, flowers turn red. Exploration and practice of ideological and political teaching in digital topographic survey course under the background of Intelligent surveying and Mapping [J]. Bulletin of Surveying and Mapping,2022 (S1) : 33-36. DOI: 10.13474 / j.cnki.11-2246.2022.0508.

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About auther:

Xu Ting(1988-),female,master’s degree, lecturer.

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A Study of Phonological Learning and Pronunciation Accuracy in Second Language Acquirers

Nan Wang[1], Jia Li[1], Yunduo Liu[2], Nan Jia[1]

1.Shenyang University of Technology, Shenyang 110087, China.
2.Tsinghua University First Affiliated Hospital，Beijing 100015, China.

Abstract: Phonological learning is one of the most challenging tasks in second language acquisition, which requires overcoming obstacles such as native language interference, cognitive difficulty of non-native speech, and inadequate learning environment. Pronunciation accuracy is crucial to the success of phonological communication, and it helps second language learners to better understand and express language. However, second language learners often make pronunciation errors, which may be influenced by factors such as native language interference, learning environment and opportunities, learning methods and strategies. Therefore, this paper proposes effective strategies and training methods, such as sound recognition and imitation training, repetition and feedback mechanisms, phonological perception and awareness development, aiming to help second language learners improve pronunciation accuracy. Through the research in this paper, we can better understand the phonological learning process of second language learners and provide guidance and reference for teaching practice.

Keywords: second language learners; phonological learning; pronunciation accuracy; native language influence; learning environment; learning strategies

1. Introduction

Phonology is a very important part of language communication, and phonological learning is a challenging task when second language learners are learning a second language. The purpose of this paper is to explore the phonological learning and pronunciation accuracy of second language learners, to analyze the difficulties and challenges faced by second language learners in learning second language phonology, and the factors affecting their pronunciation accuracy. Through effective strategies and training methods, it will help second language learners to better master the phonological system of the second language.

2. Theoretical Foundations of Phonological Learning and Pronunciation Accuracy

2.1 Overview of Second Language Acquisition Theory

Second language acquisition theory is a subject area that studies the processes and mechanisms by which people learn a second language. It provides a theoretical framework on the patterns and regularities of how learners acquire knowledge and skills in a second language. Second Language Acquisition Theory is concerned with two types of language learning: first language (L1) and second language (L2). L1 is the mother tongue that an individual acquires while growing up, while L2 is the language that is acquired later in the learning process. Second language acquisition theory focuses on how L2 learners acquire language competence through interaction with the target language environment. Second language acquisition theory views language acquisition as a natural, unconscious process, similar to what children experience in the acquisition of their native language. In contrast, language learning (LL) emphasizes the acquisition of language knowledge through teaching and learning strategies [1]. The theory of second language acquisition suggests that learners automatically acquire knowledge of language structure, vocabulary and pragmatics through exposure to the target language environment.

2.2 Characteristics and challenges of phonological learning

Phonological learning is a complex and challenging task that involves the understanding, production and expression of human language and sounds. The characteristics and challenges of phonological learning will be developed below. First, phonological learning is characterized by diversity and variation. There are huge phonological differences between regions, cultures and individuals, which make learners need

to adapt to different pronunciation and phonological rules. In addition, phonology changes over time, and new ways of pronouncing words and phonological features are constantly being created, which is an ongoing challenge for learners. Secondly, phonics learning involves the development of listening and speaking skills. Learners need to familiarize themselves with and understand different speech sounds through extensive listening training. At the same time, they need to imitate and produce correct speech sounds through speaking practice. This requires learners to have good auditory sensitivity and oral muscle coordination.

2.3 Importance of Pronunciation Accuracy

Pronunciation accuracy is the basis of effective communicative competence. Correct pronunciation ensures that learners can be understood by others and can communicate effectively with others. If learners' pronunciation is inaccurate, it may lead to communication barriers and affect the transmission and understanding of information. Pronunciation accuracy is therefore essential for building good communicative language skills. Secondly, pronunciation accuracy is also very important for improving language self-confidence and fluency. When learners are able to produce speech accurately, they feel more confident. This self-confidence promotes learners to express their ideas and opinions more fluently and improves their ability to express themselves in oral communication. On the contrary, if pronunciation is inaccurate, learners may feel frustrated and language expression becomes difficult, which in turn affects the coherence and fluency of conversations.

3. Analysis of Second Language Acquirers' Pronunciation Performance

3.1 Common Pronunciation Errors of Second Language Acquirers

In the process of second language acquisition, learners usually make some pronunciation errors. These errors may be caused by a variety of factors such as the differences between the native language and the target language, individual learner differences, learning environment and so on. Some common pronunciation errors of second language learners will be introduced below. First of all, phonological alliteration and weakening are errors that are more likely to occur in second language learners. For example, the phenomenon of alliteration is more common in English, but it is not common for Chinese or other native non-English speakers, so they tend to mispronounce or omit some alliterative phrases, which leads to poor phonology. Secondly, the pronunciation of vowels and consonants is also a common error for second language learners. For certain vowels and consonants, different languages may have different ways and rules of pronouncing them, and different dialects and accents may also produce differences. As a result, learners can easily misapply their native language's way of pronouncing vowels and consonants to the target language, or incorrectly convert the target language's pronunciation to their native language's way of pronouncing vowels and consonants.

3.2 Factors affecting pronunciation accuracy

The influence of the first language (L1) is an important factor. Learners' mother tongue has a profound effect on their pronunciation when learning a second language (L2). Different phonological systems and pronunciation rules exist between languages and learners are often disturbed by the sounds of their mother tongue. For example, some languages may not have specific phonemes in the L2 or may have different phonemes, which may cause learners to have difficulty in accurately producing phonemes in the target language. Therefore, learners need to recognize the differences between their mother tongue and the target language and try to overcome these differences in order to improve pronunciation accuracy. The age of the learner and the starting point of learning also have an impact on pronunciation accuracy. Research has shown that children are more flexible and sensitive during language acquisition and easily imitate new speech sounds. In contrast, adults tend to face greater challenges when learning a second language [2]. Early learning beginnings can help learners better master the pronunciation rules and phonological features of the target language.

4. Effective Strategies and Training Methods for Phonics Learning

4.1 Sound Recognition and Imitation Training

Sound recognition and imitation training is the basis for second language learners to learn pronunciation. In phonological learning, sound discrimination and imitation are the key steps to improve pronunciation accuracy. Sound discrimination training is designed to help second language learners distinguish different phonetic units and accurately recognize the differences between the target speech and their own mother tongue. This training can be achieved through listening practice and comparison. First of all, second language learners can familiarize themselves with the pronunciation characteristics of the target speech sounds through listening practice. They can listen to standard pronunciation materials recorded by model speakers, such as audio or video recordings. Through repeated listening and with the aid of words or images for comprehension, L2 learners can gradually familiarize themselves with the pronunciation patterns and features of the target speech. Second, imitation is the key to improving pronunciation accuracy. Second language learners can try to imitate the pronunciation of model speakers, paying attention to the details and features of pronunciation. They can refer to the speaker's mouth shape, tongue position and vocal fold movement, etc., and gradually adjust their own pronunciation. When imitating, second language learners can practice repeatedly and correct their mistakes in time by comparing the differences between their own pronunciation and the exemplary pronunciation [3].

4.2 Establishing Repetition and Feedback Mechanisms

Repetition and feedback mechanism is an important strategy for second language learners to improve their pronunciation accuracy in speech learning. Through repetition and timely feedback, L2 learners can continuously improve their pronunciation skills and accuracy. First of all, repetition is one of the basic principles for improving pronunciation accuracy. Second language learners need to practice the pronunciation of target speech sounds over and over again to consolidate the learned pronunciation rules and skills. Through repeated practice, they can gradually familiarize themselves with how the target speech sounds are pronounced, develop correct oral muscle memory, and improve pronunciation accuracy. Secondly, feedback is an important supplement to repetition training. L2 learners need timely feedback on the accuracy and errors of their pronunciation. This feedback can come from multiple sources, such as teachers, peers, or speech-learning apps. Feedback can help second language learners realize their pronunciation problems, correct errors in time, and deepen their understanding of the target speech sounds.

4.3 Developing speech perception and awareness

Speech perception refers to the auditory sensitivity and discrimination of speech signals. In the process of phonological learning, the cultivation of phonological perception is crucial to accurately understanding and imitating the pronunciation of the target language. First of all, the development of speech perception requires learners to be exposed to the speech environment of the target language through extensive listening practice. This includes listening to a variety of speech materials, such as recordings, dialogues, movies, songs, etc. Through repeated listening, learners can gradually familiarize themselves with the characteristics and patterns of the target speech and improve their sensitivity and discrimination of speech. Secondly, the cultivation of speech perception also requires learners to pay attention to and analyze the phonemes, syllables, stress positions, intonation and other elements in speech signals. Learners can train themselves to discriminate different speech elements through specialized listening exercises. For example, training can be focused on a particular speech feature, such as recognizing the pronunciation of different vowels, or recognizing words with different stress positions.

4.4 Utilizing phonics learning aids and resources

Phonics learning aids and resources play a crucial role in improving learners' pronunciation accuracy. First of all, quality phonological materials are the key to learners' acquisition of correct phonological input. Learners can obtain speech materials through a variety of channels, such as listening materials, audio clips, and online speech libraries. [4] These materials can help learners familiarize themselves with the phonetic features and pronunciation rules of the target language and improve their phonological sensitivity. At the same time, learners need to select high-quality speech materials to ensure that they can receive correct speech input. Secondly, speech recognition software and speech correction tools are also effective aids. These tools can help learners correct their pronunciation errors and provide feedback and guidance. Some speech recognition software can even provide real-time pronunciation checking and assessment to help learners quickly identify and

correct errors.

5. Conclusion

In the phonological learning of second language learners, a variety of factors need to be considered. Adopting a variety of effective strategies and training methods, strengthening phonological teaching and providing diverse learning opportunities and resources can help second language learners better master the phonological system of a second language. Future research needs to further explore the pronunciation characteristics and influencing factors of different groups of second language learners, and develop more intelligent phonological learning aids and resources.

References

[1] Mother Shan,Hua Yuqi. A study of Chinese native speakers' ability to acquire English contrastive consonants[J]. Chinese Character Culture,2020(04):52-53.

[2] BAN Yingchao,HE Li,WANG Shuwen et al. The effect of Sichuan dialect on English phonological learning of second language learners--Taking /l/ and /n/ as an example[J]. Journal of Weifang Engineering Vocational College,2017,30(04):72-76.

[3] Su En. The effect of social mother tongue experience of dialects on second language vocabulary acquisition[J]. Journal of Xiamen Institute of Technology,2015,23(06):69-73.

[4] Wang Yuting. Effects of Northeast Dialect on ESL Learners' English Phonological Acquisition and Coping Strategies[J]. Overseas English,2020(14):102-104.

Author Resume:

Wang Nan(1981.5-), Female, Jinzhou, Liaoning, PhD Candidate, Associate Professor, Research Interests: Pedagogy, Second Language Acquisition

Li Jia (1978.10-), Female, Taian, Liaoning, Graduate Student, Assistant Researcher, Research Interest: International Education.

Liu Yunduo (1981.12-), Female, Jilin Nong'an, Doctoral Candidate, Chief Physician, Research Direction: Psychology of Oncology

Jia Nan (1981.04-), Female, Wuan, Hebei Province, Master, Associate Professor, Research Direction: Cognitive Psychology.

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Digital Empowerment: Construction of Visual Communication Design Major in Private Higher Education Institutions

Zhenjie Xia

School of Art, Wuhan University of Bioengineering, Wuhan 430415, China.

Abstract: In the wave of "Digital Empowerment," this paper delves deeply into the evolution of Visual Communication Design specializations within private higher education institutions. By elucidating the impact of "Digital Empowerment" on Visual Communication Design specializations, the current curriculum design, teaching modes, and changes in student demands in private institutions are analyzed. Using Wuhan College of Bioengineering as a case study for empirical research, strategies such as innovative curriculum system design, optimization of teaching resources, and interdisciplinary cooperation and practice are proposed.

Keywords: digital empowerment; visual communication design; private higher education institutions; specialization construction; construction strategies

Introduction

The "Fourteenth Five-Year" plan and the 2035 vision proposal issued by our government clearly stipulate the promotion of deep integration among industries such as the internet, big data, and artificial intelligence, aiming at achieving industrial digital transformation, with the reliance on treating the digital economy as a strategic emerging industry[1]. How to drive the development and construction of the Visual Communication Design field amidst the wave of "digital empowerment," and how to cultivate design talents who can adeptly handle technology and possess profound creativity in a digital environment, are propositions that require thorough contemplation and discussion.

1. Influence of Digital Empowerment on Visual Communication Design Specialization

From November 19 to 21, 2020, China held its first national-level conference on 5G and the Internet. The conference introduced the concept of "Digital Empowerment," emphasizing the rejuvenation of various industries through digital means and using informatization as a driving force to achieve modernization. The rapid advancement of artificial intelligence technology is profoundly altering the landscape of education. The methods of acquiring and imparting knowledge, as well as the interaction between teachers and students, are undergoing a profound and magnificent transformation[2]. Additionally, digital empowerment has spurred the emergence of new design fields such as CV (Computer Vision), NLP (Natural Language Processing), and HCI (Human-Computer Interaction), providing a more flexible and diverse range of employment areas for specialization construction. Tongji University is the first domestic institution to complete an integrated "Bachelor-Master-Doctoral" chain in intelligent design talent cultivation. The "Visual Communication Design - Artificial Intelligence" program at the university enrolls students through a national examination selection followed by a secondary selection after admission. The admitted students come from three professional categories within Tongji University: Design, Information, and Architectural Planning, Landscape & Design. This admission method showcases the multidisciplinary nature of the intelligent design dual-degree program, encompassing not only artistic design and aesthetic concepts but also requiring students to grasp various technical knowledge and possess practical operational capabilities.

2. Current State of Visual Communication Design Specialization in Private Higher Education Institutions

2.1 Overview of Current Curriculum Settings and Teaching Models

Due to their historical background and distinctive nature of education provision, private higher education institutions face some common issues in the Visual Communication Design specialization, such as lack of distinctive features in curriculum settings, monotonous teaching methods, weak practical teaching links, insufficient comprehensive quality of students, and disconnection with market demands[3]. In the

context of “Digital Empowerment,” many private institutions have introduced digital courses like User Experience Design, Application of Virtual Reality Technology, etc., to adapt to the new requirements for designers in the digital era. Meanwhile, teaching models are evolving towards project-driven and practice-oriented directions, enabling students to cultivate comprehensive design abilities through real-world cases.

2.2 Characteristics and Demand Changes of Student Groups

Unlike before, today’s visual communication students are eager to apply their acquired knowledge and skills to real-world projects, craving for more opportunities to connect with the industry to enhance their competitiveness in the job market. They possess a higher level of digital literacy, enabling them to keenly grasp market trends. They are enthusiastic about cleverly integrating their design works into digital platforms such as mobile applications and interactive media, aiming for a deeper engagement with the audience.

3. Case Analysis and Empirical Study on the “Digital Empowerment” Construction at Wuhan University of Bioengineering

3.1 Case Analysis: Construction of Visual Communication Design Specialization

Wuhan University of Bioengineering has accurately captured the essence of digital empowerment in the construction of its Visual Communication Design specialization. Through proactive insight into societal needs, the institute fully explores the tripartite teaching model of “Topic-Teaching-Social Practice,” actively adjusting the curriculum to integrate digital technology into traditional design courses. Taking the “Mobile Media and User Experience Design” course as an example, students learn how to optimize user experiences from the angle of designing mobile applications, achieving more intuitive communication effects through digital empowerment. In the “New Media Communication” course, the institute introduces Virtual Reality technology, enabling students to experience firsthand the interactivity and immersive features of digital media. Moreover, the institute provides students with a diverse array of digital tools, ranging from 3D modeling to data visualization, and from image processing to animation production, thereby comprehensively enhancing students’ digital literacy and creative application abilities (Fig. 1).

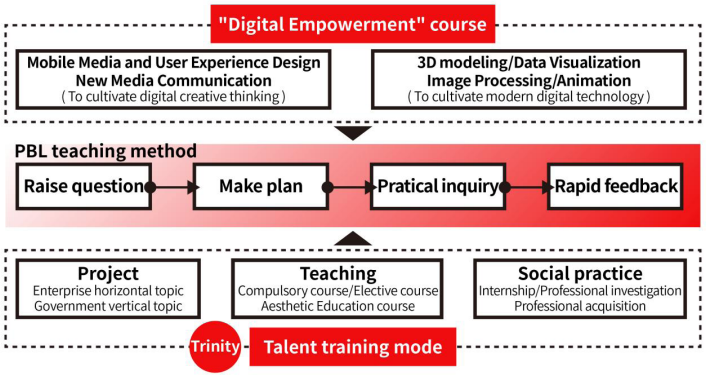

Figure 1. Cultivation model integrating digital courses in Visual Communication Design specialization (drawn by the author)

3.2 Empirical Study: Students’ Innovative Achievements in a Digitally Empowered Environment

In the classrooms of the School of Arts at Wuhan University of Bioengineering, digital empowerment is not merely a theoretical concept, but vividly manifested through students’ creations and practices. Over the past three years, faculty members have guided students of the Visual Communication Design specialization in winning a total of 452 awards in nationwide competitions such as the “Internet+” contest, Hua Can Award, and Jin Du Award. Among these, over 80 awards were secured in international competitions like the UK Eco Design Award, G CROSS Creative Award, and Hong Kong Contemporary Design Award, ranking the institution among the top of its kind in the province. Additionally, 9 national patents have been authorized, and 11 projects have been approved at the national and provincial levels under the

"Major Creation Project" initiative. In 2023, graduating students from the Visual Communication Design specialization focused their graduation projects on "Trans-field Digital Creativity," orchestrating a "Offline + Online" dual exhibition. In the exhibition, numerous works integrated sound visualization videos, AR-enhanced posters, and installation spaces, enabling interaction through touch and voice control, thereby creating an immersive artistic environment for the audience.

4. Strategies for Constructing Visual Communication Design Programs in Private Higher Education Institutions Based on "Digital Empowerment"

In the digital era, visual communication design programs in private higher education institutions need to formulate strategies, take "digital empowerment" as a guide, and implement the "4P" professional construction concept to ensure that the professional construction is in sync with the times, adapts to social needs, and cultivates excellent design talents with innovative capabilities and digital literacy (Fig. 2).

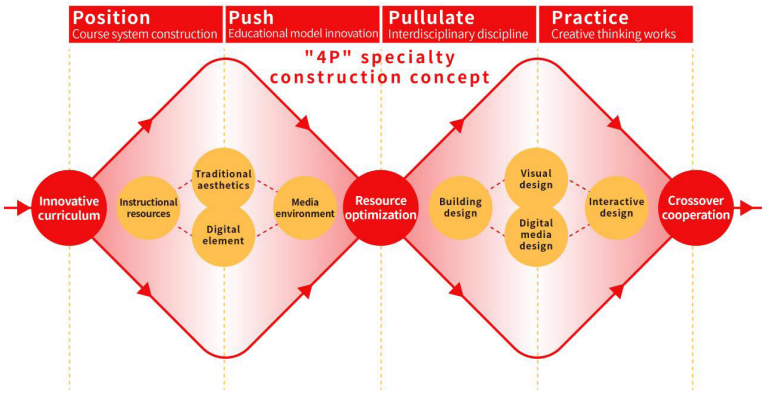

Figure 2. Strategies for constructing visual communication design programs in private higher education institutions based on "digital empowerment" (drawn by the author)

4.1 Innovative Curriculum System Design: Integrating Traditional and Digital Elements

In an era advocating cultural confidence, the integration of new technologies, new thinking, and traditional elements is of great significance for promoting and inheriting excellent traditional culture [4]. In curriculum system design, traditional aesthetics and digital elements should be integrated to enable students to obtain digital creation capabilities based on traditional foundations. For different design fields such as graphic design, animation, and interaction design, tailor-made courses should be formulated so that students can master traditional design theories and proficiently use digital tools, achieving design diversity and innovation, and allowing students to explore the infinite possibilities of graphic works in the digital environment.

4.2 Optimization of Teaching Resources: Integration of Digital Tools and Platforms

The cognitive theory of learning emphasizes that the processing of information can affect learners by altering behavioral patterns. This theory enlightens us to the fact that media serves as a crucial medium to facilitate communication between teachers and students. Traditionally, media was merely perceived as a "channel" for information transmission, but now, we are starting to acknowledge the role of educational resources and media environment[5]. Against this backdrop, it's pivotal to actively establish digital platforms for showcasing works, introducing virtual laboratories, online collaborative platforms, etc., to provide students with opportunities to display their works. This, in turn, encourages cross-school and cross-regional collaboration, urging them to translate what they have learned into tangible creative outcomes.

4.3 Cross-boundary Cooperation and Practice: Expanding the Realm of Cooperation in the Digital Era

A significant trend in future teaching will be interdisciplinary education, especially courses involving various artistic disciplines, characterized by their rich and diverse integrative features [6]. The latest 2022 version of the "Graduate Education Discipline Directory" positions

design as a first-level discipline of interdisciplinary categories, implying that the future of design students is closely connected to cross-specialty and interdisciplinary studies. The future world will be a world of interdisciplinary studies, and "Design + AI" is just one of the exciting combinations. Other combinations like "Architecture + Gaming," "Visual Communication + Digital Media," "Film and Television + Interaction," etc., will also bring different sparks of collision, promoting the frontier development of the design field.

References

[1] Xiao Jie. Research on the construction of production-education integration training bases based on 3D digital technology - A case study of the animation design program at Guangzhou P College[J]. Green Packaging, 2023(1):35-38.

[2] Zhou Qinqing. Exploration of countermeasures for the connotative development of higher education continuing education empowered by digital technology - A case study of continuing education at Shunde Polytechnic[J]. Continuing Education Research, 2023(5):10-13.

[3] Zhang Mei. Research on the construction of practical teaching system of visual communication design major in private undergraduate colleges - A case study of Sichuan Business College[J]. Knowledge Economy, 2020(4):136-137.

[4] Zuo Zhuo. Reflections on the application of Chinese traditional elements in digital media art design[J]. Art and Technology, 2023, 36(4):163-165.

[5] Zhang Chunrao. Exploration and practice of the development and integration application of higher education art education resources[J]. Art Education Research, 2023(6):135-137.

[6] Wei Min. Application of "cross-boundary cooperation" teaching model in higher education art design education[J]. Art Education Research, 2016, 0(20):92-93.

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Author Introduction:

Zhenjie Xia (1991-), male, lecturer, master's degree, research direction: new media visual design, artificial intelligence art. Email: 609635868@qq.com

Optimization Strategies for the Students Education Management Model in Higher Education under the Circumstance of Big Data

Maojie Hu[1], Xinwei Zhang[2]

1. University of Sydney, Australia NSW 2006

2. Zibo Water Resources Survey and Design Institute, Zibo 255000,China.

Abstract: With the advent of the big data era, China's higher education industry is facing a severe test. Using big data to optimize school education management is an important measure for schools to demonstrate "people-oriented", drive value with data, adapt to social development needs, and improve their own educational efficiency. In the context of big data, the management of student education in Chinese universities is developing towards a scientific, comprehensive, and personalized direction. Students should actively adapt to this situation, starting from building a solid platform foundation, improving the information literacy of management personnel, and strengthening security protection, effectively improving the quality and efficiency of student management work in higher education.

Keywords: Big data; College students; Education management; Optimization strategy

Introduction

Big data is not only a science and technology, but also an advanced ideological concept. In the era of big data, massive information resources not only provide convenience for students, but also have a subtle impact on their values. Studying the scientific combination of big data technology and university student education management methods, utilizing big data technology and ideas to enhance the ability of universities to guide value, share resources, and evaluate education, is an inevitable move for universities to adapt to the development of the times and the needs of the country.

1. The Significance of Optimizing University Student Education Management Models with Big Data

1.1 Highlighting the "Student-oriented" Educational Philosophy

The widespread application of big data provides new opportunities for the optimization and transformation of university management models. In the big data environment, massive information resources and convenient information collection, processing, and integration provide strong technical support for the transformation of university education management methods. With the development of technology, the psychological, emotional, and knowledge-based needs triggered by the interest of young college students in new things in the new era also make it urgent for universities to use big data technology to optimize the education management of college students. With the changes of the times, the learning methods of college students are also constantly changing, and the desire for knowledge and self-awareness are driving them to make better and more effective learning methods. In this context, applying big data technology to universities can inject a reasonable driving force into students' educational management, thereby enabling them to better participate in school teaching activities.

1.2 Utilizing the Educational Guidance Value of Big Data

In the era of big data, big data has become the most important production factor affecting the development of various aspects of society, and the same applies to teaching in universities. The application of big data technology can change the traditional manual guidance and experiential guidance towards "data guidance", thereby enhancing the rational decision-making ability of university students and enhancing the educational management efficiency of university students. Utilizing big data for university student education management can solve the problems of information chaos and resource fragmentation in current university student education management, and achieve the management

of university students. In addition, teaching management tools based on big data visualization, systematization, and interaction can effectively solve the difficulties and key issues in university management. Based on big data technology, when policies change, universities can adjust according to local policies or conduct small-scale experiments to achieve specific management goals. Under the effective implementation of small-scale approaches, we will innovate and optimize work models on a large scale to promote the sustainable development of student education management in universities.

1.3 Meeting the Objective Requirements of Social Development for Higher Education

The quality of higher education is an important indicator of evaluating a country's comprehensive strength. In order to grasp the pulse of the times and comply with the requirements of socialist construction and development in the new era, further promote the reform of university management methods, and improve the overall strength of the country. It is urgent to innovate the management methods of universities. It cannot only focus on slogans and concepts, but also need to determine our own training goals on the basis of seeking truth from facts and effectively promote the reform of university management work. Big data technology provides a powerful means to promote the deepening and application of student education management in universities. With the support of big data, university managers can obtain more valuable information from students and society, in order to accurately grasp the ideological and social development laws of students, and formulate a management system that meets the interests of everyone, promoting the maturity and efficiency of higher education, and achieving the goal of student education management reform.

2. Optimization Strategies for University Student Education Management Models in the Context of Big Data

2.1 Innovating Education Management Concept

Under the guidance of the "people-oriented" educational ideology, university teachers should timely create diversified humanistic education methods. The education and management of college students should start from their own needs, pay attention to the differences between different types of students, and reform from the psychological and personality aspects of students. In universities, it is necessary to strengthen the education and management of college students, and strengthen the guidance of moral education work for college students. Secondly, it is necessary to fully leverage the subjective initiative of college students and effectively enhance their cultural and quality, fully leverage the advantages and characteristics of big data to continuously enrich students' education and management methods based on exploring and analyzing their behavior, and grasp the dynamics of their learning and life. In the interaction and communication between teachers and students, cultivate students' self-learning ability, gradually shifting from education management centered on educators to education management centered on students. In addition, in daily education management work, it is necessary to organically combine students' knowledge transfer in the classroom with after-school teaching, allowing them to actively participate in teaching activities, truly improving the quality and efficiency of teaching, guiding students to move forward in a standardized and scientific teaching method, combining theory and practice, network and classroom, and improving the analysis of students' problems from the root, To enhance students' ability to respond and distinguish, thereby improving the overall quality and efficiency of university student education management work.

2.2 Building a Solid Platform Foundation and Achieving Comprehensive Integration and Sharing of Resources

Universities should actively adapt to the requirements of the development of the big data era, fully utilize modern information technology, and provide a platform for mutual communication between teachers and students in universities. On this platform, schools can carry out teaching management work such as logistics, finance, and teaching evaluation, systematically integrate and centrally manage the teaching management information of universities, provide convenience for information exchange of universities, and provide certain rankings and structures for various departments of universities, thus effectively solving the phenomenon of information islands and information depressions caused by the fragmented management of various systems in universities. In the process of common development, the comprehensive

application of various data has value for educational management.

Universities should collect, organize, classify, and store student information, establish a big database, conduct information exchange, and maintain big data accordingly. The management of college student education contains multiple aspects of information. From the beginning of student registration, various information will be generated, such as club participation, military training scores, attendance rate, food consumption, health status, etc. Universities need to transform the working methods of multi departmental information management, input these different sources and attributes of information into the same database, fully mobilize the awareness of information participation in various departments of the school, build an intensive and centralized information management system, and clearly divide the responsibilities of each department based on the characteristics of various information.

2.3 Strengthening Security Protection and Establishing a Standardized Data Management Mechanism

Big data not only provides convenience for university administrators, but also raises security risks such as information leakage and data leakage. The increasing prevalence and frequency of public behavior on the Internet pose serious challenges to information security. Compared to the management and operation of social organizations, the management of student education in universities has its own characteristics. Except for students who take the postgraduate entrance examination for further education and engage in related scientific research work, most students have reached the end of their student careers and should devote themselves to socialist construction with full enthusiasm and knowledge. If a student's personal information is damaged or lost, it will cause significant losses to the student, school, and even the entire community. Therefore, it is necessary to rely on big data technology to effectively manage the teaching management of universities, and encrypt and store it. The access, modification, and use of data should be authorized to management personnel at different levels, and data that can be disclosed to the public should be strictly isolated, with independent rights and sufficient confidentiality rights. Universities should actively invite external programmers and IT professionals to assist in building professional firewalls, student information blockchains, and cloud data centers to form scientific and effective emergency plans, which can ensure that schools promptly respond to network intrusions or data leaks, thereby ensuring students' privacy.

2.4. Improving the Information Literacy of Management Personnel

In the context of big data, the management of student education in universities is facing an urgent demand for information technology and high-tech talents. Therefore, it is necessary to introduce advanced management concepts, continuously explore new management models, and consider educational management work from the perspective of development strategies. This requires universities to have high-quality leadership and information talents in management positions. In this situation, managers need to start from two aspects and continuously improve their information literacy and comprehensive quality. Firstly, current leading cadres should have awareness and ability. Universities should continuously enhance the informationization awareness of managers, establish data awareness, recognize the importance of transforming student education management, and actively participate in the transformation work. Secondly, managers should continuously enhance their skills in data search, data collection, analysis, interpretation, and thinking. Universities should regularly carry out training on big data applications, with big data applications as the core, organize the use of data analysis software, explain international advanced management concepts and leadership skills, and apply the theories and skills learned to management work. At the same time, schools should also strengthen the assessment of the management ability of managers, and regularly evaluate them based on student feedback, data application ability, and management effectiveness. From the evaluation results, the shortcomings in current management work can be identified, thereby improving the ability of universities to evaluate the results, and implementing a dynamic management model based on the actual situation of students, continuously improving and innovating.

3. Conclusion

To sum up, the quality of higher education is directly related to the construction of socialist modernization, and therefore has been highly valued by the country. In the context of big data, the management of student education in universities has undergone multidimensional

changes, but its fundamental purpose is to cultivate qualified socialist builders for the country. Although there are still problems with outdated concepts, incomplete hardware facilities, and low management efficiency in the students education management in colleges and universities, as long as schools can actively integrate new ideas and technologies in the era of big data around the direction of socialist education, they can improve the informationization level and comprehensive quality of students' education management, thereby promoting their comprehensive and healthy development.

References

[1] Jifei Zhao. Transformation and Strategy of Student Education Management Model in Universities in the Era of Big Data [J]. Shanxi Youth, 2023, (16): 175-177

[2] Yu Han. Optimization Strategies for the Education Management Model of College Students in the Context of Big Data [J]. Taste Classic, 2023, (12): 116-119

[3] Liang Gong, Xiaohui Huang. Exploration of Strategies for Transforming Student Education Management Models in Universities in the Era of Big Data [J]. Universities, 2022, (34): 55-58

[4] Xi He. Strategic Research on the Transformation of College Student Education Management Model under the Background of Big Data Application [J]. Essay Hundred (New Chinese Looseness), 2018, (07): 204.

Explore the tie-dye culture and inherit the artistic value

—— Take the Dali Zhou Yangcheng tie-dye culture as an example

Xiangting Chen, Yu Zhao

Yunnan Normal University, Kunming 650500, China.

Abstract: 20 proposed by the party to build a strong education, science and technology, talent, culture, sports, healthy China, significantly enhance the national cultural soft power; during the summer vacation to the hometown town to explore Dali intangible cultural heritage tie-dye culture, this paper will from the source, tie-dye technology, the cultural connotation and tie-dye in the culture and art to discuss.

Keywords: tie-dye; art; intangible cultural heritage

Zhouis located 20 kilometers north of the ancient city of Dali. There are about 1,800 Bai dwellings in the village, which is the largest Bai village in Dali. Through this research, we understand the value of cultural inheritance in the intangible cultural heritage. Dali tie-dye culture not only brings rich and colorful tie-dye handicrafts to Dali people, but also plays a very important role in the process of spreading the intangible cultural heritage and Dali's traditional culture.

1. Traceability of tie-dye

After arriving in Zhou City, we saw a lot of tie-dye handicrafts. Well, first of all, we can't wait to understand the history of tie-dye with the local villagers. Tie-dye ancient name "valerian", "valerian", began in the second century BC. It is stated: " During the Han Dynasty, there was a dyeing method, I do not know who made it."Dali has a long history of tie-dye culture. I heard the local villagers say that the Bai ancestors understood the" dyeing and picking grain show " as early as a thousand years ago. It is said among Dali people that the tie-dye of the Bai people in Dali was dyed by water of the melting snow mountains on the top of Cangshan Mountain, which reflects the love of the Dali people for the tie-dye of the Bai people.

In my memory, I was deeply impressed by tie-dye since I was a child. Cloths, door curtains, clothes, ethnic bags, ethnic costumes, scarves, scarves, pillowcases, sheets and so on all have tie-dye colors. Since tie-dye has such a long history and a wide range of uses, what is the production process of tie-dye, the cultural connotation of tie-dye and the significance of tie-dye for our art education. Next, the author thinks through the summer vacation research content and related literature.

2. Tie-dye process

After listening to the source of tie-dye, we were all curious about this process and began to observe how the Bai aunt made it. The tie-dyeing process mainly includes three steps of tying flowers, dyeing and drying. The design patterns are mostly composed of a variety of circles, local flowers and plants, irregular patterns and some strange shape and strange geometric figures. As The Times evolves, so do the patterns. In the later period, many innovative patterns with the characteristics of The Times appeared. Next, according to the pattern requirements, fold it with a thread and bundle it into the dye cylinder. The traditional use of weekly tie-dye dye is locally called "earth indigo".

The Bai people will use the tie-dye works as tablecloth, bed sheets, headscarves and so on. The people of Zhouhave been making tie-dye for generations. With the continuous development of tourism in Dali, it provides conditions for the inheritance of this intangible cultural heritage.

3. The cultural connotation contained in the tie-dye

The dissemination of national culture has always been important content of human society, and national craft is the medium for the dissemination of national culture. These media carry the national production and life style, national character, aesthetic taste, etc., and carry out their own cultural communication in different times. Zhucheng Village in Dali is the hometown of Bai tie-dye. The production and marketing of tie-dye handicrafts run around the whole village. At the same time, it also absorbs and exports culture in foreign trade, which has formed

a “tie-dye culture cluster”.[1] Different patterns not only reflect the life of the people of Zhou, but also reflect the beautiful vision of the people. Tie-dye pattern is the embodiment of a kind of culture, which contains the history and culture of a nation.

Will tie-dye art into the university art course can not only enrich the current art course teaching resources, let more people pay attention to and inheriting the tie-dye the folk art, feel the humanistic value and artistic charm, and can change the inherent teaching mode, stimulate students ‘vitality and interest in learning art, cultivate the students’ imagination and creativity. It can be seen that integrating tie-dye art into college art courses is of great significance for stimulating students ‘enthusiasm for artistic creation, improving students’ professional art ability, inheriting the Chinese national culture, and promoting the inheritance and innovation of traditional culture.[2]

4. The inheritance value of tie-dyeing in school-based curriculum development in art education

The educational goal of our country is to cultivate the builders and successors of the socialist cause with all the-round development of moral, intellectual, physical, aesthetic and labor. With the continuous promotion of five education, art education is paid attention to by more and more schools. At the Fifth Plenary Session of the 19th CPC Central Committee, General Secretary Xi Jinping proposed that inheriting and carrying forward the fine traditional Chinese culture and inheriting the fine traditional Chinese culture is one of the important contents of promoting the building of a strong socialist culture. Therefore, some areas actively explore the excellent traditional culture of their own nation for curriculum development. Dali, as an ethnic minority autonomous region, also responds to the call to actively explore the culture of its own nation and innovate cultural and art courses.

Art education is constantly valued, and tie-dye as the local intangible cultural heritage of Dali is also used as a resource for school-based curriculum development. In this process, it not only enriched the content of art education in the school, but also widely spread the tie-dye culture, realizing the inheritance value of tie-dye in the development of school-based curriculum in art education. However, in the application process, we can carry out tie-dye culture inheritance from the following aspects:

4.1 Adopt diversified teaching modes

Traditional art education only stays at the level of students’ appreciation. When teachers show art works and students absorb them, students often only achieve cognitive improvement. The Opinions on the Implementation of the Project for the Inheritance and Development of Excellent Traditional Chinese Culture proposed that traditional culture should be integrated through national education, and by 2025, a system for the inheritance and development of fine traditional Chinese culture should be basically formed. Teachers should guide students to correctly appreciate and evaluate tie-dye art works, and give full play to the artistic characteristics of tie-dye technology, so as to realize the teaching purpose of art course to improve students’ aesthetic quality.[3] In addition to the appreciation of art works in the course, teachers can contact relevant units to organize regular art exhibitions, invite professionals to give lectures or actually carry out manual activities to experience tie-dye. These practical activities can make students truly feel the cultural value of tie-dye culture.

4.2 Create an immersive tie-dye atmosphere

Environment has a subtle influence on people, and the creation of educational environment is also very important in school education. Therefore, creating an immersive tie-dye atmosphere is conducive to students’ learning of tie-dye culture and their mastering of their skills. When I arrived at the tie-dye culture experience store in Zhucheng, I was shocked by the tie-dye works. In a clothes rack of a Bai people, there are lots of tie-dye works, with tables, cloth and large dyeing jars. These arrangements seem to make me understand the production process of tie-dye. In the course of school art education, the tie-dye environment of the Bai nationality can be imitated. For example, set aside a separate art education classroom, with different works of art hanging on the wall of the classroom, relevant tools can be placed in the corner, and even the wall can indicate the creation process on the wall. The specific environment creation will make students better understand the tie-dye process and stimulate their interest in tie-dye.

4.3 Make full use of Dali Zhucheng community resources

Community resources can be roughly divided into two kinds, one is community material resources, the other is community human

resources. Material resources include local tourism and cultural publicity centers, tie-dye experience centers, folk culture centers and museums. The community human resources include the Bai people in Zhoucheng, the craftsmen who make tie-dye and the operators of the tie-dye experience stores. Using these resources to integrate into the school's art education can include the following ways: First, you can go to the tourism and cultural publicity center, tie-dye experience center and folk culture centers and museums to collect photos, record videos, buy tie-dye works, and bring them back to the school for art display. Second, professionals can be invited to the school to explain special tie-dye knowledge, and even to become teaching assistants of the school. Third, lead the students to enter Dali Zhou City for observation, exploration and experience, and truly feel the local art in the life around them. Fourth, we can also communicate with the community to build a special education base. Learn about the local ethnic festivals, and take the students to participate in the community ethnic festival celebrations. The full use of community resources is conducive to the development of school art education. Exploring community resources can enrich the content of school art education, let students go out of the school curriculum, experience the production process of tie-dye culture and traditional minority festivals with local people, and truly feel the Bai culture of Dali Bai Autonomous Prefecture.

4.4 Establish a diversified teaching evaluation system

Most of the traditional curriculum evaluation is the teachers' evaluation and the final evaluation of students. However, in the process of art education, teachers need to guide students in all links and steps, and process evaluation is also very important. When schools in ethnic minority areas have quality evaluation, they use the national unified examination system to examine and approve, and I think this evaluation method has realized education equality. But in fact, the nations in different cultural environments have different modes of thinking and behavior, and their intellectual development advantages are also different.[4] Therefore, we should break through the traditional evaluation system and establish a diversified teaching evaluation system.

References

[1]Liu Lijuan, Li Xiaorui. Symbol meaning change and cultural representation of tie-dye handicraft of Bai nationality in Dali [J]. Textile Report, 2021,40 (04): 97-100.

[2]Ma Zijun. Research on integrating tie-dye art into the professional art courses of preschool education in colleges and universities [J]. Research on Art Education, 2023 (17): 150-152.

[3] Ma Zijun. Research on integrating tie-dye art into the professional art courses of preschool education in colleges and universities [J]. Research on Art Education, 2023 (17): 150-152.

[4] Wang Jianghua. Research on the development and utilization of educational resources in ethnic culture in schools in ethnic minority areas [D]. Southwest University, 2010.

An Analysis of English Polysemous Words from the Perspective of Conceptual Metaphor- Taking "Hot" for Example

Jie Li

Hunan Normal University, Changsha 410081, China.

Abstract: With the development of society, people's requirement on lexical meanings keeps changing, which causes meaning expansion. And it gives birth to the pervasive phenomenon of polysemy in vocabulary. Conceptual metaphor, proposed by Lakoff and Johnson, is a significant cognitive device deeply influencing human's way of thinking and using language. And this thesis focuses on the analysis of conceptual metaphor mechanism on the polysemous words, "Hot". Firstly, there is a brief introduction about polysemous words and conceptual metaphor. Then the most part of thesis focuses on explaining the semantic meanings of "Hot" with the help of conceptual metaphor theory.

Keywords: Conceptual metaphor theory; lexical meaning extension; hot

1. Introduction

The study of metaphor owns a long history and prolonged effect for linguistic study. As the representative of the traditional theory of metaphor, Aristotle regarded metaphor as a rhetorical device which can substitute the meaning of a word with another [1]. The words with more than one related lexical meanings are defined as polysemous words. And the sense of polysemous words is the combination of connotative and denotative meanings.[2] This thesis focuses on the analysis of the work mechanism of conceptual metaphor on words, taking "Hot" for example.

2. Using Conceptual Metaphor Theory to Analyze Semantic Meanings of "Hot"

2.2 Dictionary Meanings of "Hot"

The dictionary meaning of "Hot" can be divided into basic meanings and extended meanings.

2.2.1 Basic Meanings

Based on the Oxford Dictionary, "Hot" is defined as "having a high temperature; producing heat". From the core meaning of "Hot" elaborated by dictionary, "Hot" is associated with high temperature and heat. More precisely, "Hot" originally can be used to "describe the entity with high temperature surrounding human." [7] And the use of "Hot" in the following sentences (1) to (4) is the application of the basic meanings.

(1) Do you like this hot weather?

(2) Be careful---the plates are hot.

(3) Eat it while it's hot.

(4) I touched his forehead. He felt hot and feverish.

2.2.2 Extended Meanings

And the following is the extended meanings of "Hot".

(I) The Lexical Extension of "Hot"

(i) a person feeling unpleasant heat;

(ii) making someone feel hot;

(iii) a burning feeling in someone's mouth caused by spices;

(iv) causing the feeling of excitement;

(v) being difficult to deal with some hard situation making people feel worried and uncomfortable;

(vi) being popular; making people pay much attention;

(vii) being fresh;

(viii) being likely to be successful;

(ix) being good at doing something;

(x) being sexing or causing sexual excitement;

(xi) (of music) having a strong and exciting rhyme.[5]

2.3 Conceptual Metaphors in the Semantic Extensions of "Hot"

This chapter aims to introduce the definition of CM through analyzing some examples and lists the CMs in the extended meanings of "Hot".

2.3.1 Definition of Conceptual Metaphors (CM)

Conceptual metaphor was proposed and defined by Lakoff & Jhonsen (1980) firstly in the book Metaphors We Live By [4], which provokes the radical development of the study of metaphor. The conceptual metaphor is a cross-domain mapping from a concrete "source domain" onto an abstract "target domain".[3] Conceptual metaphor implies the interaction between the "source domain" and the "target domain" based on human physical, psychological, cultural and social experiences.

2.3.2 CM in the Semantic Extensions of "Hot"

The followings are the CM existing in the polysemous word, "Hot":

(I) THE FEELING OF EXTREME HIGH TEMPERARURE IS HOT

(II) SEXY IS HOT

(III) EXCITING IS HOT

(IV) EXCITED IS HOT

(V) FOOD WITH SPICES IS HOT

(VI) ANGERY IS HOT

(VII) DIFFICULT IS HOT or HARD IS HOT

(VIII) FRESH IS HOT or THE LATEST IS HOT

(IX) POPULAR IS HOT or GETTING MUCH ATTENTION IS HOT

2.3.3 Functions of the CM Working on "Hot"

(I) THE FEELING OF EXTREME HIGH TEMPERARURE IS HOT

(1) The temperature is at 40 centigrade today. I feel so hot, and I hate summer.

(2) --- "Your cheeks are so red. What's the matter with you?"

--- "I felt hot and uncomfortable."

--- "OMG! Let's test your body temperature and please have a rest now."

(3) Her cheeks were hot because of shyness.

The metaphor THE FEELING OF EXTREME HIGH TEMPERARURE IS HOT is an ontological metaphor. It is formed by the source domain "Hot" which is connected with the target domain, "the feeling of extreme high temperature". "Hot", whose core meaning is "having a relatively or noticeably high temperature", is close to describe the attribute of some entities.[6] And based on biological knowledge, human beings are thermostatic animal. It impossible for human to touch some entities with extreme high temperature. The skin sense provides human with a chance to experience the feeling of extreme high temperature. In this case, the human body can be regarded as a container, and the entities with high temperature from outside world is another kind of container. The two containers effect and are linked to each other. According to the theory of thermal conduction, between the two contacting entities, one entity with higher temperature emits heat to the entity with the lower temperature. And the heat stimulates human skin, making people feel the attribute of the entity, "Hot". Under the psychological intimation, the feeling is assimilated by the attribute, and people feel hot. Just as the first sentence shows, "I" feel hot because of the hot

environment surrounding and contacting “me”.

Here is also another environmental effect on human body like virus. Sometimes viruses invade human body destroying the balance of body mechanism. And a series of responses make the temperature of human body higher than normal. Though the human body cannot be regarded as an object with relatively high temperature, based on life experience they give themselves psychologically suggestions that they are surrounded by unbelievable heat. And when people catch fever, they will use “Hot” to describe their feelings. It’s not only a cross-domain mapping, but also a way to show that the extreme heat they psychologically feel makes them feel uncomfortable and emergent. Except for the influence of the heat coming from the external environment, here exist inner physical factors to make people feel “Hot”. Sometimes people are influenced by the psychological factors to produce some adrenalin. The chemical thing makes human cells more active, which produce some heat and make the temperature of the body increase. The influence of these cells is similar with the viruses mentioned above, which also provides people with psychological indication to feel hot. And the metaphor THE FEELING OF EXTREME HIGH TEMPERARURE IS HOT is reasonable.

(II) SEXY IS HOT

(1) In the bar, most girls and boys dress hot.

(2) Putting on this little skirt, she looks so hot.

(3) Tom looks hotter than before because he insists in working out and balancing his diet.

In daily life, when people come across beauties who look sexy, they can describe these pretty persons as hot guy or hot girl. And here comes the metaphor SEXY IS HOT. The produce of the metaphor can owe to sex hormone. Because these beauties are very attractive, people who see them spontaneously produce sex hormone in their body. Sex hormone stimulates bodies to work faster to produce more heat which makes the temperature of body higher. Through the reaction of the human body, the abstract “Sexy” here becomes a concrete object endowed with the ability to let the temperature of body higher. With the accumulation of the knowledge of such physical phenomenon, people naturally make “Hot” connected with “Sexy” under the media of cross-domain mapping, thus producing the metaphor SEXY IS HOT or BEING SEXY IS THE WAY OF MAKING OTHERS FEEL HOT.

(III) EXCITING IS HOT

(IV) EXCITED IS HOT

(1) There exists hot competition between the two basketball teams.

(2) How boring staying at home! I want to sleep. Please play a hot music and give me some energy.

(3) The fans on the auditorium are hot for the winning of the football team they like.

(4) He looks hot because today he buys a new smart phone which he desires for a long time.

There are always lots of activities that give people the sense of the excitement, for example basketball game or high-risky sports. “The stimulation of intensity originating from the activities plays an important role to map the high temperature domain to the abstract domain of excitement.” Therefore, there exists the expression like hot discussion related to the CM EXCITING IS HOT and “he feels hot about the discussion” linked with the conceptual structures EXCITED IS HOT.

(V)FOOD WITH SPICES IS HOT

(1) Eating mustard is hot for children.

(2) Enjoying a bottle of soup with hot peppers in winter helps expel coldness.

Eating spicing food will evoke intensely the cells of the tongue and the brain, which makes people feel excited and then makes the body produce heat. And when the temperature of the surroundings gets very high, the body also has high temperature. The two different situations possess the similar outcome, making human body’s temperature higher. And the similarity makes it possible for mapping the domain of high temperature onto the target domain of taste.

(VI) ANGERY IS HOT

(1) His hot temper makes it hard for him to make some close friends.

When people get mad, their body tend to produce a lot of heat, which is similar with the situation when people stay in a high temper-

ature environment. The similarity can make the two situations get analogy to produce metaphor ANGERY IS HOT, which is derived from mapping the source domain of high temperature onto the target domain of emotion.

(VII) DIFFICULT IS HOT or HARD IS HOT

(1) With the war between the two countries were getting hotter and hotter, many residents of the war areas ran away.

(2) Because of the economic crisis, people are living a hot life.

The metaphor DIFFICULT IS HOT or HARD IS HOT can also be regarded as DEALING DIFFICULT SITUATION IS TOCHING SOMETHING HOT. If a person needs to process an extremely hot entity whose temperature comes to the zenith, how does the person feel about the hard situation? Isn't it dangerous? Maybe once people touch the stuff, they will draw back the hand immediately. Therefore, it is difficult to touch an object with extreme heat. The metaphor DEALING DIFFICULT SITUATION IS TOCHING SOMETHING HOT, DIFFICULT IS HOT or HARD IS HOT involves in the mapping from the source domain "Touch" onto the target domain "Dealing with".

(VIII) FRESH IS HOT or THE LATEST IS HOT

(1) The two girls are talking about the hottest gossips of stars.

(2) He is reading the hot stories from the latest newspapers.

When a cake has just been baked, it must be hot because it just comes out from an oven. And the new baked hot cake must be fresh or latest. So when people taste hot food, they will naturally hold the view that the food is fresh or the latest. So based on the life experience, people endow "Hot" with the meaning of "Fresh" or "The latest". And the hidden mechanism under the endowment is the conceptual metaphor FRESH IS HOT or THE LATEST IS HOT.

(IX) POPULAR IS HOT or GETTING MUCH ATTENTION IS HOT

(1) They are always the hottest bands making people unforgettable.

(2) The restaurant is the hottest place for lovers to date.

In ancient time, there was totally dark at night. And in the dark the higher temperature a thing had, the brighter it was and the more attention people paid. The popular things or people always get much attention like the entity with extreme high temperature in the dark. The common feature provokes the mapping from the domain of high temperature onto the domain of attention. And the conceptual metaphor, POPULAR IS HOT or GETTING MUCH ATTENTION IS HOT, is reasonable.

3. Conclusion

All in all, human language is metaphorical including human vocabulary.

The major findings of the study are as followings:

Firstly, by finding the similarities between the core meaning and the expanded meanings, the thesis concludes the conceptual metaphors in "Hot".

The conceptual metaphor modes in "Hot" are the followings:

(I) THE FEELING OF EXTREME HIGH TEMPERARURE IS HOT

(II) SEXY IS HOT IS HOT

(III) EXCITING IS HOT

(IV) EXCITED IS HOT

(V) FOOD WITH SPICES IS HOT

(VI) ANGERY IS HOT

(VII) DIFFICULT IS HOT or HARD IS HOT

(VIII) FRESH IS HOT or THE LATEST IS HOT

(IX)POPULAR IS HOT or GETTING MUCH

Except for analyzing the semantic meanings of polysemous words, the conceptual metaphor theory can be applied in other fields, such as in education and translation. We can have some further studies about the application of the conceptual metaphor theory.

References

[1] Aristotle. Poetics [M]. Translated by M. C. Butcher, in Nahm Ed., 1950. 28-50.

[2] Berg, J. Metaphor, Meaning, and Interpretation[J]. Journal of Pragmatics, 1988, 12(5-6): 695-709.

[3] Canwen, H. A Comparative Study of Metaphors of “xue” in Chinese and “Blood” in English[J]. Journal of Xi’an International Studies University, 2011: 01.

[4] Lakoff, G & M. Johnsen. Metaphors We Live by[M]. London: The. University of Chicago Press, 1980.

[5] Oxford Learner’s Dictionaries [DB/OL] https://www.oxfordlearnersdictionaries.com, 2022-4-26.

[6] Mei Jinli. From a cognitive point of view, the word “hot” is a polysemy phenomenon [J]. Journal of Hunan University of Science and Technology, 2007 (06).

[7] Peng Yi. The cognitive semantics study of English and Chinese skin perception adjectives [D]. Hunan: Hunan Normal University, 2010.

Author：

Jie Li，Female，Han，Yongzhou，Postgraduate Student，Unit：Hunan Normal University，Changsha，Unit Zip Code：410081，Research Direction：English Language and Literature

A Study on Student-Centred Teaching of Oral English in Universities under the Perspective of Curriculum Ideology and Politics

Wenjin Zhou

Guangxi Normal University, Guilin541004, China.

Abstract: The reform of university oral English teaching is an important part of the reform of contemporary university English teaching, and it is an urgent need of the times and the country to integrate it into the content of curriculum ideology and politics, so as to realise the fundamental goal of "establishing morality and educating people". Enhancing the teaching of daily speaking is an effective measure to adapt to the strategy of "going out" of China's culture, and it is also an inevitable choice to enhance students' soft power of culture and hard power of language expression. Under the current background of curriculum ideology and politics, there are many problems in the student-centred teaching of spoken English in universities, which urgently need to find corresponding solutions to cultivate students' oral English literacy. Based on this, the article explores the student-centred teaching of spoken English in university under the perspective of curriculum ideology and politics, with a view to providing reference for related work.

Keywords: Curriculum Ideology and Politics; Students; College English; Oral Teaching

1. Introduction

Curriculum Ideology and Politics is a kind of teaching method that organically integrates ideological and political theories with disciplinary courses and promotes each other. By making full use of classroom teaching resources, realizing the organic combination and synergistic development of ideological and political theories and disciplinary courses, and integrating Curriculum Ideology and Politics into the daily learning of college students in the process of teaching, it helps to cultivate more high-quality talents with moral, intellectual, physical, social and aesthetic qualities, and promotes the healthy and stable development of the cause of higher education. Development. As the backbone of the construction of socialism with Chinese characteristics, young college students should achieve all-round and multi-level growth and progress. As an important subject course compulsory for students in colleges and universities, college English speaking is one of the important ways to promote students' all-round development and improve their comprehensive quality. At the current stage, one of the important responsibilities of college English teachers is to organically integrate oral teaching with course ideology and politics in order to promote the innovation and reform of college English teaching.

2. Second, the current situation of student-centred oral English teaching in universities

2.1 Lack of Integration of Ideological and Political Theory under Student-Centredness

In order to better understand the connotation of curriculum ideological and political theory, we need to combine it with the ideological and political courses for in-depth analysis. At present, China's higher education is in a period of reform and transformation, and the talent cultivation mode of colleges and universities is also undergoing a series of changes. In the education and teaching of colleges and universities, the concept of Curriculum Ideology and Politics in the curriculum has been put forward and operated for a period of time, and it has been more and more widely applied. The knowledge of ideological and political theory is integrated into the curriculum, so that students can set up a correct outlook on life and values through learning knowledge, improve their own quality and ability, and then cultivate more excellent talents for the development of society. But for the current teaching work, the teacher lacks the integration of ideological and political theories in the teaching of spoken English, but simply give students oral practice in English, so that the whole teaching process lacks of raw activities.

2.2 Failure to reasonably guide students to pay attention to the differences between Chinese and foreign cultures

There are differences between English and Chinese. When Westerners think and express themselves, they tend to clarify the intention of the subject first and then add other elements, while Chinese people are more inclined to integrate the messages they want to convey. Students know little about foreign cultures, so it is easy to form a gulf in the learning process. Therefore, I believe that it is easier for readers to understand what is being written if the writing is organised and laid out in a way that captures the central idea. English essays tend to centre around a more prominent theme, which usually appears at the beginning of the essay and dominates the subsequent development. Information related to this theme can be found in all paragraphs of the text, and the topic sentences of most of these paragraphs are located at the beginning. In China, the core of an essay is semantics, which naturally connects the preceding and following parts so that the upper and lower parts echo each other, thus conveying a complete meaning, which also reflects the overall way of thinking. If it is an English article, its structure and language are often different from Chinese. So the teaching of spoken English at university needs to pay attention to the cultural differences between Chinese and foreign cultures, but the lack of attention to this part of the content by some teachers has led to an obstacle to the improvement of the quality of spoken English teaching.

2.3 Failure to reflect the students' main position

As an important measure of students' overall comprehensive ability in English, speaking plays a crucial role in its external expression. Therefore, how to improve college students' spoken English has become one of the important topics in college English teaching. However, China's university oral English teaching has long been using a single and obsolete teaching mode, which fails to reflect the students' main position, resulting in the teaching content not being able to meet the diversified needs of students in the new era. Students are still inclined to test-taking in English learning due to the lack of sufficient learning resources and high-quality language learning environment, and many college students ignore the problem of language application, which also leads to the lack of motivation of students in spoken English.

3.Suggestions for student-centred teaching of spoken English at university from the perspective of curriculum ideology and politics

3.1 Increase Efforts to Study Ideological and Political Theory from the Students' Perspective

As the practice subject of the concept of curriculum ideology and politics, college English teachers shoulder an important mission, that is, to promote the development of education by establishing moral values. The role of university English teachers is not only to teach students English subject knowledge, but also to provide useful contributions to students' cultural literacy, comprehensive ability, and the shaping of correct values and worldview. Carrying out the "Three-Whole Education" model in the process of university English oral teaching is not only conducive to promoting the overall development of college students, but also helps them to establish a good outlook on life, morality and values. Therefore, the reform of college English teaching must be carried out from the perspective of college English teachers and based on the perspective of curriculum ideology. In order to enable college English teachers to better guide students' professional knowledge and guide them to form correct ideological and political concepts, we need to update teachers' concepts of education and teaching and strengthen the ideological and political theoretical foundation of English teachers. On this basis, we also need to strengthen the combination with social practice activities in order to achieve the fundamental task of "cultivating morality and nurturing people". Therefore, English teachers should update their teaching concepts as soon as possible and abandon the old ideas and thinking patterns to adapt to the changing teaching environment. The reform of oral English teaching in universities should adhere to the educational goal of "people-oriented", focus on improving the quality of teaching, and constantly explore new modes and methods, so as to make the cause of China's higher education develop in a sustainable and healthy way. English teachers must have a high sense of responsibility and mission, always put education in the first place, and at the same time, they should consciously strengthen students' ideological and political theoretical qualities in order to achieve the purpose of effectively training students.

3.2 Guiding students to understand the differences between Chinese and foreign cultures

Vocabulary in language is the most significant carrier of cultural information and a tool to reflect human social and cultural life, and they carry various cultural characteristics. The English speaking classroom in colleges and universities is an important part of China's higher education system and one of the main ways for college students to receive cultural education and ideological and political theoretical education, so in the process of speaking teaching, students should be taken as the centre and helped to understand the differences between Chinese and foreign cultures, so as to make a good preparation for teaching. The cultural differences between Chinese and foreign cultures are very obvious in the spoken language, for example, to describe "timid", "as timid as hare" in English, and the corresponding idiom in Chinese is "as timid as a mouse". The corresponding idiom in Chinese is "gutless". From the above analysis, we can see that both languages have rich cultural connotations. In Chinese culture, "mice" represents a timid psychological state, while "rabbits" symbolises a quick behaviour. Therefore, it is particularly important to study the differences in vocabulary between different countries and regions. For example, in the United Kingdom and the United States, people usually regard the dog as a sign of good luck, such as "Every dog has his day." (Everyone will have a happy day.) "Love me, love my dog." (Every dog has his day.) "Love me, love my dog. Nevertheless, in the Chinese context, the description of a dog is often given a negative connotation, such as "no ivory can come out of a dog's mouth," "hanging sheep's head to sell dog meat," and so on. By explaining the differences, we can help to improve students' vocabulary and arouse their preference for traditional Chinese culture from another perspective, thus laying a solid foundation for their daily communication.

3.3 Adhere to the student-centred approach

Teachers should break through the limitations of traditional English teaching and aim at stimulating the students' subjectivity and central role in the classroom to further enhance the teaching effect. Attention needs to be focused on students' subjective initiative, autonomy and personalised development in order to promote their overall growth and development. In-depth exploration of English teaching resources, the relevant content of ideological and political theory is organically integrated into classroom teaching. On this basis, the English teaching mode and teaching methods are innovated. In order to make the content of English oral teaching more ideological and political theory, we need to let students in the process of learning English subject knowledge, subconsciously accept the ideological and political theory. In the process of teaching, teachers should be guided by socialist core values and properly handle the differences between Chinese and Western cultures to ensure the improvement of teaching quality. Combine the education of China's excellent traditional culture with the advanced ideas of the West to help students establish correct values. Cultivate students to be able to understand and cope with different cultural backgrounds with an open mind and in-depth thinking, centred on improving the efficiency of oral English teaching, so as to promote the establishment of correct ideological and political concepts in the process of English learning.

4.Conclusion

Teachers should break through the limitations of traditional English teaching and aim at stimulating students' subjectivity and central role in the classroom to further improve the teaching effect. The student-centred promotion of oral English teaching under the Curriculum Ideology and Politics is a project with a systematic approach. In the education of university English speaking course, especially on the basis of curriculum ideology, in-depth thinking and exploration are needed in order to realise the innovation of teaching, it is necessary to comprehensively consider all the important aspects to ensure the improvement of the quality of teaching.

References

[1] Zhanying Yu. The use of activity theory in the interactive teaching of college English speaking[J]. Knowledge base,2016(24):203-204.

[2]Yanmei Song. On the blended college English speaking practice teaching mode of "four classroom docking"[J]. Neijiang Science and Technology,2020,41(10):83-84.

[3]Haiyan Zhu . Practice and Evaluation of Blended Teaching in University English Speaking Courses[J]. Journal of Jiangxi Power Vocational and Technical College,2020,33(6):35-36.

The Application of Cooperative Learning Theory in College English Reading Teaching

Yan Zheng

Guangxi Normal University, Guilin 541004, China.

Abstract: Cooperative learning theory refers to a teaching method in which students help and cooperate with each other in learning based on cooperative group learning. Students are rewarded based on the overall performance of the group. The traditional teaching mode often puts both teachers and students in a state of anxiety or even opposition, which makes it difficult for students to give full play to their self-awareness and initiative, and the learning outcomes are poor. The application of cooperative learning theory in College English reading teaching is not only the requirement for the reform of College English classroom teaching, but also the need for the personal development of college students. In the process of teaching College English reading, it is necessary to adhere to the learner-centered teaching philosophy, closely carry out all-round communication and exchanges among college students, explore the material content of textbooks, provide time and space for College English reading teaching to the maximum extent, cultivate students' cooperative spirit, and thereby improve the efficiency of College English reading teaching.

Keywords: cooperative learning theory; College English reading; application strategy

1. Theoretical Analysis of Cooperative Learning

Cooperative learning is a general term for a series of methods to organize and promote classroom teaching, in which students are reasonably divided into several groups to help each other and complete relevant tasks. In the process of cooperative learning, students learn from each other, discover each other's strengths and weaknesses, make up for each other's shortcomings, and achieve comprehensive development. Cooperative learning plays an important role in College English reading teaching. Firstly, cooperative learning meets the basic requirements of the new curriculum reform, stresses the main role of college students in classroom learning, and is conducive to cultivating students' learning autonomy to meet the requirements of the new curriculum reform. Secondly, cooperative learning helps to build a harmonious classroom atmosphere. Through group cooperation, students strengthen communication among themselves, understand each other better, promote the formation of a relaxed classroom atmosphere, and have a positive effect on the cultivation of students' English reading literacy.

2. The Current Situation of College English Reading Teaching

2.1 Lack of Practical Teaching

The traditional teaching of College English reading is teacher-centered. Teachers' explanations occupy most of the time of College English classroom teaching. However, most students only focus on recording the knowledge explained by the teacher, which leads to the lack of communication and interaction. This teaching method is difficult to mobilize students' subjective initiatives and cultivate their autonomous learning abilities. At the same time, colleges and education departments do not attach importance to practical teaching, and do not provide sufficient support and encouragement to College English teachers in the innovation of teaching methods. As a result, some teachers cannot effectively combine the teaching mode of cooperative learning with actual teaching, resulting in poor teaching effectiveness.

2.2 Lack of Guidance for Cooperative Learning

College English reading teaching needs to attach importance to students' subjectivity, but appropriate guidance from College English teachers is essential. Middle school English teaching emphasizes the instrumental and knowledge-based nature of language, while College English reading teaching has made qualitative improvements in both breadth and depth. In the process of collaborative learning, without the correct and timely guidance of College English teachers, it is difficult for students to fully grasp the vast knowledge content of College Eng-

lish reading teaching at the required teaching pace, and it is also impossible to achieve significant improvements in reading and text writing abilities.

3. The Significance of Cooperative Learning Theory Applied to College English Reading Teaching

3.1 Cooperative Learning Enhances College Students' Understanding of College English Textbooks

College English reading teaching based on cooperative learning can not only stimulate students' enthusiasm to participate in classroom text reading, but also guide students to deeply understand the teaching materials. In the process of reading teaching in College English classrooms, College English teachers organize students to engage in cooperative learning, which can create scenes matching the content of the textbook, so that students are immersed in the situation and have a sense of immersion. At this time, students can pay more attention to the reading of the textbook, and then explore the characters, events or scenes with other students in the same group, trying to understand the emotions or connotations expressed in the textbook, and deepen their understanding of the College English textbooks.

3.2 Cooperative Learning Can Promote the Overall Development of College Students

In College English reading teaching, cooperative group learning plays an important role, which helps optimize the teaching methods of College English reading and improve the overall reading level of college students. At the same time, the implementation of cooperative learning in College English reading teaching is also conducive to promoting the overall development of college students' comprehensive abilities. In College English classroom teaching, college students read, think, discuss and answer questions in groups. In the process of cooperative learning, there is healthy competition among groups. And in order to answer questions accurately and quickly, members of each group actively read the text and cooperate in problem solving. Joint learning within the group forms positive and active incentives for college students, builds a relaxing and pleasant learning atmosphere, improves students' participation in reading and learning, highlights their main position in the classroom, returns the classroom initiative to students, mobilizes students' motivation, allows them to truly understand the textbook in the process of cooperative learning, improves their reading ability, and promotes students' comprehensive enhancement. At the same time, the cooperation and communication within the group not only cultivate the collaborative learning ability of college students and enhance their team spirit, but also provide more reading ideas for group members, improve their thinking ability, guide divergent thinking, and enhance their imagination.

4. The Application of Cooperative Learning Theory in College English Reading Teaching

4.1 Scientifically Establishing Cooperative Learning Groups to Enhance College Students' Interest in Reading

College students are the main body of College English reading teaching. In order to enhance the efficiency of College English reading teaching and help college students improve their English reading literacy, it is crucial to strengthen the cultivation of their cooperative awareness. The scientific and reasonable establishment of cooperative group learning is the foundation and prerequisite for the orderly development of College English reading teaching. When carrying out cooperative group learning, College English teachers need to think and analyze how to scientifically and reasonably divide groups. College English teachers can control the number of learners in each group, and design multiple reading tasks with different levels of difficulty for students in the same group. Reading tasks with different levels of difficulty are reasonably allocated based on the level of top students, intermediate students, and students with learning difficulties. Scientific and reasonable grouping can help students with a good English foundation drive those with weaker foundation and self-learning ability within the group, thereby improving the enthusiasm of students in the group to participate in reading. At the same time, positive and healthy competition among different learning groups is also conducive to forming a catch-up learning atmosphere and promoting the overall improvement of College English learning level.

4.2 Establishing Teaching Objectives and Strengthening Collaborative Group Teaching

In the process of College English reading teaching, College English teachers can guide students to transform their multiple identities through experiential group teaching mode, namely readers and evaluators, and form an experiential teaching mode. This enables students to gradually experience the pleasure of reading through group cooperation and enhance their subjective judgment and independent thinking abilities. Before implementing cooperative learning in College English reading classes, College English teachers should conduct systematic analysis and scientific research on the content of College English textbooks, and establish teaching objectives for College English reading classes, so that students' cooperative learning closely revolves around the learning objectives of College English reading classes, effectively avoiding deviations in the process of cooperative group learning. Based on this, in the process of implementing cooperative group learning, College English teachers should take into consideration the actual situation of students in class, divide students into different learning groups based on their individual differences, guide students with different English proficiency to actively participate in College English reading classroom learning, and make good use of the advantages of cooperative learning. At the same time, College English teachers must enable students to fully understand the methods and objectives of cooperative learning, provide correct guidance to students, actively guide students to learn and explore around teaching objectives, immerse students fully in the process of cooperative learning, improve students' participation in reading learning, improve the efficiency and quality of cooperative learning, and achieve effective improvement of the overall teaching quality of the entire class.

5. Conclusion

Cooperative learning theory is a new teaching method of great significance. In the context of the continuous deepening of the new curriculum reform, the application of cooperative learning theory plays an important role in College English reading teaching. College English teachers should fully recognize its importance and actively explore cooperative learning methods that are more suitable for College English reading teaching. In the process of teaching College English reading, College English teachers need to comprehensively adjust their English reading teaching methods, strengthen collaborative learning among college students, fully leverage their subjectivity and creativity in the learning process, enhance their interest in English reading, thereby improving the efficiency of reading teaching and promoting greater progress in College English learning.

References

[1] Li Chen. Analysis of the Application of Cooperative Learning in College English Reading Teaching[J]. Intelligence,2023(03):33-36.

[2] Ling Ding. The Application of Cooperative Learning in College English Reading Teaching[J]. Seeking Learning,2021(40):29-30.

The Path and Implementation of Civic-Political Construction of University English Courses under the Three-Whole Parenting Mode

Yan Chen

Guangxi Normal University, Guilin 541004, China.

Abstract: In today's higher education, the "three-round education" model has become a widely discussed and respected educational philosophy. This model aims to comprehensively cultivate students' moral quality, intellectual ability and physical quality, so that they can better adapt to the needs of modern society. In this context, the ideological and political construction of university English courses has emerged as a key link in the university education system. The purpose of this paper is to discuss the path and implementation strategy of the ideological and political construction of university English courses under the mode of "Three-Whole Parenting", and to study how to combine the modern education concepts to make university English education become an effective way to cultivate all-round talents. Through this mission, we can better meet the challenges of the times and cultivate more graduates with comprehensive quality for the society, who will play an important role in the future field.

Keywords: three-whole-parenting model; university English; curriculum ideology and politics

Education has always been an important engine of social progress and talent cultivation, and in today's world, the ideological and political construction of university English courses has become an important part of the university education system. As an important part of China's higher education reform, the "Three-Whole Parenting Model" emphasises the comprehensive cultivation of students in terms of morality, intelligence, physicality, aesthetics and labour, and covers multiple dimensions of quality. The English course, among them, has a special status. It is not only a language tool, but also a window for students to understand the world, think about the society and develop critical thinking. Therefore, how to teach English while guiding students to think about political, social and ethical issues has far-reaching significance.
1. The Necessity of Civics in University English Programmes

University English programmes have always been regarded as a tool for developing students' English language skills. However, in today's China as well as globally, the task of education has gone beyond merely teaching grammar and vocabulary. Therefore, it has become imperative to build up the Civic-Political construction of university English programmes, that is, to integrate the elements of ideological and political education.

First of all, English, as a global language, has an omnipresent influence. Through learning English, students are able to come into contact with a rich and colourful international culture and knowledge. However, with the globalisation of information dissemination, English is not only a language, but also a medium for transmitting ideas and values. The necessity of Civics in University English Programmes is to guide students to understand different ideas and political systems around the world through this channel, to cultivate an open international outlook, and to help them better adapt to the globalised society.

Secondly, the necessity of Civics and Politics in university English courses is also reflected in the improvement of students' comprehensive quality. The reform of English courses should not be limited to the improvement of language skills, but should also focus on students' thinking ability and judgement. By guiding students to think about and debate topics related to ethics, social issues, and political decision-making, they can develop their critical thinking and become citizens with independent opinions. This is not only beneficial to students' personal growth, but also cultivates more capable and responsible citizens for the country [1].

Finally, the construction of Civics and Politics in college English courses also has an important value in improving students' sense of social responsibility and civic awareness. By discussing topics such as global issues, social inequality, and environmental protection, students will be able to better recognise their own position and responsibility in society. They will begin to think about how they can participate in social progress in a positive way and contribute to solving important problems. This cultivation of a sense of social responsibility is a central

goal of the construction of the Civics and Politics of the University English Programme.

2. The Implementation Path of Civic Politics in University English Courses

2.1 Improve teachers' ability in curriculum civic politics

Colleges and universities can set up special training programmes to provide English teachers with training related to Civic-Political education, and these trainings should take care to cover knowledge of political theories, concepts of ethical and moral education, and research on social issues. Through systematic training, teachers will have a better understanding of the core concepts of Civic and Political Education and will be able to apply them to the English curriculum, guiding students to think about social and political issues. Teachers also need to continuously deepen their own ideological and political literacy in improving their ability to think about politics in the curriculum, which means that teachers should actively participate in ideological and political education activities, engage in research on social issues, and pay attention to current affairs and politics in order to better share insights about society and politics with their students, which can be effectively conveyed to students only if the teachers themselves have a deep understanding and knowledge of ideology and politics. In addition, traditional English teaching methods cannot effectively incorporate elements of Civics and Politics, so teachers need to actively explore innovative teaching methods to guide students to think about and discuss political, ethical and social issues. For example, group discussions, case studies, debates and other teaching methods can be used to encourage students to participate in the discussion of social issues, so teachers need to have interdisciplinary educational skills and be able to combine knowledge of politics and ethics with English teaching. Finally, teachers should pay attention to students' participation and feedback in the process of improving the course's political thinking ability. Students are encouraged to ask questions, express their opinions, and are provided with opportunities for meaningful discussion during the course. Through interaction with students, teachers can better understand their needs and feedback, and adjust the teaching content and methods in order to better implement the construction of curriculum Civics [2].

2.2 Carrying the whole process of educating people through before, during and after teaching

University English courses are not only the teaching of language skills, but should also be a platform for cultivating students' ideological and political awareness. The concept of whole-course parenting should be carried out throughout the whole teaching process, which needs to be considered and implemented in various aspects before, during and after teaching. Firstly, the pre-teaching period ensures that the overall design of the course is in line with the concept of whole-process parenting, clarifies the objectives and vision of the course, clarifies the teaching content and methods, and ensures that the elements of ideology and politics are organically integrated into the course structure. For example, the course syllabus may explicitly include relevant content such as political ethics, social issues, international affairs, etc., while explicitly using interdisciplinary teaching materials and methods to encourage students to think about political, ethical and social issues. Secondly, in the middle of the teaching period, the focus is on how to lead students to think and discuss about the topics related to Civics and Politics. Teachers should adopt an interactive teaching approach and encourage students to actively participate in discussions, debates and group activities. This helps students to actively think about political, ethical and social issues, and to develop critical thinking and independent opinions. At the same time, teachers should provide timely feedback to guide students to explore the topic of Civics and Politics in greater depth. Again, in the middle of the teaching period, teachers can also organise students to participate in social practice and research activities, so that they can experience and understand social issues first-hand. For example, they can organise students to visit social welfare organisations, participate in volunteer activities, or conduct social surveys and research projects. These experiences will give students a deeper understanding of the reality and complexity of social problems and stimulate their interest in and sense of responsibility for social change. At the later stage of teaching, it is important to evaluate students' learning outcomes in Civics and Politics. Evaluation should not only focus on English language skills, but also include the assessment of Civic and Political elements. This can be done in a variety of ways such as essays, presentations, debates, group discussions, participation in community service and so on. Through comprehensive evaluation, students' Civic and Political growth can be objectively reflected, and they are also encouraged to actively participate in Civic and Political education.

2.3 Using Blended Teaching Mode to Ensure All-round Parenting

In the implementation of Civics in college English courses, the blended teaching mode can ensure the effect of all-around parenting. Blended teaching combines the elements of traditional face-to-face teaching and online learning, providing more opportunities to cultivate students' comprehensive quality and ideological awareness. Firstly, the blended teaching mode provides more flexible learning opportunities for students, who organise their learning progress according to their own time and learning speed, which helps to cultivate their independent learning ability. After integrating the elements of Civic-Political awareness into the English course, students need to read a large amount of relevant literature and participate in discussions and reflections on political and ethical issues. The blended teaching mode allows them to independently choose appropriate learning resources and time, which promotes individualised Civics education. Secondly, blended teaching provides more opportunities for interaction and co-operation. Through the online platform, students can participate in activities such as discussions, debates and group projects to interact more with their classmates and teachers, thus cultivating their co-operation and communication skills, and at the same time encouraging them to take the initiative to share their views and reflect on political ethics. The implementation of Civics in English courses requires students to actively participate in discussion and reflection, and blended learning provides more opportunities to achieve this goal [3].

3. Conclusion

To sum up, under the guidance of the "Three-Whole Parenting" model, the construction of the Civic-Political construction of university English courses has gained a new impetus and direction. This educational concept elevates the English course from traditional language learning to a higher realm, making it a tool for shaping students' character and stimulating their sense of social responsibility. Through this paper, we learn about the necessity of building the Civics and Politics of university English courses and how to use the blended teaching model to achieve all-round parenting before, during and after teaching. This process aims to cultivate students with critical thinking, social responsibility, and political awareness, who are better able to adapt to the needs of society and contribute to the progress of the country and society. However, the implementation of the construction of Civics and Politics in university English programmes requires the joint efforts of all educators, and constant innovation and improvement to adapt to the ever-changing context of the times. Only through methods and strategies that keep pace with the times can we ensure that the university English programme plays a more important role in the "three-pronged education" model and produce more graduates with all-round qualities.

References

[1]Xi Zhang. Exploration on the Innovative Practice of Civic-Political Construction of University English Courses under the Perspective of "Three-Whole Parenting"[J]. Overseas English,2023(05):159-161.

[2]Xiaodan Liu . Research on Civic and Political Construction of College English Programme under the Mode of "Three-Whole Parenting"[J]. Journal of Kaifeng Culture and Art Vocational College,2022,42(07):49-51.

[3]Yan Zhang . Thinking and Practising on the Civic and Political Construction of University English Courses under the Threshold of "Three-Whole Parenting"[J]. Campus English,2021(39):29-30.

Analysis and Countermeasures of the Potential Default Risk of Rural Oriented Normal University Students in Yancheng

Yongyun Lyu

Yancheng Teachers University, Yancheng 224002, China.

Abstract: To achieve rural revitalization, priority should be given to developing rural education. For rural areas, education not only carries the function of spreading knowledge and shaping civilized village customs, but also provides talent support for rural construction, and plays an irreplaceable basic role in rural revitalization. The policy of rural oriented normal university students in Jiangsu Province aims to train rural teachers who can "go down", "stay" and "teach well", but the construction of rural teachers in Yancheng is still facing the problems of shortage of quantity and quality to be improved. This paper analyzes the demand and trend of rural teachers from the current situation of rural normal students in Yancheng, and understands the default of rural normal students in Yancheng, and explores the potential causes of default and the attribution of rural teachers. On this basis, the paper puts forward the countermeasures to construct the training and development mechanism of rural oriented normal university students in Yancheng, which integrates training, management and service, in order to promote the construction and development of rural teachers in Yancheng and accelerate the realization of high-quality development of rural education in Yancheng.

Keywords: Rural orientation; Normal university students; Default risk; Development mechanism

1. Analysis of regional distribution and current situation of rural oriented normal students in Yancheng

In 2016, Jiangsu Province began to implement the policy of targeted normal university students to recruit high school graduates who meet the national college entrance examination policy and registered their residence in the county (city, district). They choose and fill in the corresponding targeted training colleges and majors corresponding to the county (city, district), and the admitted colleges and majors are undergraduate. As a new force of rural school education in the new era, rural oriented normal university students have been endowed with the status of "localization", "one specialization", "rural root", "general teacher" different from ordinary normal university students.(Liu Cheng, Chen Peng, 2022) Studies have shown that the policy of rural oriented normal university students has attracted a number of excellent students and achieved the expected enrollment effect.(By Yan Zhao, 2021)

From 2016 to 2021,89% of the rural normal students to 98% tended to be full. It can be obtained from the data that the demand for rural normal university students in counties and districts has eased, which proves that rural oriented normal university students do play an optimization role in the rural teachers.

2. Analysis of the potential default problems and causes of rural oriented normal university students in Yancheng

2.1 Investigation results of the potential default phenomenon of rural oriented normal university students

At present, there are 1050 rural oriented normal university students in Yancheng, 3 of whom directly breach the contract after graduation, accounting for 0.28%. It is understood that the three people who broke the contract are all fulfilled because they have made new development plans, such as studying abroad for graduate school or being engaged in other industries. Their individual interests conflict with their policy goals. In the process of pursuing self-interests and life planning, individuals affect the realization of the established policy goals. The training quality of rural oriented normal university students is influenced by the registration motivation, learning input and teaching choice. (Zhu Yanfei, Wu Dongzhao, Wang Yunlai, 2021)

2.2 Potential reason and motivation of default of rural oriented normal university students

Poor families are one of the main reasons for the default of targeted normal university students. In rural areas, students with poor family economic conditions tend to face greater pressure, and their families may not be able to afford the cost of their school, so they choose rural oriented normal university students.

The default of the directed normal university students may also be due to personal reasons. For example, when some students enter the learning stage of oriented normal university students, they find themselves not very interested in education, and even have resistance. In this case, they may choose to default and replan their life path.

2.3 Analysis of the potential default motivation of rural oriented normal university students

The motivation of default is divided into subjective factors and objective factors. The subjective factors should be analyzed from individual behavior, and the objective factors should be analyzed by combining policies and local actual situation.

2.3.1 Subjective factors: an analysis of the individual behavior of normal students

① Policy speculation, registration motivation. Mainly reflected in the orientation of 5 years after the return of tuition, can advance batch admission of undergraduate colleges, after graduation has a post and iron rice bowl. Some directed normal university students do not have a systematic and comprehensive understanding of the policy of rural directed normal university students before the voluntary application, which leads to blind filling.

② Rural teachers do not agree with the position. The identity identity and initiative of rural oriented normal university students are generally low.(Liu Cheng, Chen Peng, 2022) Blindly covet the policy benefits brought by the rural oriented normal university students, but they are unwilling to assume their due obligations and responsibilities.

2.3.2 Objective factors: an analysis of the realization of the established policy objectives

① From the policy formulation ideas analysis. The promotion of human capital of this group of rural oriented normal university students shows clear The dynamic demand change, but the contract of the established policy is relatively static. When the individual produces the dynamic demand, the relatively static contract does not realize the matching incentive and constraint effect, which will lead to the balance of the original agreement to be broken.

② Job planning is inconsistent with the actual demand. In some rural schools, due to the weak teachers, the number of targeted students filled every year is far from enough to supplement the number of basic education and teaching, so the schools transfer targeted students, thus causing the dissatisfaction of targeted students.

3.The Construction of the training and development mechanism of rural oriented normal university students in Yancheng

3.1 Establish a “trinity” quality evaluation mechanism for rural oriented normal university students to ensure the delivery of excellent teachers for rural basic education.

In order to ensure the high-quality development of rural basic education in Yancheng, the key lies in the high-quality teachers. Through the training policy of rural oriented normal university students, Yancheng can further improve the quality of rural teachers. In order to realize the rural oriented normal university students “go, stay and teach well”, it is necessary to establish a “trinity” rural oriented normal university students quality evaluation mechanism, namely Yancheng government, education bureau, county government, education bureau, and the linkage between training schools and rural schools, and the document is clearly implemented. This mechanism includes a three-level comprehensive quality evaluation mechanism, combined with the professional characteristics of oriented normal university students, and emphasizes clear evaluation orientation, scientific classification, quantitative operation and precise refinement.

3.2 Strengthen the performance management mechanism of Yancheng rural oriented normal university students, formulate post evaluation indicators and rules of reward and punishment, and improve the obligation and responsibility quality of rural oriented normal university students.

We will improve the dynamic tracking and management mechanism of rural oriented normal university students. Jiangsu province rural directional normal university students training currently has the “directional employment agreement”. In order to ensure the performance of rural oriented normal university students, on this basis, the dynamic tracking management mechanism of the performance of rural oriented normal university students can be further improved, and the integrity file of rural oriented normal university students can be established. At the same time, the establishment of directional normal university student teachers’ education and teaching post evaluation indicators, according to the evaluation results, to give rewards and punishments.

3.3 Improve the differentiated subsidy and professional title evaluation mechanism for rural teachers, and expand and enhance the professional development space of rural teachers.

We will improve the mechanism for ensuring funds for rural teachers, and clearly stipulate the proportion of funds allocated at the provincial, municipal and county levels to avoid them The financial burden of the county level is excessive. Under the principle of “fair compensation”, differentiated awards and subsidies should be implemented according to the level of county economic development. In the existing Opinions on the Evaluation Policy of Rural Teachers in The Province, the local situation in Yancheng is considered to make adjustments to meet the dynamic needs of rural teachers, increase the opportunities for rural teachers to learn and exchange, clarify the path of professional title promotion, expand the channels of professional development, and improve the space for improvement.

Rural teachers are the key to revitalizing rural education and cultural construction. The policy of rural oriented teacher training provides support for the rural training and delivery of excellent teachers who can “go down”, “stay” and “teach well”. To resolve directional students and induction teachers potential default risk, in addition to the policy support, also need to Yancheng city government and county bureau of education, higher normal colleges and rural school tripartite synergy, establish a radiation of the city, information, long-term, the whole process, all-round service in Yancheng rural directional teacher training and development mechanism, not only for the country transport “to” to “stay” well “teach well” outstanding graduates, also make these graduates have a sense of belonging and identity, let them “want to stay” “stay” to stay “” stay “, rooted country, lifelong service rural education career.

References

[1]Liu Cheng, Chen Peng. Multiple identity conflicts of rural oriented normal students —— educational ethnography based on sociological institutionalism [J].Research on Educational Development, 2022,42 (02): 18-27.

[2]Zhao Yan. Analysis of policy student attraction of rural oriented normal students —— Based on the perspective of social exchange theory [J]. Academic Education, 2021 (01): 64-70.

[3]Zhu Yanfei, Wu Dongzhao, and Wang Yunlai. Comprehensive evaluation of the quality of local rural oriented normal students under the perspective [J]. China Journal of Education, 2021 (12): 85-90.

The Impact of Feedback Strategies of Primary School English Teachers on Students

Mengyao Ma

Sejong University, Seoul, Xintiandi Community, Qingxian County, Cangzhou City, Hebei Province, 062650

Abstract: Based on the feedback strategies employed by primary school English teachers in classroom contexts, this paper analyzes the management methods displayed in the teaching processes from the perspective of teachers, aiming to find out whether these feedback strategies have a positive effect on students' learning.This paper adopts literature analysis to prove that different classroom feedback strategies of primary school English teachers have different effects on students.

Keywords: feedback strategies; classroom teaching; second language learners

1. Introduction

1.1 Background of the Study

The classroom feedback strategies of primary school English teachers are very important for students as they will help them to better understand the teacher's intentions and provide the conditions for further learning.Many articles have been written about feedback strategies and second language achievement and many models have been proposed to explain the phenomena (Rahimi and Zhang 111-122).

1.2 Research Questions

Research Question One (RQ1): Do primary school English teachers' classroom feedback strategies have an impact on students' learning?

Research Question Two (RQ2): Which strategies are the most frequently used ones by English teachers?

2. Literature Review

In this section, the literature on feedback strategies in second language classrooms will be reviewed. Specifically, first, the types of classroom feedback strategies will be discussed. Meanwhile, empirical studies of L2 classroom feedback strategies and its relation to the present study will be elaborated. Finally, the research gap that the present study aimed to fill in will be introduced.

2.1 Classification of Teacher Feedback Strategies

Since Lyster and Ranta (1997) publish their influential study on the different types of corrective feedback observed in French immersion classrooms in Canada，a growing body of research has emerged attempting to measure the effects of corrective feedback on second language acquisition. Following the footsteps of many scholars at home and abroad (e.g., Song, 2020), this paper holds that teacher feedback in primary English classroom teaching mainly includes verbal feedback and non-verbal feedback (Song, 2020:91-92).

2.1.1 Verbal Feedback Strategies

In the literature, verbal feedback strategies are generally divided into four types, namely, simple recognition or metalinguistic feedback, expressing error correction which generally comprises recast and explicit correction, instruction guidance, and nonverbal feedback.

2.1.1.1 Metalinguistic Feedback

Simple recognition in English classroom teaching refers to mediational moves that when students' answers meet teachers' expectations, teachers will affirm students' answers and often use statements such as "Yes"; it is a positive form of feedback for students and can mobilize students' enthusiasm (Zhu,2019:8).

2.1.1.2 Recast and Explicit correction

The strategy focuses on the fact that when a student answers incorrectly, the teacher usually expresses this to the student in a negative way, simply ignoring the student's answer and stating the correct answer.

2.1.1.3 Instruction Guidance

The so-called instruction guidance means that the teacher guides the students in an implicit or quick way and urges them to answer the questions correctly, rather than denying the questions directly.

2.1.2 Nonverbal Feedback

Nonverbal feedback in primary School English classroom teaching mainly includes body feedback and facial feedback. Body feedback mainly refers to the teacher's evaluation of students' learning through body language, so as to convey information to students.

2.2 Effective Classroom Feedback Strategies

2.2.1 Hierarchical evaluation and praise

Effective immediate feedback requires a certain amount of skill, emphasizing the art of language, so teachers can open up and build confidence in the classroom through appropriate intonation, facial expressions, and gestures, based on teaching objectives and teaching process. In addition, to constantly adjust the expression of instant feedback, according to the age of students, the change of learning stratified evaluation, so that the language of praise targeted (Su,2020:13).

2.2.2 Comprehensive Evaluation

In the traditional primary school English classroom teaching, immediate feedback will be limited to the level of knowledge of English and students for the master degree of knowledge, but ignored the students' English thinking ability,make immediate feedback in invalid state, the students can't perceive the teacher verbal feedback in class.

2.2.3 Dynamic and Diversified Feedback

Students have obvious individual differences, so to play the effectiveness of immediate feedback in primary School English classroom teaching, it is necessary to build a diversified and dynamic immediate feedback mode according to the individual characteristics of students, so that every student can benefit from it (Yu,2020:2).

2.3 Summary

While the current research on feedback strategies at home and abroad is fruitful, it is mainly concerned with types of feedback strategies, the impact of these feedback strategies on students, especially in Chinese primary schools EFL context, however, has not been given enough attention. This study analyzes the types of teaching feedback, and proposes some relatively effective teaching feedback strategies, making up for the deficiencies of existing research by analyzing relevant literature.

3. Methodology

In this chapter, first, the research design will be discussed, in which I will provide justification of questionnaire employed in this study. After that, information of participants will be provided. Furthermore, data collection analysis method will be discussed.

3.1 Research Design

The research method used comprises a questionnaire survey. The questionnaire survey method can carry out a large-scale survey, thus it is the simplest and most effective method.

3.2 Participants

The research objects are students from Class 3, Grade 3, in a public primary school in Cangzhou City. The class of 100 students as a foreign language learner voluntarily took part in the study.

3.3 Instrument

The questionnaire survey adopted in the present study is from internet.The questions in this questionnaire were found to be largely appropriate to the topic of this study as they were essentially about the impact of classroom feedback strategies on students (details of the questionnaire see Appendix 1). With minor modifications, the questionnaire was sent to the target group.

3.4 Data Collection and Analysis

In this survey, a total of 100 questionnaires were distributed. SPSS （SPSSAU21.0）was used for data analysis and reliability test (reliability analysis is used to study the reliability and accuracy of the answers to quantitative data (especially the attitude scale questions). Specifically, firstly, the α coefficient was analyzed (Appendix 2). To clarify, if the value is higher than 0.8, the reliability is high. If the value is between 0.7 and 0.8, it indicates that the reliability is good. If the value is between 0.6 and 0.7, the reliability is acceptable. If this value is less than 0.6, it indicates poor reliability. Secondly, CITC value was tested. To clarify, if the CITC value is lower than 0.3, it can be considered to delete the item. Thirdly, the item of "α coefficient deleted" was considered. To clarify, if the value of "α coefficient deleted" is significantly higher than α coefficient, it can be considered to delete the item and re-analyze it. Finally, the analysis was summarized.

5. Discussion

The results of this study suggest that the feedback strategies used by primary school English teachers in the classroom have an impact on students to some extent, which is consistent with the results found by most scholars.

The results of the questionnaire show that the most popular strategy is Simple Recognition as well as some other strategies. The use of this strategy by teachers showed that it was the most effective way to help most students to have some understanding of their learning and to make some purposeful study plans to help their progress.

6. Conclusion

The research finding show that the positive feedback produced by teachers in primary school English classroom is far superior to the negative feedback.This study is expected to let teachers know more feedback strategies and to draw teachers' attention to feedback strategies and to actively adapt the right feedback strategies to help students learn.

Firstly, it is essential for students to not only be diligent but also for them to master some of the teacher's feedback techniques, rather than blindly understanding the surface meaning based on what the teacher says. Secondly, teachers should use a variety of feedback strategies to help students understand their intended meaning and to enable them to find the right way to learn in order to get the best results with half the effort.

References

[1] Hanne Roothooft. The relationship between adult EFL teachers' oral feedback practices and their beliefs [J]. Contents lists available at ScienceDirect System (2014): 65-79.

[2] Lyster, R., and L. Ranta, Corrective feedback and learner uptake: negotiation of form in communicative classrooms. Studies in Second language Acquisition[J]. 19 (1997):37-66.

[3] Merce Bernaus, and A. Wilson. Teachers' motivation, classroom strategy use, students' motivation and second language achievement[J]. Porta Linguarum 12（2009):25-36.

[4] Muhammad Rahimi, and L. Jun Zhang. Exploring non-native English-speaking teachers' cognitions about corrective feedback in teaching English oral communication [J]. Contents lists available at ScienceDirect System 55 (2015): 111-122.

[5] Retrieved from (https://www.wjx.cn/xz/94997922.aspx?KeyWord=Classroom feedback strategy)

[6] JINGXIA SONG. Reflections on the immediate classroom evaluation of primary school Chinese teachers[J].Chinese teachers,2020(02):91-92.

[7] PANPAN SU.An Exploration of Effective Feedback Methods in Primary School English Classroom Teaching[J].Primary school teaching research，2020(13):23-26.

[8] JIE YU.Effective Strategies for Immediate Assessment in Primary School English Classes[J].Primary school teaching research，

2020(2):56-59.

Appendix I

Questionnaire on the impact of English teachers' classroom feedback on primary school students' language learning strategies

1. The teacher revises what I have learned before class, which helps me to review and consolidate in time

A、Agree

B、Not necessarily

C、Disagree

2、When there is a mistake in my answer, if the teacher corrects me in time, I will not make the same mistake next time

A、Agree

B、Not necessarily

C、Disagree

3、I will deepen my memory of the knowledge content repeatedly in the teacher's class

A、Agree

B、Not necessarily

C、Disagree

4、When the teacher asks a question in class, I get very nervous and worry about answering wrongly

A、Agree

B、Not necessarily

C、Disagree

5、When answering questions in class, I look forward to receiving timely affirmation from the teacher

A、Agree

B、Not necessarily

C、Disagree

6、I feel embarrassed when my teacher bluntly points out my mistakes in class

A、Agree

B、Not necessarily

C、Disagree

7、Actively communicating and interacting with the teacher in class has helped me a lot in my studies

A、Agree

B、Not necessarily

C、Disagree

8.When you offer an incorrect answer, what does your teacher usually do?

A. Explicit correction

B. Recast

C. Clarification request

D. Metalinguistic feedback

E. Elicitation

F. Repetition

Appendix II

Table 3.2

A questionnaire analysis of the influence of English teachers' classroom feedback strategies on pupils' language learning strategies（https://www.wjx.cn/xz/94997922.aspx?KeyWord=Classroom feedback strategy）

The teacher revises what I have learned before class, which helps me to review and consolidate in time	0.634	0.887	0.894
When there is a mistake in my answer, if the teacher corrects me in time, I will not make the same mistake next time	0.633	0.886	
Actively communicating and interacting with the teacher in class has helped me a lot in my studies	0.797	0.884	
I will deepen my memory of the knowledge content repeatedly in the teacher's class	0.671	0.886	
When the teacher asks a question in class, I get very nervous and worry about answering wrongly	0.135	0.902	
When answering questions in class, I look forward to receiving timely affirmation from the teacher	0.594	0.888	
I feel embarrassed when my teacher bluntly points out my mistakes in class	0.363	0.894	
When you offer an incorrect answer, what does your teacher usually do?	0.807	0.88	
Cronbach α:0.932			

Research on special teaching and coordinated development path of basic medical education in Yancheng

Yongyun Lyu

Yancheng Teachers University, Yancheng 224002, China.

Abstract: This study aims at the special teaching and basic medical problems of rural sports and medical care in Yancheng, deeply discusses the path of collaborative development, and comprehensively reveals the dilemma and bottleneck of special teaching of rural physical education in Yancheng, as well as the current situation and problems of basic medical care. This paper not only reveals the main challenges of the special teaching of rural sports in Yancheng, such as the professional quality of teachers, the quality and richness of teaching resources, and students' physical condition, but also reveals the effectiveness and operability of teaching methods, as well as the support and understanding of school leaders for this work. At the same time, in the analysis of the current situation of rural basic medical care in Yancheng, this paper not only points out the relative shortage of medical resources, the shortage of doctors and the relatively low overall medical level, but also discusses the improvement space of medical facilities and equipment, which are the main contents of this study. In addition, this study also conducts an in-depth study on the characteristics and mechanisms of coordinated development of special sports specialized teaching and basic medical care, points out the potential advantages and effects of collaborative development, and provides useful suggestions and programs for promoting the coordinated development of rural sports and medical care in Yancheng.

Keywords: rural physical education, special teaching, basic medical care, coordinated development

1. Research on the dilemma of special teaching in Yancheng

1.1 The evolution analysis of the rural sports special teaching in Yancheng

In the rural areas of Yancheng, the development of special physical education teaching has gone through many stages, and the characteristics and problems of these stages need to be analyzed and studied, so as to better promote the development of physical education and improve the physical quality of students. Here are some possible evolution analysis directions:

Early stage (start): at this stage, the physical education in rural areas is mainly organized by local governments and school organization and promote, but due to the lack of education resources, teachers' quality and professional level is generally low, lack of professional teaching materials and equipment, physical education is often only part of the physical education course, there is no special teaching content.

Basic stage (enlightenment stage): In this stage, the physical education in rural areas began to gradually introduce special teaching content, such as basketball, football, track and field, etc., to provide students with more diversified sports choices. At this stage, the teachers began to be strengthened and standardized, and some professional teaching materials and equipment were gradually applied, but they were still faced with problems such as insufficient number of teachers and insufficient teaching resources.

Development stage (improvement stage): In this stage, the physical education in rural areas began to form a relatively complete physical education teaching system, and the special teaching content has been further expanded and enriched, such as training and competition for different sports projects. At the same time, the quality and quantity of teachers have been improved, and professional teaching materials and equipment have also been updated and upgraded. However, there are still some difficulties and challenges in terms of educational resources, teachers and management mode.

Modernization stage (innovation stage): At this stage, the physical education in rural areas began to pay attention to innovation and reform, and actively explore new education mode, new teaching means and new curriculum content. At the same time, strengthen the integration of educational resources, teacher training, management mode innovation and other aspects of the work, in order to promote the modernization process of rural physical education.

1.2 Physical fitness detection and analysis of rural students in Yancheng

In addition to basic indicators such as height, weight and BMI, we can add more test items, such as lung capacity, grip strength, jumping strength, etc., to more comprehensively assess students' physical fitness.

Data analysis: In-depth analysis of the collected data can be conducted according to different grades, gender, regions and other dimensions to find out potential problems and improvement measures. At the same time, the school data can also be compared with other schools or regions to understand the overall level of students' physical quality in the country.

Education courses: combine physical education courses with physical exercise to provide students with more comprehensive health education. Through this teaching method, we can cultivate students' sports awareness and teach them to develop a healthy lifestyle.

Parent participation: through parents' meeting, parent class and other ways, let parents understand the physical quality of students, and encourage them to develop healthy living habits in the family. In this way, we provide a better living environment and support for our students.

1.3The attribution analysis of the special teaching bottleneck of rural sports in Yancheng

Teacher quality: physical education teachers in rural areas of Yancheng may be a key factor in the special teaching aspects of professional quality, educational experience and teaching ability. We can carry out detailed investigation and research on these teachers' educational background and professional skills, so as to in-depth understand their real situation in the actual teaching work. This can not only help us to find the shortcomings of education, but also provide a strong basis for optimizing teaching strategies and improving teaching quality.

A measure of support for school leaders: The level of support for school leaders may have an impact on teaching outcomes. The possible problems can be explored by evaluating its attitude, policy implementation and funding input.

2. Research on the dilemma of rural basic medical care in Yancheng

2.1 Analysis of the current situation of rural basic medical care in Yancheng:

Yancheng is an important city located in eastern China, and the status quo of its rural basic medical care has attracted extensive attention. Rural basic medical care is the basic link in the health security system, which is directly related to the health and happy life of rural residents. However, at present, the rural basic medical care in Yancheng is facing some challenges and problems.

① Rural basic medical resources in Yancheng are relatively insufficient. Due to the relative prosperity of Yancheng city, medical resources are mainly concentrated in urban hospitals, resulting to the lack of medical resources in rural areas. Many rural residents are faced with the problem of difficult and expensive medical treatment, and it is also difficult to go to counties or urban areas.

② The number of rural doctors in Yancheng is insufficient and the overall medical level is relatively low. Rural doctors have low income and relatively difficult working conditions, which leads to the reluctance of some excellent doctors to work in the countryside, leading to the lack of doctors. At the same time, due to the limited education level and training level of rural doctors, they may lack in medical technology and clinical experience, which is difficult to meet the diversified medical needs of rural residents.

2.2 Attribution analysis of the development dilemma of rural basic medical care in Yancheng:

① The unbalanced distribution of medical resources between urban and rural areas is one of the main reasons. Due to the different level of economic development and infrastructure, Yancheng has more medical resources compared with rural areas. This leads to a shortage of medical resources in rural areas that cannot meet the diverse medical needs of rural residents.

② The treatment and development space of rural doctors is relatively small. Rural doctors have relatively difficult working conditions, low income and unattractive conditions, leading to some excellent doctors choosing to work in cities. The lack of rural doctors and the relatively low overall level of medical treatment are also one of the reasons for the plight of rural medical development.

3. Research on the characteristics and mechanism of the special rural sports teaching and the coordinated development of basic medical care in Yancheng

3.1 Analysis of the characteristics of special physical education teaching and the coordinated development of basic medical care:

The coordinated development of basic medical care refers to the combination of physical education and basic medical care to form a development mode of close cooperation. The characteristic of this coordinated development is that physical education pays attention to the improvement of students 'physical quality and sports ability, while basic medical care pays attention to students' health status and medical security. Through coordinated development, we can better ensure the health and safety of students in physical exercise, make physical education and medical security complement each other, and jointly promote the all-round development of students.

3.2 Analysis of the coordinated development mechanism of special physical education teaching and basic medical care

Policy support and collaborative management mechanism: The government should formulate relevant support documents at the policy level to clarify the goals and tasks of the coordinated development of special sports teaching and basic medical care. At the same time, a collaborative management mechanism should be established to clarify the division of responsibilities, to ensure information sharing and resource coordination between education and medical departments, and to promote the efficient progress of the work.

Cooperation mechanism between schools and medical institutions: Schools and medical institutions should establish a cooperative partnership, sign an agreement to clarify the responsibilities and obligations of both parties. The school provides the collection and summary of basic medical information for students, and the medical institutions conduct regular physical examination and health monitoring for students, and timely feedback to the school and parents, so as to take timely measures.

References

[1] Guo Zhihou. Research on the effect of specialized teaching of senior high school physical education on the physique and interest in physical education of backward students [C] the Research Center for Basic Education curriculum reform of the Ministry of Education.Symposium on the reform of 2021 education. 2021:2.

[3] Xia Tao, Li Yuanhua, Wu Yongna. Research on the key technology of accessibility analysis of county basic medical facilities for rural revitalization [J]. Innovation and application of science and technology, 2023,13(08) : 23-28.

[3] Zhang Qingzhong. Constructing a reasonable proportion of physical fitness is the direction of the reform of the specialized curriculum of senior high school physical education--taking the Shanghai Normal University secondary school as an example [J] . New Sports, 2022(06) : 82-84.

This paper is a 2021 research project on the quality assurance and evaluation of higher education in Jiangsu province: a research on the optimization of the structure of knowledge and ability of sports students based on the needs of basic education students.

Research on Strategies for Cultivating and Enhancing the Ability of Independent Innovation and Entrepreneurship of College Students

Pingan Gao

Changsha Normal University, Changsha 410100, China.

Abstract: At present, many universities only focus on professional education for students in their education and teaching work, without strengthening the effective cultivation of students' practical abilities. To address this issue, the role of innovation and entrepreneurship education has gradually become prominent, and in education and teaching, it can help students improve their practical abilities. To cultivate the independent innovation and entrepreneurship abilities of college students, universities need to change their outdated educational ideas and adopt effective methods to carry out teaching, so that students can independently innovate and start businesses after graduation and achieve long-term development. Based on this, this article mainly analyzes the necessity of cultivating and enhancing the independent innovation and entrepreneurship ability of college students, and delves into strategies for cultivating and enhancing the ability, in order to enable students to continuously improve their independent innovation and entrepreneurship ability, have a broader development space, and indirectly promote social progress.

Keywords: universities; Practical ability; Innovation and entrepreneurship education; College students; Independent innovation and entrepreneurship

Against the backdrop of the continuous development of China's knowledge economy, universities, as the main venue for cultivating new talents of the times, have attached great importance to the independent innovation and entrepreneurship abilities of college students. Both the government and society believe that college students are key targets for cultivating national independent innovation and entrepreneurship capabilities, which can greatly promote the comprehensive and healthy development of college students, provide an environment for employment pressure in society, and promote the continuous improvement of national comprehensive competitiveness. So, universities also need to focus on exploring effective means to cultivate the independent innovation and entrepreneurship abilities of college students, in order to promote the stability and long-term development of the national economy.

1. The necessity of cultivating and enhancing the independent innovation and entrepreneurship ability of college students

The cultivation of college students' independent innovation and entrepreneurship ability will meet the talent needs of society and also lead to the development of talent skills in a compound direction. In universities, in order to cultivate high-quality talents, it is necessary to pay attention to significantly improving students' independent innovation and entrepreneurship abilities, so that they have a sense of subjectivity and are willing to maintain market competitiveness through their own exploration and innovation after graduation. Against the backdrop of continuous reform of the current market economy system, enterprises are gradually increasing their requirements for talent. For talents with independent innovation and entrepreneurship abilities, they are bound to have strong practical abilities and focus on achieving the unity of theory and practice. Therefore, universities need to increase their emphasis on the cultivation of independent innovation and entrepreneurship talents, and incorporate them into the overall talent cultivation goals of the school. By learning theoretical knowledge and conducting practical activities, they can enhance their learning experience and proficiently apply the knowledge they have mastered to solve practical problems. At the same time, cultivating the independent innovation and entrepreneurship abilities of college students will also enable them to have a better experience of life and realize the significance of learning knowledge while mastering theoretical knowledge and practical abilities. In this way, students' thinking will also be dispersed, their potential will be stimulated, and students will have corresponding advantages in employment and achieve more comprehensive development. It can be said that the cultivation and improvement of college

students' independent innovation and entrepreneurship ability is of great significance.

2.Strategies for Cultivating and Enhancing the Ability of Independent Innovation and Entrepreneurship of College Students

2.1 Building a practical platform

In order to enhance the training effect of college students' independent innovation and entrepreneurship ability, universities need to pay attention to the integration of various educational resources. By strengthening the construction of innovation and entrepreneurship carriers, we aim to create a practical platform for independent innovation and entrepreneurship among college students. Universities can choose to utilize maker spaces, incubators, and entrepreneurship parks to actively encourage students to start their own businesses and achieve an organic combination of employment and entrepreneurship. In this way, independent innovation and entrepreneurship can be used to promote students' employment, and cultivate versatile talents with independent innovation and entrepreneurship capabilities. Moreover, universities also need to pay attention to the construction of innovation and entrepreneurship practice platforms, providing practical opportunities for independent entrepreneurship college students, so that students can improve their ability to connect with the market and adapt to society in practice, laying the foundation for their independent entrepreneurship. For the maker space, it is mainly a practical platform for cultivating entrepreneurial projects. In the specific construction, universities need to pay attention to combining the scientific research bases and engineering centers of various colleges, applying advanced digital technology, establishing professional maker spaces, and designing corresponding technological innovation activities to make students more interested and willing to unleash their creativity, and turning various creativity into reality through hands-on operations. Incubators are mainly incubation platforms for enterprises in stable development stages, which can consolidate students' independent innovation and entrepreneurship abilities. For entrepreneurship parks, it is mainly for students to establish a preliminary business incubation platform, relying on the participation of all parties, including universities, enterprises, society, etc., in order to build training, technology, information and other service platforms. In this way, it can also provide support for the independent entrepreneurship of college students and effectively improve the survival rate of enterprise creation. Through the construction of such innovation and entrepreneurship practice platforms, a complete talent cultivation chain of "cultivating promoting incubating" will also be formed.

2.2 Creating a cultural atmosphere

In the education of independent innovation and entrepreneurship for college students, the main goal is to help them establish a corresponding awareness and have the dream of practicing entrepreneurship. So, in order to achieve such goals, universities also need to pay attention to creating a cultural atmosphere of innovation and entrepreneurship on campus. Universities should combine the basic characteristics of the college to carry out scientific, technological, and cultural activities related to brand academia. By actively encouraging students to independently build innovative and entrepreneurial clubs, this type of club can be further developed. Moreover, universities should also strengthen the management of clubs, thereby significantly improving the overall service level of clubs. To bridge the gap between clubs and society, universities also need to actively organize clubs to go out of school, communicate and learn in various types of entrepreneurial bases, and achieve the docking of educational resources between clubs and enterprises, further transforming the achievements of innovation and entrepreneurship. Moreover, in order to improve the quality of training, universities also need to regularly hold independent innovation and entrepreneurship salons, provide various forms of education, encourage students to broaden their thinking on independent innovation and entrepreneurship, and strengthen the construction of campus innovation and entrepreneurship culture.

2.3 Conduct skill competitions

Cultivating the independent innovation and entrepreneurship abilities of college students is not an overnight task. Universities should focus on strengthening the cultivation of students' practical abilities, actively organizing students to participate in skill competitions, and training students' skills. By leveraging skill competitions to drive teaching, it will also help students clarify the basic goals of teaching, ac-

tively participate in learning, and unknowingly enhance their practical abilities. Universities can also create second classrooms, strengthen cooperation between schools and enterprises, and provide professional guidance for student cultivation. Students will also clarify their own shortcomings in a timely manner through professional guidance, in order to effectively correct them and achieve effective improvement of their independent innovation and entrepreneurship abilities.

3. Conclusion

In summary, cultivating the independent innovation and entrepreneurship ability of college students will play an important role for students and society. So, in the specific process of carrying out education and teaching in universities, it is also necessary to focus on cultivating independent innovation and entrepreneurship ability, and explore effective training and improvement strategies based on the actual situation of students. By building practical platforms, creating a cultural atmosphere, and conducting skill competitions, college students can significantly improve their ability to innovate and start businesses, and become a force for innovation and entrepreneurship in the new era of society, Promote social and economic development.

References

[1] Gu self-defense. Strategies for Cultivating and Enhancing the Innovation and Entrepreneurship Competence of College Students [J]. China Market, 2022 (06): 98-99.

[2] Pan Xiaoxia, Ye Tangyan, Yao Guixiang, et al. Research on Strategies for Cultivating and Enhancing the Innovation and Entrepreneurship Ability of College Students: A Case Study of the School of Chemistry and Environment, Yunnan University for Nationalities [J]. Industry and Technology Forum, 2021,20 (18): 178-179.

[3] Chen Menghan. Research on the Cultivation of Innovation and Entrepreneurship Ability of College Students in the New Situation [J]. International Public Relations, 2023 (07): 142-144.

Research on the cultivation of economic and management talents in universities under the new business model

Zhiyao Luo

Changsha Normal University, Changsha 410100, China.

Abstract: The current development of society has put forward stricter requirements for talents. How to make the talents cultivated by universities meet the characteristics and needs of social development is a problem that needs to be deeply solved by relevant parties. In practice, whether considering personal interests or the future development of society, the cultivation of students majoring in economics and management is crucial. They account for a large proportion of the total number of students in universities, which also puts higher requirements on the cultivation of talents in economics and management. Universities need to explore and analyze more diverse teaching methods based on actual situations, innovate and optimize teaching methods, Ultimately cultivate comprehensive talents who are more in line with the development of the times, have strong social adaptability and competitiveness

Keywords: economic management; personnel training

1.An Analysis of the Employment Situation of College Students

In recent years, the admission rate of universities has been increasing, but this gradually increasing admission rate has not led to an increase in the employment rate of universities. On the contrary, there have been phenomena and problems of employment difficulties for college students. The number of college graduates is increasing, and the employment situation is becoming more and more severe and complex. Employment is also becoming more and more difficult. Employers have gradually increased their requirements for graduates, but the demand has been decreasing year by year.

2. The composition of the talent training system for economic management in universities

2.1 The types of practical teaching for economic and management talents in universities

Cultivating talents in the field of economic management is an important goal of practical teaching in the field of economic management. In the current social environment and the innovative situation of new business models, the practical teaching of economic management in universities has undergone great changes and higher requirements have been put forward, mainly through comprehensive teaching from four perspectives. One is the experimental teaching method, which can strengthen students' understanding ability, improve their ability to apply and solve problems, and also promote the formation of logical thinking in students. The second is the practical training mode. The main goal in the practical training teaching process is to improve students' skills, exercise their thinking, enable them to acquire various abilities during the training process, and help them seize more employment opportunities in future work.

2.2 Narrowly defined practical teaching system for cultivating economic and management talents

The traditional teaching mode is relatively dull and boring, unable to achieve good results in the talent cultivation process, nor can it promote student progress and allow students to gain more benefits. However, by integrating practical teaching mode into the process of cultivating economic and management talents in universities, it can promote further improvement and growth of teaching level, and also enable students to gain various forms of exercise. In the actual teaching process, liberating students' minds, cultivating their abilities, and promoting their growth and progress are key contents. If the teaching mode is integrated with social practice, scientific research practice, or other competition modes in the process of cultivating economic and management talents, it is easier to improve the comprehensive advantages of practical teaching in economics and management in universities, make it more macroscopic, and build a complete teaching system, Standardize the teaching process, enhance students' coping, processing, communication, and innovation abilities.

3. The training ideas for economic and management talents in universities under the new business model

3.1Realize resource sharing through communication between schools

In the continuous development process of the current society, the speed of knowledge updating and replacement is relatively fast. As the main battlefield for knowledge dissemination, universities have the responsibility and obligation to produce and disseminate knowledge. In order to better meet this requirement, universities need to attach importance to mutual cooperation between schools and build an efficient collaborative work model. Firstly, it is necessary to organize the construction of inter school professional cooperation organizations, build a specific scale of e-commerce circle, promote the sustained and stable development of e-commerce majors in universities, and on this basis, play the active role of universities, gather ideas, form multi-dimensional discussions and speeches, which can further promote inter school communication and discussion, solve related problems, and improve the comprehensive quality level of students in the field of economics and management. Secondly, it is necessary to build an economic management laboratory, which can cooperate with other universities, absorb and learn from the talent management experience in the development process of other universities, promote exchanges among major universities, provide simulation laboratories for students in the field of economics and management, and enable them to complete various operations and practices in the laboratory, deepening their mastery and understanding of theoretical knowledge, It can also improve the practical operational ability of students majoring in economics and management in universities.

3.2 Building a school enterprise cooperation mechanism to promote practical teaching

Colleges and universities need to leverage the advantages of training and practice bases to form a model of school enterprise cooperation for cultivating economic and management talents. This will enable both the campus and the enterprise to obtain the content they need, leverage their expertise and abilities, achieve the goals and requirements of resource complementarity and benefit sharing, and promote the achievement of the training goals for economic and management talents in universities, Obtain higher social benefits.

3.3 Based on talent orientation, improving students' practical abilities

The talents cultivated in the current process of social development must meet the needs of social development. Universities need to follow the basic principle of talent orientation in the process of talent cultivation, cultivate talents with both professional knowledge and practical abilities, so that their skills can be fully utilized and meet the needs of social development. In the process of talent cultivation in universities, it is necessary to pay attention to the enhancement of students' hands-on ability and practical ability, so as to make their knowledge structure more complete, so that they are no longer limited to simple textbook knowledge, but can transform their learned knowledge into practical skills, and effectively enhance their problem-solving ability. And this requires teachers to carefully design the curriculum in teaching, taking into account the characteristics of different students and the goal of comprehensive ability cultivation. At the same time, they should pay attention to the cultivation effect of applied talents, helping students occupy a favorable position in fierce international competition.

Reference

[1] Sun Guoping, Wang Shuhao Research on the cultivation of management accounting talents in colleges and universities under the background of "Internet plus" [J] Journal of Jilin Engineering and Technology Normal University, 2020, 36 (04): 21-23.

[2] Du Youqiang Exploration of the Training Model for Economic and Management Talents in Universities [J] New Education Era Electronic Magazine (Teacher Edition), 2017 (36): 141.

[3] Zhang Xin, Wu Fang A Study on the Collaborative Innovation Training Model of Talents in Economics and Management under the Transformation of Applied Universities [J] Journal of Daqing Normal University, 2017, 37 (02): 151-154.

[4] Zhu Qinghua Research on the Training Model of Applied Talents in Economics and Management Majors in Universities [J] Curriculum Education Research, 2015 (04): 10-11.

Research on Information Literacy of College Students from the Perspective of Cultivating Innovation and Entrepreneurship Abilities

Ping An Gao

School Changsha Normal University, Changsha 410100, China.

Abstract: In the context of educational modernization, the cultivation of innovation and entrepreneurship has become a key direction of higher education. As an essential quality for the innovation and entrepreneurship ability of college students, information literacy is often overlooked in the process of carrying out innovation and entrepreneurship education, leading to insufficient practical effects of overall innovation and entrepreneurship education. In the new era of higher education, in order to cultivate innovation and entrepreneurship abilities, it is necessary to organically integrate information literacy into the teaching of innovation and entrepreneurship ability cultivation, improve the overall quality of innovation and entrepreneurship education, and continuously improve the level of innovation and entrepreneurship education. Therefore, this article systematically studies the information literacy of college students from the perspective of cultivating innovation and entrepreneurship abilities, explores effective strategies to improve their information literacy in the innovation and entrepreneurship education environment, and implements the fundamental educational task of cultivating morality and talent.

Keywords: Innovation and entrepreneurship ability; College students; Information literacy; Effective strategy

Since the implementation of the innovation driven development strategy, China's science and technology have achieved vigorous development. In the context of digitalization and informatization, college student entrepreneurship has become the mainstream of the times, and innovation and entrepreneurship, together with socio-economic development, have empowered China's modernization development. Information literacy, as an essential quality in the innovation and entrepreneurship ability of college students, is closely related to their daily learning and teaching. However, information literacy is easily overlooked in cultivating the innovation and entrepreneurship abilities of college students, which affects their level of innovation and entrepreneurship abilities. Based on this, in the process of cultivating the innovation and entrepreneurship abilities of college students, it is necessary to pay more attention to information literacy, so as to further improve and enhance their innovation and entrepreneurship abilities.

1. The Basic Meaning of Information Literacy of College Students from the Perspective of Cultivating Innovation and Entrepreneurship Abilities

Information literacy was first proposed by Paul Zurkowski, the chairman of the Information Industry Association in the United States, in the early 1970s, and was elaborated on as the ability to solve problems by searching for the necessary content in a large amount of information. With the advent of the information and internet era, information literacy is increasingly valued by people. To cultivate the information literacy of college students, it is required that they actively learn and collect information from the internet environment and physical data. Through screening and elimination, they can capture the necessary information and then apply it to solve practical problems. From the perspective of cultivating innovation and entrepreneurship abilities, cultivating the information literacy of college students is of great benefit to improving their innovation and entrepreneurship abilities, enhancing their ability to effectively obtain necessary information from complex information materials, enhancing their ability to identify and search for information, and continuously improving their self-learning ability.

2. The Shortcomings of Cultivating Information Literacy of College Students from the Perspective of Innovation and Entrepreneurship Ability

Faced with the severe employment situation and environment, many college students are facing the problem of unemployment upon graduation. In the context of the comprehensive promotion of innovation and entrepreneurship by the country, innovation and entrepreneur-

ship education has become a compulsory course for college students. As one of the important factors in cultivating innovation and entrepreneurship abilities, information literacy still has some shortcomings in college education, which affects the overall ability of college students to innovate and start businesses.

2.1 Unclear concept of information literacy

Information literacy is a concrete manifestation of comprehensive ability, not only reflected in innovation and entrepreneurship ability, but also in the daily learning and life of college students. However, many college students are not clear about the concept of information literacy, and only a small number of college students understand the concept of information literacy, and they only stay at the initial cognitive stage, summarizing information literacy as the process of obtaining information, lacking a deeper understanding.

2.2 Lack of interest in innovation and entrepreneurship

Although innovation and entrepreneurship education has been widely popularized in higher education, college students generally lack interest in innovation and entrepreneurship. Most college students still focus on postgraduate entrance exams, civil service exams, and employment. There are very few college students with entrepreneurial intentions, and they do not pay much attention to the importance of innovation and entrepreneurship. They do not have enough understanding of the forms of innovation and entrepreneurship. So, it is even more difficult to leverage the role of information literacy in innovation and entrepreneurship capabilities.

2.3 Low emphasis on information literacy in innovation and entrepreneurship training

For most universities, carrying out innovation and entrepreneurship training is just a formality and has not been truly implemented in practice. Many college students are unable to develop an interest in innovation and entrepreneurship, believing that the threshold for innovation and entrepreneurship is high and that they need to have a certain level of intelligence. In the cultivation of innovation and entrepreneurship, only basic theoretical knowledge is generally explained, and typical cases of innovation and entrepreneurship are introduced. There is a lack of in-depth cultivation of innovation and entrepreneurship abilities, and the emphasis on information literacy is not high.

3. Research on Strategies for Cultivating Information Literacy of College Students from the Perspective of Cultivating Innovation and Entrepreneurship Abilities

To cultivate the information literacy of college students, it is necessary to face the cultivation of their innovation and entrepreneurship abilities, increase the importance of innovation and entrepreneurship education, effectively implement the requirements of innovation and entrepreneurship education, and integrate information literacy into various stages of innovation and entrepreneurship ability cultivation.

3.1 Schools should attach importance to the cultivation of information literacy in the cultivation of innovation and entrepreneurship abilities

As the main body of innovation and entrepreneurship education, universities should pay more attention to the cultivation of innovation and entrepreneurship abilities in the current employment environment for college students, and realize the important role of information literacy in innovation and entrepreneurship abilities. By improving the infrastructure for cultivating the information literacy of college students, enhancing the level of information technology development in university libraries, innovating teaching models and concepts, effectively carrying out innovation and entrepreneurship courses, and cultivating the information literacy of college students. In order to improve the information literacy ability of college students in innovation and entrepreneurship, universities should leverage their overall resource advantages, provide professional skills training for innovation and entrepreneurship teachers, and improve the level of professional teachers. At the same time, the important role of libraries should be played. University libraries are an important way for college students to obtain information. Therefore, improving the informationization construction of libraries can effectively enhance the information literacy of college students. In addition, it is necessary to increase the construction of network resources and improve the updating of teaching systems.

3.2 Utilize the Information Literacy Ability of Innovation and Entrepreneurship Teachers

As the main body of knowledge transmission, teachers need to play a role in preaching, imparting knowledge, and resolving doubts. Their personal qualities can have a profound impact on college students. Therefore, in order to cultivate the information literacy of college students, university teachers must have sufficient information literacy abilities, integrate information literacy into daily teaching, and improve the understanding and application of information literacy among college students. Through interactive teaching, enhance students' autonomy in learning, fully utilize information technology tools such as computers and the Internet in teaching, cultivate students' ability to search for information, and cultivate good information literacy.

3.3 The Practicality of Information Literacy in Improving the Innovation and Entrepreneurship Ability of College Students

The most important way to cultivate the information literacy of college students is to enable them to master the basic concepts of information literacy and apply it to innovation and entrepreneurship practices, thus realizing the practical value of information literacy. Firstly, university teachers should combine theoretical knowledge of information literacy with practical applications in classroom teaching. While teaching theories, they should also demonstrate operations for college students and allow them to practice with the teacher's actions. For example, in video editing teaching, a complete video requires a lot of materials. Teachers can guide students to find the motivation for materials, provide them with some free material platforms, and cultivate the information literacy of college students in practice, truly mastering the essential qualities of information literacy.

Conclusion

In summary, as an important component of innovation and entrepreneurship ability, the cultivation of information literacy should be valued by universities and teachers. In innovation and entrepreneurship education, information literacy should be organically integrated to continuously improve the innovation and entrepreneurship ability of college students.

References

[1] Chen Huixin. Analysis of the Impact of Information Literacy on the Innovation and Entrepreneurship Ability of College Students [J]. Knowledge Economy, 2022599 (5): 169-171.

[2] Zhang Fuxin. Research on Embedding Information Literacy Education into Innovation and Entrepreneurship Teaching for College Students in University Libraries [J]. Journal of Library Science, 2022 (2): 37-42.

[3] Wu Lijuan, Wu Li. Research on the Information Literacy Education Model for College Students Based on the Cultivation of Innovation and Entrepreneurship Ability [J] Inner Mongolia Science and Technology and Economy, 2021 (12): 34-35.

Research on the path of Improving the Quality of "Double-qualified" teachers in secondary vocational schools under digital background

Jiayu Hou, Chuanjie Qiu

Graduate School of Master of Education, Shenyang Normal University, Shenyang 110034, China

Abstract: It is one of the key points in the development of vocational education to build a high quality "double teacher" team. This paper analyzes the dilemma of improving the quality of "double-qualified" teachers in secondary vocational schools, and with the help of digital technology, puts forward the strategic route of constructing a "double-qualified" teacher training system, digital files, and a unified digital platform for comprehensive training, and improving the assessment mechanism and promotion standards.

Keywords: Digitization, high quality development, "double qualified" teachers, quality improvement

Secondary vocational teachers mainly come from universities and enterprises, and the advantages of a single field are difficult to meet the requirements of "double-qualified" teachers. The Ministry of Education requires that the proportion of "double teachers" should not be less than 50%, so as to improve the quality of "double teachers" and build a team of high-quality teachers. Under the catalysis of modern scientific and technological progress and the epidemic, education has entered the digital era, changing the mode of communication, breaking the learning restrictions, improving efficiency, and providing new ideas for "double-qualified" teachers.

1.The connotation of "double-qualified" teachers' quality

The concept of "double-qualified" teachers first appeared in the Notice on Building Exemplary Vocational Universities issued by the State Education Commission in 1995, referring to teachers with both theoretical and practical teaching abilities. The academic circle analyzes its connotation mainly includes double qualification, double quality, double source and double ability. In order to promote the high-quality development of vocational teachers, the Ministry of Education has made clear that teachers' ethics are the primary standard. To sum up, "double-qualified" teachers should have good ethics, education and teaching ability, practical and professional ability, physical and mental quality, social and organizational coordination ability and scientific research and innovation ability.

2.The dilemma of "double-qualified" teachers' quality improvement

In order to improve the quantity and quality of "double-qualified" teachers and promote the high-quality construction of teachers, the state and relevant experts and scholars in this field have issued a number of policy recommendations, including the establishment of school-enterprise training bases, the formulation of teacher incentive evaluation mechanisms, and the construction of training systems. However, there is still a shortage of qualified "double-qualified" teachers in secondary vocational schools. The difficulties they face mainly include:

2.1 The training funds are limited and the mechanism is not perfect

The training of "double-qualified" teachers needs the guarantee of funds and a perfect training system, but many vocational colleges are faced with challenges due to the shortage of funds and the lack of effective training system. At the same time, paying too much attention to the quantity of "double-qualified" while ignoring the quality, such as overemphasizing the qualification certificate while ignoring the practical experience and ability of teachers, and the inconsistency between the qualification and teaching specialty, are not conducive to the construction of "double-qualified" teachers and the sustainable development of vocational colleges.

2.2 The enthusiasm to participate in training is not high, and the career plan is not clear

Compared with general education, teachers in vocational schools are less active in participating in education and teaching, the reasons

include the low enthusiasm of secondary vocational students leading to poor teaching results; The shortage of professional teachers and heavy teaching tasks limit the room for improvement; Teachers think that training has nothing to do with salary promotion and lack interest; Family weight or physical condition affecting training participation; The unclear training content, methods and effects lead to wait-and-see attitude.

2.3The support degree of relevant enterprises is not high, and the training opportunities are limited

The key to improve the quality of "double-qualified" teachers lies in the active participation and support of enterprises. Teachers are required to do on-the-job internships in relevant enterprises to enhance their professional skills. Through internships, teachers can keep up with industry dynamics and improve their professional knowledge system, so as to guide students' practice more effectively. However, the current teachers' professional training mainly relies on teachers' self-contact enterprise temporary training and theoretical knowledge training, and there are few internship opportunities. Some enterprises are reluctant to cooperate for fear of leaking technical secrets, which hinders teachers' deep learning and skill upgrading.

2.4 The method of testing the effect of training is not strict

After teachers participate in the training of double quality improvement, there will be a definition or assessment of the training effect. Now there are generally two kinds: one is to fill in the training-related forms and submit them directly; The second one is to obtain the corresponding certificate after the training. It is obviously not enough for a certificate or a certificate to test the professional quality of double-qualified teachers. However, at this stage, there are no standardized and high-quality testing methods to improve and test the training teachers' practical skills.

3.The significance of digitization to the improvement of "double-qualified" teachers' literacy

3.1 Break the barriers of "double-qualified" teachers' training

Traditional training requires planning content, venue and time in advance, and teachers sometimes miss training opportunities due to geographical and time constraints, coupled with the impact of the COVID-19 epidemic. However, thanks to digitization, teachers can learn in small chunks of time, in a continuous way, which upends the traditional training model.

3.2 Sharing school-enterprise cooperation resources to increase learning channels

As the key force of talent training, "double-qualified" teachers need to take into account the needs of enterprises and theoretical practice at the same time to adapt to social development. As a bridge between enterprises and students, teachers need to improve their quality and explore multiple learning styles. With the help of digital platform, combined with school-enterprise resources and platform technology, teachers can break through internship restrictions and learn new technologies from enterprises in different places.

3.3 Make the training effect digital and transparent

Most colleges and universities organize teachers to participate in national training, provincial training, "1+X" certificate and other training, but they often stay in the form, and the results are difficult to land, which weakens the training effect. Under the influence of digitalization, the training process of "double-qualified" teachers, such as learning time, content, direction and results, can be digitized and transparent, which will help improve the training effect and teachers' attention to training.

4.The specific path to improve the quality of "double-qualified" teachers in secondary vocational schools under the digital background

4.1 Do a good job of top-level design, and build a systematic training system for "double qualified" teachers

To reshape the training of "double teachers" in secondary vocational schools, it is necessary to carry out fine planning and implemen-

tation in combination with efficiency, timeliness and professionalism. Through standardized and quantitative strategies, we can strengthen the cultivation of teachers' professional and practical ability and meet the standard of "double-qualified" teachers. In addition, the top-level design should be combined with the teacher evaluation mechanism to maximize its promotion effectiveness.

4.2 Regular inspection and establishment of digital archives of "double-qualified" teachers

Secondary vocational schools should build a digital file system to integrate the quality, ability and scientific research data of "double teacher" teachers for in-depth analysis. Form a visual report to help schools identify the shortcomings of teachers' abilities, and implement accurate and personalized training based on this. At the same time, teachers can also find and supplement their lack of ability through the platform, so as to quickly grow into excellent "double-qualified" teachers.

4.3 School and enterprise administration resources into the network, build a unified digital platform, and carry out integrated training

In order to solve the problem of the quality of "double-qualified" teachers in secondary vocational schools and the mismatch between students and enterprises, secondary vocational schools need to build a digital platform through the Internet, integrate education, enterprise and government resources, and integrate theoretical and practical teaching methods. The platform needs to combine psychology, teacher education, academic research and development and other courses to build an integrated online teaching system. Through the platform, teachers can improve themselves, keep up with industry dynamics, optimize teaching quality to meet the needs of enterprises and achieve the goals of vocational education.

4.4 Improve the "double-qualified" teacher training evaluation mechanism and career promotion standards

Linking the training and evaluation of "double-qualified" teachers with the evaluation of professional titles and formulating a clear evaluation system can arouse the enthusiasm of teachers. While strengthening teaching supervision, secondary vocational schools should pay attention to the assessment of "double qualified" quality, and promote the continuous improvement of "double qualified" teachers through quantitative indicators, such as competition performance, practical ability and "1+X" qualification certificate.

5.The conclusion

The key to the development of vocational education is to improve the quality of "double-qualified" teachers. The use of digital platforms to break the barriers of teacher training, establish digital files for teachers, integrate the resources of schools, enterprises and government to conduct integrated training, and improve the evaluation and promotion standards is conducive to improving the quality of "double-qualified" teachers. This will enable schools and teachers to connect with enterprises and the market, make full use of digital convenience, improve teachers' literacy in an all-round way, achieve high-quality development of vocational education, train more highly skilled talents for the society, and improve the current situation of recruitment and employment difficulties.

References

[1] Huang Yanhong. Research on the quality improvement Path of "double- qualified" teachers in "double-high" colleges and universities under the digital background [J] Modern Vocational Education, 2022 (34) : 102-105

[2] Hu Weifang, Yan Zhiyong, Lu Feifei. Investigation on the current situation of professional quality of teachers in Higher Vocational Education [J]. Vocational and Technical Education,2019,40(11):59-63.

[3] Chen Fengying. The structure and development path of vocational Mission of "double-qualified" teachers in vocational Education: Based on the perspective of grounded theory [J]. Journal of Vocational and Technical Education, 2019,44(13):38-45.

Study on the Cultivation of Craftsman Spirit in Interior Design Majors of Vocational Education

Ming Sun

Jinan Institute of Technology, Jinan, 250014, China

Abstract: In the current dynamic trend of thriving innovation in the industry, vocational education, in the cultivation of talents, must continuously improve and enrich teaching methods in line with industry demands. Apart from honing students' professional skills, it is essential to strengthen character education. By integrating the craftsmanship spirit into the interior design discipline, a comprehensive educational framework is formed, combining professional courses with ideological guidance. This integrated approach, encompassing theory, practice, and character development, aims to promote the cultivation and output of high-quality professionals in the field of interior design. This paper begins by analyzing the significance of instilling the craftsmanship spirit in interior design education and then briefly elucidates effective strategies for fostering this spirit in interior design students, serving as a reference.

Keywords: Craftsmanship Spirit; Vocational Education; Interior Design Discipline; Cultivation Strategies

Introduction

In the rapidly evolving era, industries are undergoing continuous transformations, and the field of interior design, as a highly practical discipline, is no exception. The development of the interior design industry is experiencing rapid and constant changes due to shifts in people's living environments, quality of life, and aesthetic preferences [1]. As an essential form of skill-based talent development, vocational education, particularly in the goals of cultivating professionals in the field of interior design, should not be confined solely to the cultivation of technical skills. It is crucial to emphasize ideological guidance and education. By incorporating the cultivation of the craftsmanship spirit throughout the entire teaching process of interior design, a comprehensive enhancement of the quality of talent development is achieved at all levels. This approach helps professionals in interior design adapt better to job requirements and contributes to the overall advancement of the industry.

1.The Significance of Cultivating Craftsmanship Spirit in Interior Design Education

The interior design discipline is not only theoretical but also demands excellent practical skills, aesthetic foundations, and cultural insights. In essence, interior design represents the perfect integration of technology, art, and culture. Only when these elements are well-balanced can it deliver excellent decorative effects, creating a satisfying environment and providing users with an enhanced experience. The methods and forms of interior design are not static; they evolve with changes in the overall environment and must align with the owner's requirements while showcasing professional competence [2]. Hence, professionals in the field must possess strong professional qualities, continuously refine technical skills in their roles, and engage in ongoing reflection and innovation. The integration of craftsmanship spirit in interior design education not only elevates students' skills but also provides guidance in cultivating their character. By incorporating the principles of craftsmanship into curriculum design and teaching activities, the diligence, research, and innovation inherent in craftsmanship subtly influence students' professional values. This approach encourages students to wholeheartedly immerse themselves in their roles, passionately engage in their profession, and continuously pursue excellence in their respective fields through dedication and exploration.

The infusion of craftsmanship spirit into interior design education effectively enhances students' professional capabilities while reinforcing their intellectual qualities and professional ethics [3]. With a dedicated mindset, constant exploration, refinement, and improvement, individual progress contributes to the advancement and development of the industry.

2.Effective Strategies for Cultivating Craftsmanship Spirit in Vocational Education Interior Design Teaching

2.1 Analysis of Craftsmanship Spirit

The forms of vocational education activities are diverse, requiring meticulous implementation from both theoretical and practical perspectives. It is essential to tailor educational activities to the characteristics of the profession, especially for applied disciplines like interior design, which demands individualization and diversity. In organizing teaching activities, it is crucial not to limit oneself to traditional models and content but to stay abreast of contemporary changes and industry trends. Emphasis should be placed on cultivating students' innovative awareness and creative abilities to meet the requirements and demands of diverse groups [4]. Therefore, in vocational education, instilling the craftsmanship spirit in students is paramount. For skill-based professionals, the craftsmanship spirit should not merely be a concept but a belief. Only through continuous research, dissatisfaction with current achievements, ongoing reflection, and innovation can better results be achieved, contributing to industry development. To cultivate students' craftsmanship spirit, it is essential to first analyze the essence of craftsmanship spirit. This spirit is manifested in both philosophy and action. Philosophically, it involves persistence and concentration, while in action, it demands meticulousness and continuous improvement. For skill-based professionals, craftsmanship spirit is not just about expertise but also dedication to the job. It goes beyond completing tasks; it involves the continuous pursuit of excellence, with precision and professionalism being key elements of craftsmanship spirit, laying the foundation for outstanding contributions in the workplace.

By analyzing the craftsmanship spirit and integrating its elements into specific teaching and practical activities, students can be guided to strengthen their beliefs and persist in exploration.

2.2 Integrating Craftsmanship Spirit into Curriculum Design

The cultivation of students' craftsmanship spirit is a gradual process that requires a combination of philosophy and methodology, influenced by the environment and atmosphere. To integrate craftsmanship spirit throughout the entire teaching process, it is crucial to first incorporate it into curriculum design. Considering the characteristics of the interior design profession, delve into the profound connections between craftsmanship spirit and the discipline. Utilize course resources, exemplary cases, and outstanding individuals to highlight craftsmanship spirit. Showcasing their achievements and contributions in the industry will enable students to analyze the gaps between themselves and these role models, gaining a deeper understanding of the application requirements and job characteristics in the field of interior design. This analysis aids in developing targeted teaching materials, laying the groundwork for the comprehensive integration of interior design learning and craftsmanship spirit.

2.3 Infusing Craftsmanship Spirit into Practical Teaching

For the interior design profession, talent development relies heavily on extensive practical experience, making it an excellent entry point for cultivating students' craftsmanship spirit [5]. Through diverse practical teaching activities and the initiation of practical projects, students can design environments such as dormitories, classrooms, libraries, sports halls, cafeterias, supermarkets, and other indoor spaces. These practical activities hold significant guidance and educational value. Throughout the process, students apply theoretical knowledge to practical situations, conducting investigations and analyses of current design styles and strengths and weaknesses. They then produce design proposals, implement designs, and understand the materials, resources, and equipment required for presenting the interior design effects. This process not only hones students' hands-on skills but also enhances their communication abilities and strengthens their design capabilities. Additionally, students may encounter various difficulties and issues, and in the process of solving problems and refining designs, continuous practice, validation, comparison, and adjustment are essential. This dedicated process is a crucial step in cultivating students' professional competence and craftsmanship spirit.

3. Conclusion

In conclusion, to further meet the developmental needs of the interior design industry, continuous exploration of effective methods and pathways in talent development is essential. It is particularly crucial to emphasize the education of students' professional qualities and recognize the significance of cultivating craftsmanship spirit in enhancing students' comprehensive skills. Implementing the requirements for cultivating craftsmanship spirit throughout the entire teaching process, seamlessly integrating them from theory to practice, and permeating them effectively are vital steps. This holistic approach aims to comprehensively elevate students' overall competence levels, aligning with the dynamic demands of the interior design field.

References

[1] Zhang Chunyang. Reform Practice of Ideological and Political Education in the 1+X Curriculum of Interior Design Majors in Higher Vocational Education [J] Journal of Kaifeng Vocational College of Culture and Arts, 2023,43 (01): 35-37.

[2] Ma Yue. Research on Cultivating the Craftsman Spirit of Applied Talents in Interior Design in the New Era [J] Green and environmentally friendly building materials, 2020, (06): 93-94.

[3] Li Dexin. On How to Practice the Spirit of Craftsmanship in Vocational Education - Taking Interior Design as an Example Think Tank Era, 2018, (39): 275-277.

[4] Xie Zhixian. Exploration and Practice of the Craftsman Spirit Talent Training Model in Vocational Colleges: Taking Interior Design as an Example Art Education, 2017, (19): 150-151.

[5] Lu Yi. Research on the Cultivation of Craftsman Spirit in Interior Design Majors of Higher Vocational Education [J] Building Materials and Decoration, 2016, (40): 169-170.

About the author:

Ming Sun,1980-10, Han nationality; Title: associate professor, master's degree; Research direction: Teaching of architectural decoration engineering technology.

Exploring online and offline connection strategies for enterprise training in the context of the Internet

Jun Yin

Hainan Vocational University of Science and Technology Haikou, Hainan 570311

Abstract: This study aims to explore the integration strategy of online and offline enterprise training in the context of the Internet, in order to enhance the effectiveness of online enterprise training. Through the analysis and comparison of multiple online enterprise training cases, it was found that when combining online and offline training, the training process should be reasonably planned, the advantages of online and offline teaching resources should be fully utilized, and interactive platforms and feedback mechanisms should be established to achieve interaction and support between online and offline learning. Through the integration of these strategies, the effectiveness and satisfaction of enterprise training will be improved, and the continuous optimization and development of enterprise training will be promoted.

Keywords: Internet background; Enterprise training; Combining online and offline; Connection strategy

1.The Current Situation of Enterprise Training in the Context of the Internet

1 .1 Fully grasp the characteristics of online and offline enterprise training

1. 1.1 Online enterprise training has flexibility in both time and space

Students can participate in training activities at any location according to their own schedule, without being limited by time and location. This flexibility enables students to better balance the relationship between work and learning, improving learning efficiency.

1.1.2 Online enterprise training has the advantage of resource sharing

Through internet platforms, students can easily access rich teaching resources, including textbooks, courseware, teaching videos, etc. The sharing of these resources enables students to more conveniently obtain the required teaching materials and improve teaching effectiveness.

1.1.3 Online enterprise training has the characteristic of strong interactivity

Through internet platforms, students can communicate and interact with other students, share learning experiences and methods. Trainers can also engage in online interaction with students, answer their questions, and promote the improvement of learning effectiveness. This interactivity provides students with a broader learning and communication platform.

1.2 Fully grasp the characteristics of offline enterprise training

1.2.1 Strong interactivity

Offline training can allow students and trainers to have face-to-face communication, which can help students better understand the instructor's intentions and better understand their learning situation, thereby better adjusting teaching content and methods.

1.2.2 Strong practicality

Offline training usually involves practical sessions, where students can better understand and master knowledge. For example, in language training, students can improve their oral proficiency through dialogue with instructors; In skill training, students can master their skills through practical operations.

1.2.3 Timely feedback

Offline training can enable instructors to timely understand students' learning situation, provide feedback and guidance in a timely manner. For example, in language training, instructors can promptly correct students' pronunciation and grammar errors; In skill training, the instructor can promptly guide the trainees in their operations.

2.Analyze the problems in online and offline enterprise training

2.1 Insufficient emphasis on the connection and coherence of online and offline enterprise training

Due to the different forms of online and offline training, there are issues with the conversion and connection of teaching content. Online enterprise training often focuses on knowledge transfer and theoretical learning, while offline training places more emphasis on practical operation and teaching practice. Therefore, when connecting online and offline training, it is necessary to plan the training process reasonably to ensure the connection and coherence between the two forms of teaching content and learning objectives.

2.2 The advantages of online and offline training resources have not been fully utilized

Online platforms provide rich teaching resources and learning tools, while offline training is more closely related to practical scenarios. When combining online and offline training, trainers should fully utilize the advantages of online and offline teaching resources to achieve efficient connection between knowledge transfer and practical operations. For example, knowledge can be imparted through videos and textbooks provided by online platforms, followed by practical operations in offline training to enhance training effectiveness and practical ability cultivation.

2.3 Lack of interaction and feedback mechanisms for online and offline learning

In online enterprise training, the interaction between trainers and students is relatively difficult, and there is a lack of face-to-face communication and feedback mechanisms. Therefore, when connecting online and offline training, corresponding interactive platforms and feedback mechanisms should be established to promote interaction and support between trainers and students.

3.Optimization Strategy for Integrating Online and Offline Training in Enterprises

3.1 Reasonably plan the training process to ensure the connection and coherence between online and offline training

Before training, a detailed training plan should be developed to clarify the training objectives and content, and organically combine online and offline training. In the training process, the reasonable arrangement of training time and sequence should fully consider the characteristics and needs of students' learning, provide personalized learning support and guidance, and pay attention to the connection between online and offline training to ensure that students can smoothly transition and adapt to different learning environments. This can ensure a close connection between online and offline training, enabling trainers to learn and practice in an orderly manner.

3.2 Fully utilize the advantages of online and offline teaching resources to achieve efficient connection between knowledge transfer and practical operation

Fully utilize the advantages of online and offline teaching resources to achieve efficient connection between knowledge transfer and practical operations. Online enterprise training can provide rich learning resources through multimedia technology and interactive platforms, enabling students to easily acquire knowledge and skills. Offline training can help students apply their knowledge to practical operations through practical operations and teaching internships. It can also increase the interactivity and communication of training through offline training, which can better receive training feedback from students and further tap into their training needs. Therefore, when connecting online and offline teacher training, the advantages of both should be fully utilized, Enable students to seamlessly connect theoretical learning and practical operations.

3.3 Integrating online and offline for course teaching practice

3.3.1 Combining online classroom teaching with offline self-learning, two aspects of learning and assessment should be arranged

The main approach is to arrange for students to self-study some content outside of class, reduce the theoretical teaching time in classroom training, and provide training on key content in the classroom through a combination of video learning and on-site teaching to consolidate the theoretical foundation. In terms of assessment, add assessment links such as classroom discussions and practical operations, and combine them with attendance to form rewards or promotion opportunities based on completion. Through the improvement of teaching methods, the teaching time of trainers has been reduced, and the subjective initiative of students has been enhanced.

3.3.2 Reasonable and clear division of labor, achieving mutual cooperation and complementarity between online and offline

It is necessary to reasonably allocate online and offline training time and specific class hours, and the two should work together rather than run independently. Depending on the working hours and nature of the job, different forms can be taken during the training process. The theoretical knowledge content in the training is mainly stored in the online training section, and the training materials learned are also mainly stored on the online platform. This way, students can more freely arrange training time, use fragmented time to complete training tasks, and can also learn repeatedly.

3.3.3 Establish an interactive platform and feedback mechanism to achieve interaction and support between online and offline learning

Establish an interactive platform and feedback mechanism to achieve interaction and support between online and offline learning. Online enterprise training can promote interactive communication and experience sharing among students through online discussions, question answering, and other means. Offline training can promote cooperation and feedback among students through practical operations and group discussions. A feedback mechanism can also be established to collect feedback and opinions from trainees on training, and to adjust and improve training content and methods in a timely manner. In offline training, cooperation and mutual assistance among students can be used to promote interaction and learning support among them.

4.Conclusion

Based on the content and conclusions of this study, this article explores the importance of combining online and offline training strategies for enterprises in the context of the Internet. We found that when combining online and offline training, attention should be paid to reasonable planning of the training process, making full use of the advantages of network resources, establishing interactive platforms and feedback mechanisms, and other aspects. Through the integration of these strategies, the effectiveness and satisfaction of enterprise training can be improved, and the continuous optimization and development of enterprise training can be promoted.

References

[1] Liu Yang. Research on the Connection between Online and Offline Training in Enterprises under the Internet Background [J]. Road to Success, 2021:3.

[2] Hong Chengwen, Niu Xinxin. Enterprise Training from the Perspective of the Internet: Benefits, Challenges, and Countermeasures [J]. Continuing Education Research, 2020:47-50.

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Exploration of Excellent Traditional Education and Psychological Quality Training for College Students in the Information Age

Shuang Mou*

Yulin Normal University, Yulin, Guangxi 537000, China

Abstract: This study explores the key issues in the education of college students in the information age, focusing on how to integrate excellent traditional education and psychological quality training to cultivate college students with comprehensive qualities. The article analyzes the characteristics of college students in the information age, including the widespread use of technology, the importance of social media, and the challenges of information overload. It emphasizes the importance of the transmission of values of traditional education to college students, especially in the face of social change. The article also describes the need for psychological quality training and explores the development of emotional management, decision-making and stress tolerance. The article delves into the innovation of educational methods, the application of traditional values in the age of information technology, and the analysis of successful cases in order to demonstrate the practical effects of integrating excellent traditional education and psychological quality training. This comprehensive study aims to guide educational institutions and policy makers to meet the needs of college students in the information age better and to train them to become future leaders and innovators in society.

Keywords: information age; excellent traditional education; psychological quality training

Introduction

In the age of information, college students' education is facing unprecedented challenges and opportunities. The popularization of technology, the development of social media and information overload have all had a profound impact on college students' learning and life. The development of the information age has greatly increased the difficulty of traditional education and psychological quality training for college students. The purpose of this paper is to explore how to integrate excellent traditional education and psychological quality training in order to cultivate college students with comprehensive literacy. Through in-depth study of the characteristics of college students in the information age, the application of traditional values in the new era, and the implementation strategy of psychological quality training, we can provide useful insights for the education sector and policy makers, and help college students adapt to and cope with today's complex and changing social environment more successfully.

1.Characteristics of College Students in the Information Age

College students in the information age have unique characteristics that play a key role in shaping the way they learn and live. First, the widespread availability of technology has allowed them to grow into digital natives, skilled in the use of digital tools and media, but also posing the risk of information overload. Secondly, social media plays an important role in their social lives, shaping the way they interact socially and express themselves. It is important to note that social media may also lead to addiction and privacy issues [1]. Finally, college students in the information age often face distraction challenges because they often need to process multiple sources of information at the same time, which may affect their learning and concentration. Knowing and understanding these characteristics of college students in the information age is crucial for developing appropriate educational strategies. Educators need to make creative use of technology to provide engaging learning experiences while focusing on the development of psychological quality training to help college students meet the challenges of the information age and succeed.

2.The value of traditional education

The value of traditional education is still of great significance in the information age. First of all, the knowledge transfer and in-depth study of disciplines emphasized by traditional education still provide a solid foundation for the cultivation of students' thinking ability and

problem solving ability. Secondly, traditional education emphasizes the transmission of moral and ethical values, which helps to cultivate students' moral concepts, sense of social responsibility and civic literacy. Finally, traditional education emphasizes the cultivation of comprehensive qualities, including critical thinking, creative thinking and communication skills, which are particularly important in the information age. The values of cultural traditions, humanities, sciences and arts emphasized in traditional education help to cultivate students' humanistic spirit and global vision. The value of traditional education remains significant in the age of information because it provides students with an important foundation of comprehensive qualities, ethics, thinking skills, and cultural background, enabling them to adapt to and participate in today's complex and ever-changing social environment [2]. Therefore, traditional education should be combined with modern educational methods in order to cultivate college students with comprehensive literacy in the information age.

3.The necessity of psychological quality training

Psychological quality training is especially necessary in the education of college students in the information age. First of all, psychological quality training helps to cultivate students' emotional intelligence and emotion management ability. This is crucial for them to cope with the increasingly complex social pressures and frustrations. Secondly, decision-making is the key to students' future success in life and career, and psychological quality training can improve their decision-making ability and problem-solving skills. Finally, psychological quality training also improves students' interpersonal and communication skills, which are crucial for building successful professional and social relationships. Not only does psychological quality training help students succeed in the academic field, it also prepares them for overall growth and future careers. This type of training should be given more attention and implemented in the education system to ensure that students are resilient, adaptable, and well-rounded in the information age.

4.Integration of Excellent Traditional Education for College Students in the Information Age

The integration of excellent traditional education for college students in the information age is designed to produce students with traditional values and modern skills. This includes the innovation of educational methods to adapt to the needs of digital learning and the inheritance of traditional values to cultivate moral values and a sense of social responsibility. This integration helps to improve the resilience of students and help them form creative thinking, which is of positive significance for students to succeed in the information age.

4.1 Innovation of Education Methods

The innovation of education methods is crucial in the education of college students in the information age. Emerging technologies such as online learning platforms, virtual reality and artificial intelligence can provide diverse learning experiences, making it easier for students to absorb knowledge and develop skills. In addition, project-based learning and interdisciplinary education can stimulate students' creative thinking and problem-solving abilities and develop their teamwork skills. Educators should actively adopt these innovative approaches to meet the needs of the information age, help students cope with increasingly complex social challenges, and develop future leaders with an innovative spirit and comprehensive literacy.

5. Implementation of psychological quality training

The implementation of psychological quality training is the key, and it includes well-designed curricula such as training in emotion management and stress resilience skills, the role of educational institutions in providing support and resources, and methods to stimulate student motivation and participation. The ultimate educational model of psychological quality training for college students should be the integration of traditional cultural education and psychological quality training, through which the development of higher education can be further promoted. Through systematic psychological quality training, students can improve their emotional intelligence, decision-making ability and stress-resistance, so that they can adapt to the challenges of the information age and build up healthier psychological qualities to cope with all kinds of stresses in academics and life more successfully.

5.1 Design of the psychological quality training course

The design of the psychological quality training course is crucial, and it should focus on cultivating students' key psychological qual-

ities such as emotional management, decision making and problem solving. First, the course should include the cultivation of emotional intelligence to help students understand and manage their emotions better and improve their emotional intelligence. Secondly, the curriculum should emphasize decision-making skills to develop students' ability to think rationally, weigh the pros and cons, and make wise choices when faced with choices. Finally, the curriculum should also focus on problem solving and frustration coping skills to equip students with the ability to solve complex problems and overcome frustrations.

Conclusion

In the age of information the integration of excellent traditional education and psychological quality training is designed to cultivate well-rounded college students who are equipped with traditional values, innovation and mental toughness. With the innovation of educational methods, the inheritance of traditional values and the implementation of psychological quality training, we provide students with a broader space for growth. The active efforts of educational institutions and educators can help students shape a healthier, more resilient and responsible personality so that they can give full play to their potential in the information age and become leaders and innovators in the future society. The challenges and opportunities of the Information Age go hand in hand, and we aim to ensure that every student can flourish in this era of change.

References

[1] LIU Ruilian,XU Xiaoxue. Research on the Acceptance Mechanism and Psychological Counseling of Ideological and Political Education for College Students[J]. Journal of Heihe College,2023,14(08):38-41.

[2] ZHANG Weiwei,WANG Yang. Methods and paths of improving the quality and efficiency of ideological and political work in colleges and universities empowered by big data[J]. Modern Business Industry,2023,44(18):93-95.

[3] Xu Chunlong. Ideological and political education of college students into the path of logistics management in colleges and universities[J]. Journal of Jiamusi Vocational College,2023,39(08):139-141.

[4] Li Jiaqing. Analysis of Ideological and Political Education of College Students in Higher Education Student Community[J]. Modern Vocational Education,2023(21):125-128.

[5] Fan Xiaoxue. Challenges and Optimization Strategies in Ideological and Political Education of College Students in the Information Age[J]. Food Research and Development,2023,44(02):237.

About the author:

Mou Shuang, born in February 1990, female, from Yulin, Guangxi, PhD candidate, lecturer. Her research interests include ideological and political education, Japanese Society and culture.

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Research on the Application of Augmented Reality Technology in Secondary vocational School Tourism Teaching

Chuanjie Qiu, Jiayu Hou

Graduate School of Master of Education, Shenyang Normal University, Shenyang 110000, China

Abstract: With the great importance attached to tourism by the state, the development of the tourism industry has shown a rapidly growing trend in the demand for professional talents. However, some secondary vocational schools in the process of cultivating tourism professionals, there are still some obsolete cognition and concepts, which leads to the teaching process is still using the original traditional teaching methods. In recent years, with the continuous development of information technology, augmented reality technology has entered the field of education, this paper describes the application of augmented reality technology in secondary tourism teaching research.

Keywords: augmented reality technology; secondary tourism; teaching and learning

Introduction

With the continuous improvement of science and technology and the continuous integration of technology, "Internet + Education" continues to innovate and change, bringing about new changes in the landscape. The emergence of augmented reality technology has brought new experiences and influences to the life, work and learning of the public, further expanding resources and enhancing cognitive experiences. Strengthening the application of augmented reality technology has important practical significance. The combination of augmented reality technology and secondary tourism teaching helps to promote the reform of vocational education teaching more effectively, thus making it play a better effect and role.

1.Current situation of secondary vocational school tourism teaching

1.1 Outdated teaching concepts

Tourism is a practice-focused field, and there are significant differences between the secondary vocational tourism curriculum and the subject curricula of ordinary high schools. In the teaching of secondary vocational tourism, in addition to the need for students to learn theoretical knowledge, it is more important to focus on the cultivation of students' practical skills. However, due to the influence of traditional teaching concepts, teachers tend to overemphasize the accumulation of theoretical knowledge and neglect the training of professional skills, which makes the students disconnected from the theoretical knowledge and practical skills, and adversely affects their future employment.[1]

1.2 Outdated teaching environment

In the current education model, information technology has given new possibilities to the teaching method. However, some secondary vocational colleges and universities located in remote areas or lagging behind in development, due to environmental conditions and economic and financial constraints, have difficulty in realizing the updating of informatization teaching equipment, and still maintain the traditional chalk and blackboard teaching mode. Even if some schools are equipped with computer equipment, the lack of necessary teaching software has limited the teaching methods of teachers to the use of outdated PowerPoint presentations. Without the aid of network resources and teaching resource banks, the informatization potential of teaching has not been fully released, and the effectiveness of teaching has not been significantly improved, which to a certain extent restricts the effectiveness and efficiency of teaching and learning, and is gradually becoming a bottleneck in the modernization of education.

1.3 Lack of teaching resources

At present, more and more educational institutions have noticed the importance of computer and network-led information-based teach-

ing, and the gradual popularization of information-based teaching has also led to an increasing demand for multimedia teaching materials that help teaching. Now you can find a lot of teaching software on the network, many of which can not be well in line with the characteristics of the secondary school, can be truly applicable to help teachers teach the multimedia resources are relatively few, so that the auxiliary teaching materials in the actual teaching and can not provide great help.

2. Concepts, Characteristics and Principles of Augmented Reality

2.1 The concept of augmented reality

Augmented reality technology is a comprehensive technology further upgraded and developed on the basis of virtual reality technology. It mainly integrates computer vision, image processing, graphics, multi-sensor technology and display technology. It utilizes computer-generated virtual information to fuse with the real environment observed by the user, thus superimposing the real environment and virtual objects in the same picture surface or space to enhance the user's perception and perceptual experience. It is not an independent technology, and is closely related to a variety of real-life information so as to better mine real-life information.[2]

2.2 Characteristics of augmented reality technology

2.2.1 Real-time interaction

Augmented reality technology can provide real-time data feedback and information interaction, and users can instantly adjust the interaction between virtual elements and the real environment according to their needs.

2.2.2 Mapping Real and Virtual Worlds

Augmented reality technology can map virtual information into the real world, so that the virtual object and the real environment can appear in the user's field of vision at the same time, forming a strong sense of immersion and realism.

2.2.3 Three-dimensional perception

With AR technology, virtual information can be presented in the real world in three dimensions, enhancing the sense of realism and spatiality and providing a more three-dimensional and immersive experience.

2.3 Principles of augmented reality

The goal of augmented reality is to try to visualize virtual information in the original (real) world. As shown in Figure 1, a smartphone can estimate lighting by estimating the current lighting conditions, while motion tracking allows the smartphone to understand and track its position and allows objects to rotate, zoom in and out.[3]

2.3.1 Smartphone cameras

2.3.2 Capture module

2.3.3 Tracking module

2.3.4 Rendering Module

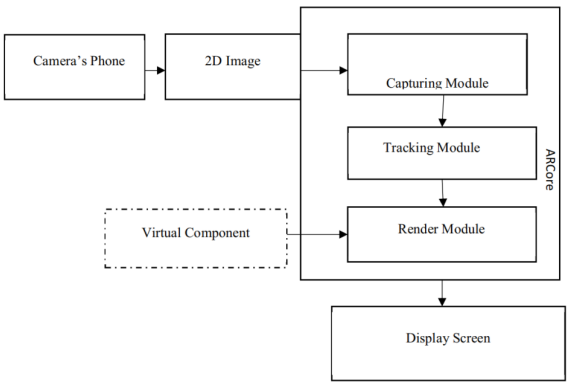

Figure 1: AR System Architecture Block Diagram

3.Benefits of Augmented Reality Technology for Secondary vocational School Tourism Teaching

3.1 Unique sights can be observed through AR technology

Augmented reality technology allows students to observe sights or objects that are normally difficult to see, such as ancient ruins and complex architectural constructions. For some dangerous or hard-to-reach environments, such as volcanoes, deep oceans, deserts, etc., students can also visit them virtually through AR technology.

3.2 Improved student understanding of content and engagement

Teachers use AR technology to create three-dimensional models of tourist attractions, simulate real tourism management and service scenarios, such as hotel layout, ticket sales, tourist navigation, etc., so that students can actually operate in the virtual environment, and transform "dead" knowledge into "live" skills. This will transform "dead" knowledge into "living" skills and further strengthen students' professional knowledge while enhancing their interest. Augmented reality (AR) technology creates a dynamic and interactive learning environment for secondary vocational tourism teaching, enabling students to observe and understand the characteristics and historical background of tourist attractions from multiple perspectives and in an all-round way, which greatly enhances students' learning experience and learning effect.

3.3 Ability to break the limits of time and space

With AR teaching, we are able to create virtual learning spaces that release the time and place constraints of learning and provide students with dynamic learning resources that make them feel as if they are there. With this technology, anytime, anywhere, students have access to popular tourist attractions or locations they want to learn about. They can visit places of interest around the world through AR technology without leaving the classroom. Teachers can use AR technology to create a variety of real travel environments and scenes to make classroom teaching more vivid and interesting.

4. Reform Paths and Suggestions for Secondary vocational Tourism Teaching

4.1 Changing traditional concepts of teaching

Teachers should change from the traditional teaching leader to the guide and learner. Under the traditional teaching concept, secondary vocational tourism teaching overly emphasizes the leading role of the teacher, but ignores the subjective experience of the students, and pays insufficient attention to the students' interest, desire to learn, and psychological receptivity, which leads to unclear understanding and cognition of the students' tourism profession. To address this problem, teachers need to pay more attention to the individual differences of students in classroom teaching, and appropriately implement the teaching concept of "student-centered and teacher-led".

4.2 Renewal of teaching methods

In the traditional classroom teaching environment, teachers usually adopt the way of explanation to teach, which is helpful for the learning and understanding of some theoretical knowledge. However, tourism is a discipline that requires high practical ability, and traditional teaching methods may not be able to meet the requirements of the discipline, and teachers need to innovate their teaching methods. For example, when teaching the course of Tourism Policies and Regulations, teachers can use actual cases to trigger students' thinking and discussion, so as to deepen their understanding of the knowledge; when teaching China Tourism Geography, through the AR technology, the geomorphological terrain of various tourist attractions is visualized to students, so as to let them understand and remember what they have learned in a more profound way.

4.3 Enhancement of teachers' pedagogical capacity and competence

In order to enhance their teaching ability and level, teachers need to remain self-driven and continue to learn and update their knowledge in order to master and apply new teaching technologies, such as AR, VR, etc., to provide students with diversified learning experiences. While adapting to the latest developments in the tourism industry, teachers need to integrate knowledge of educational psychology and teaching methodology; create a positive classroom atmosphere and guide efficient teacher-student interactions; learn new teaching concepts and technologies on a regular basis, and find and correct deficiencies in teaching through self-reflection and self-assessment in order to promote self-improvement.

5. Conclusion

In this era of rapid development of information technology, augmented reality technology not only provides a technological platform or tool for teachers and students also plays an advancing role in classroom teaching, which is of great significance to the future development of schools and the concept of smart classroom reform. The new generation of teachers need to fully understand and grasp the development of information technology, adapt and use these technologies to optimize teaching in order to improve the quality of teaching and students' learning efficiency.

References

[1] Lu Chunyu. On the teaching reform path of middle school tourism specialty[J]. Modern economic information,2019(12):416+418.

[2]Liyuan L. The application of virtual reality and augmented reality technology in the field of Education[C]//Journal of Physics: Conference Series. IOP Publishing, 2020, 1684(1): 012109.

[3]Abd Al-hassan H A, Suad J H, Ali H H. Augmented reality technology in education[C]//IOP Conference Series: Materials Science and Engineering. Publishing, 2020, 928(3): 032065.

Research on the Integration and Development of Rural Ecological Civilization Education Paths under the Background of Rural Revitalization

——Taking Heilongjiang Province as an Example

Sen Gao, Simin Li, Wei Su*

School of Marxism, Heilongjiang Bayi Agricultural Reclamation University, Daqing 163319, China.

Abstract: Starting from the relationship between rural revitalization and ecological civilization construction, this article analyzes the role of education in rural revitalization and ecological civilization construction, as well as the practical problems it faces. It proposes countermeasures and suggestions to strengthen ecological civilization education in rural revitalization, and elaborates on education system and mechanism reform, education content innovation, education resource allocation, and teacher team construction, To provide useful reference and support for promoting rural revitalization and ecological civilization construction.

Keywords: Rural revitalization; Ecological civilization; education Rural economy; social development

The ecological civilization education in Heilongjiang Province is still in its primary stage, with a weak foundation in environmental education, a lack of educational forms and means, and poor channels for disseminating environmental knowledge. In terms of research on ecological civilization education, there is still no theoretical achievement that fully focuses on the specific situation of Heilongjiang Province to conduct nationwide research on ecological civilization education. In this context, education is one of the important means to promote rural revitalization and ecological civilization construction. Through education, people's environmental awareness and rural cultural quality can be improved, rural industrial upgrading and development can be promoted, and comprehensive rural revitalization can be achieved.

1.We will promote rural revitalization on "green"

Political strategy proposed, theoretical support for rural revitalization.

Since the 19th National Congress of the Communist Party of China, the proposal of the rural revitalization strategy has injected strong impetus into the solution of the "three rural" issues. Under the environmental protection concept of "green water and mountains are golden mountains and silver mountains", the market share of green development in rural revitalization will gradually increase in the future. The green development concept will become the basic concept leading rural revitalization towards the path of socialism with Chinese characteristics, promoting development with green, and revitalizing rural areas with green, It will become the basic basis for implementing rural revitalization. At the same time, rural revitalization and ecological civilization construction are major issues currently facing China, and the relationship between them is very close.

Improve ecology and vigorously promote ecological civilization education.

Rural revitalization needs to focus on ecological civilization education research, promote green development in rural areas, and improve the quality and efficiency of agricultural supply. Rural revitalization is an important issue currently, involving various issues such as modernization of agriculture and rural areas, transformation and upgrading of rural economy, modernization of rural governance, and inheritance and promotion of rural culture. The concept of green development is of great significance in promoting rural revitalization. On the one hand, the concept of green development has promoted the upgrading and transformation of agricultural production methods. The traditional agricultural production methods excessively rely on fertilizers, pesticides, and a large amount of water, leading to problems such as decreased land fertility and environmental pollution. Adopting the concept of green development and promoting new production methods such as or-

ganic agriculture and precision agriculture can reduce the use of pesticides and fertilizers, improve soil quality, improve the ecological environment, and also improve the quality and efficiency of rural industries. On the other hand, the concept of green development also helps to promote rural environmental protection.

2.Based on “education”, establish a solid foundation for revitalization

2.1 The content of rural ecological civilization education covers.

With the increasing call for green water and green mountains and sustainable development, rural revitalization and ecological civilization construction have become important issues in today’s society. In order to achieve this goal, rural ecological civilization education has played a crucial role. Rural ecological civilization education includes training on ecological civilization concepts and technologies for rural residents, rural schools, rural enterprises, and government departments to enhance their awareness and understanding of environmental protection and sustainable development.

2.2 Implementation methods for rural ecological civilization education.

Rural ecological civilization education aims to transmit the concept of ecological civilization and ecological protection knowledge through educational means, cultivate and guide rural residents to develop a lifestyle and work style that vigorously promotes sustainable development. In terms of ecological civilization education research, attention should be paid to carrying out environmental awareness education for farmers, popularizing ecological civilization knowledge, and promoting environmental protection laws and regulations, so that farmers can deeply understand the importance of environmental protection and consciously take measures to protect the environment. In terms of ecological civilization education content, the education content includes knowledge on afforestation, ecological protection, biodiversity, green energy, as well as education on civic ethics, respect for nature, and garbage classification.

3.”Practice” for the reality, to support the rural industry

3.1 Conception of rural revitalization production mode.

Only theoretical research and oral preaching can promote rural revitalization through practical work, and support for rural industries is the appropriate behavior. In response to the needs of rural revitalization, it is necessary to gradually promote the adjustment of agricultural production methods, strengthen agricultural technological innovation, improve agricultural production efficiency and quality, reduce the impact of agricultural production on the environment, promote ecological agriculture construction, and establish a rural development model that prioritizes ecology and green development. One important way to promote the revitalization of rural industries through green development is to expand new industries, and at the same time, innovate and transform on the basis of old industries, accompanied by the improvement of technology and management level, to drive the transformation and upgrading of rural industries. The combination of old and new is not only a traditional farming industry, but also a combination of emerging technologies such as culture, tourism, and the internet to carry out transformation. With the improvement of technology and management level, it will drive the transformation and upgrading of rural industries.

3.2 Field pilot projects for rural revitalization within the province.

To promote the green and healthy development of rural revitalization, it is necessary to guide farmers to change their mindset, through publicity, education, training, and other methods, to make farmers aware of the importance and impact of the current development of rural industries, encourage them to actively participate in the process of rural industry development, and recognize the importance of rural industries. In order to encourage Heilongjiang Province to attach importance to and invest in ecological civilization education, the State Environmental Protection Administration highly recognizes and supports our province’s work on universal environmental education.

4.Heart “is Yun Fu, looking forward to the future of rural areas

4.1 Theoretical support for promoting rural development.

To implement the strategy of rural revitalization, we must adhere to the green development path of win-win ecological civilization construction and economic and social development. We must adhere to the path of diversified, comprehensive, and sustainable development, and pay attention to the interests of farmers, truly keeping them in mind. In the process of rural revitalization, the implementation of environmental protection concepts and the strengthening of education on ecological civilization will promote the comprehensive construction and sustainable development of rural areas. This will enable farmers to understand the meaning of ecological civilization values in the process of building ecological villages, stimulate their enthusiasm for learning and construction, actively promote the construction of ecological civilization, build a good rural ecological environment, promote harmonious development between humans and nature, and build a beautiful Longjiang River.

4.2 The practical need to build a beautiful countryside.

The future of rural areas is beautiful and full of beautiful prospects. With the acceleration of industrialization and urbanization, more and more people will gradually realize the negative impact of cities, while rural areas have become ideal places for people to pursue natural, healthy, and livable lives. With the rise of rural tourism, agricultural ecology, cultural industries, etc., the beauty of rural areas can be fully demonstrated, and people can have a deeper understanding of the value and charm of rural areas. At the same time, it also brings new development opportunities to rural areas. Rural areas are gradually achieving leapfrog development in areas such as industrial upgrading, technological innovation, and talent introduction. Bringing more economic benefits to rural areas, while also creating more employment and entrepreneurial opportunities for farmers, further promoting rural prosperity and prosperity.

4.3 The inevitable choice to lead rural revitalization.

The above indicates that the development strategy of rural revitalization and ecological civilization education will undoubtedly inject a powerful medicine into China’s modern ecological civilization construction. The rural construction in Longjiang has a large workload, strong timeliness, and a wide range of aspects, and everyone feels the mission and responsibility that are pressing on their shoulders. It is these cutest people who silently promote the construction of beautiful rural areas to continuously improve efficiency and growth levels, reaching new heights. Leading rural revitalization with green development is an inevitable choice to follow the path of socialist rural revitalization with Chinese characteristics. Today, we are adhering to the concept of green development and the belief of “fearlessness and hard work”, creating miracles in the history of human development.

References

[1]Rural revitalization calls for rural education [J] Hou Huaiyin; Former Zuoye. Journal of East China Normal University (Education Science Edition), 2022 (12).

[2]Revitalizing rural education requires multiple parties to work together Wang Xu; Pang Yong. Chinese Journal of Education, 2023 (01).

[3]Adhere to the principle of great love and do practical things for rural education [N] Yang Manyi. Pingliang Daily, March 31, 2023.

[4]Accelerate the development of rural education and consolidate the foundation of rural revitalization [N] Chen Minghong; Liang Ailing; Zhou Hui. Xijiang Daily, September 10th, 2020.

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Research on and Application of the Construction of Internship Practice Curriculum for Applied Chemistry Specialties with Vocational Education Characteristics

DonghuaHu, Zhongyao Du, Yang Sun*

Yunnan Normal University，Kunming 650500, China

Abstract: vocational education is an important part of the national education system and human resources development. Vocational education is an important part of the national education system and human resources development. It is an important way for the majority of young people to open the door to success and fulfillment, and shoulders the important responsibility of cultivating diversified talents, passing on technical skills, and promoting employment and entrepreneurship. It is important to attach great importance to and accelerate the development of vocational education. However, at present, some vocational education schools are influenced by the traditional education model, and in the teaching process, they tend to focus on theoretical indoctrination, which leads to students' difficulties in meeting the needs of jobs after graduation, which is obviously contrary to the purpose of the state's establishment of vocational education. Therefore, it is extremely important to construct the internship practice course construction of applied chemistry specialty with vocational education characteristics. This thesis will try to analyze the ways and means of constructing the internship practice courses of applied chemistry majors, and I hope it has certain reference value.

Keywords：Vocational education; Applied chemistry; Curriculum development; Construction research; Construction practice

1 Current Status of Practical Teaching of Applied Chemistry

Practice without theoretical guidance is blind practice, and theory without practical verification is empty theory. If you want to ensure the teaching quality of applied chemistry, it is necessary to take the road of combining theory and practice, to build a unity of applied chemistry professional learning, so that students learn in the classroom, can be abstract and complex concepts into an important productivity that can improve daily life. However, at present, in this regard, China's teaching still exists obvious deficiencies. Its main performance is as follows: ① practice is biased towards verification. Nowadays, some teachers carry out practical teaching, the content of which is not related to the students' specialties, favoring verification, resulting in the quality of teaching falls far short of expectations. ② single form of practical teaching: some schools of applied chemistry seriously lack of seminars to train students to analyze and solve problems, and even if there are seminars, mainly to instill the main, not conducive to the development of students' thinking, resulting in the quality of teaching greatly reduced. Neglect of practical activities outside the school: Although the state has repeatedly emphasized the importance of school-enterprise cooperation, but at present there are still some vocational schools, ignoring the practical activities outside the school, and did not carry out effective cooperation with the relevant enterprises, resulting in the lack of systematic knowledge and understanding of the students of the first line of applied chemistry, after graduation, it is difficult to complete the transition from school students to professionals in a timely manner. Lack of equipment and instruments. As we all know, when practicing applied chemistry, it is indispensable to have all kinds of equipment and instruments, but some vocational teaching schools do not have sound facilities, and even some instruments are used for too long, resulting in frequent failures.

2 Principles to follow when teaching applied chemistry practice

First, the principle of combining practical guidance and enlightened thinking: teachers should grasp the basic features of practice-based, organization, the use of a variety of practical activities, play the role of practice on the students' understanding, emotion, will, behavior, and attitudes, methods of motivation, guidance. In this process, teachers should first teach students how to observe, and timely remind students what to observe, how to observe, etc., and will lead students' observation to depth. At the same time, to be in the process of practice, should abandon the traditional education model based on indoctrination, timely interspersed with explanations, and to the students to ask inspiring

questions, so that students actively think, exercise their thinking ability, to lay a strong foundation for their subsequent work.

Second, the principle of comprehensive development: the principle of comprehensive development is also known as the principle of education. Because education in a broad sense includes three aspects of knowledge and skills education, intellectual development and quality of thought education, and "comprehensive development" includes all three aspects. In the process of practical teaching, teachers of applied chemistry should actively implement the principle of comprehensive development, and resolutely oppose the ideas and practices of teaching without educating, neglecting double-basic teaching, neglecting the cultivation of intelligence, neglecting ideological and political education and the cultivation of good quality.

Third, the principle of sociality. The principle of sociality refers to the close connection between social life and academic education, and guiding students to use what they have learned to solve practical problems through the introduction of practical problems in social life. Specifically, in the process of practical teaching, teachers can introduce some social problems, such as "protecting the environment", "conserving resources" and so on, and guide students to use chemical knowledge to analyze and solve these problems. This will not only help students to better grasp chemical knowledge, but also raise their awareness of environmental protection and make them realize their responsibilities and obligations as citizens.

3 Practical Teaching Strategies for Applied Chemistry Majors

3.1 Create high-level applied teachers

The teaching level of vocational applied chemistry majors is closely related to the ability of teachers. Therefore, each vocational school should be committed to creating high-level, high-quality applied chemistry teachers, the specific ways to create are as follows:

First, vocational schools strengthen the operational skills of teachers, improve their "dual-teacher quality", and build a high-level teaching team so that they can better serve students. For example, school leaders can hire experienced external experts, or practitioners in the applied chemistry industry (such as chemical industry practitioners and pharmaceutical industry practitioners), combined with their own work experience, to provide effective training services for the school teachers and teachers. The school should set up a practical training assessment system to link the training results with the actual interests of the teachers, to improve the enthusiasm and initiative of the teachers to participate in the training, so that the teachers can change from the traditional training perspective of "want me to train" to "I want to train". At the same time, the school can also implement the "top job" teacher training method, the so-called "fixed job" refers to the short and medium-term professional training, cooperative research and development, and posting and other ways, so that teachers specializing in applied chemistry to go to the front line of the work, so as to strengthen the application of chemistry. The so-called "fixed-term work" means that through short-term and medium-term professional training, cooperative research and development, attachment and other ways, the teachers of applied chemistry can go to the front line of the work, so as to strengthen the "dual-teacher quality" of the teachers of applied chemistry, improve their practical skills, so as to make their understanding of the specialty, which can always be located in the forefront of the times, and to provide strong help for the subsequent practice of teaching.

3.2 Reform practical teaching method

In order to ensure the quality of practical teaching, teachers should reform the existing practical teaching methods and promote the training mechanism of "industry-university-research" combination, which can make the practical teaching mode of "Applied Chemistry" get further development. For example, before the internship, some tutors can learn more about the problems encountered by enterprises in practical work and the types of talents they need, write investigation reports, and incorporate them into the internship guidelines. When the trainees are practicing, they can focus on the contents of these guides, so as to ensure that they meet the actual needs of the enterprises [7]. At the same time, teachers can also combine the practical activities of graduation design with industry-university research, in which teachers can take the actual needs of the enterprise as the entry point, and after refining the project refinement, break it down into several modules so that it becomes the theme of graduation design. Through this type of topic can let students in the learning process, all-round, multi-dimensional

experience of their own value, and at the same time, can also deeply appreciate their own sense of achievement after completing a task, to enhance the interest in future work. If conditions permit, vocational education schools can arrange for graduates to go to the relevant enterprises to carry out graduation design. Through this way of learning, not only can effectively solve the practical problems in the enterprise, at the same time, also can use the students to adapt to the needs of the enterprise, realize the win-win situation between the enterprise and the students

Conclusion

In conclusion, internships and practical courses are an indispensable and important part of applied chemistry majors. Leaders and teachers of vocational schools should read relevant academic theories and learn from advanced experiences at home and abroad, so as to improve their knowledge and understanding of internship and practical courses. Provide students with more systematic and perfect teaching services, so that after graduation, they can adapt to the working environment in the first time, paving the way for their subsequent development.

References

[1] Zhang Yaping, Qiao Jianfen, Zhao Lingjun, et al. Exploration and Practice of Teaching the “Double Mentor” Hybrid Course in School Enterprise under the Background of Modern Apprenticeship System: Taking the Course of Coal Chemistry as an Example [J]. Yunnan Chemical Industry, 2022,49 (03): 125-127.

[2] Yang Hongwei, Hou Chunjuan, Wang Wanqing, et al. Innovation and Practice of Ideological and Political Education in Practical Courses - Taking the Course of “Chemical Practice and Life” as an Example [J]. Anhui Chemical Industry, 2021,47 (06): 161-164.

[3] Xiang Dingding. Exploration and Practice of Ideological and Political Education in Chemistry Curriculum Development - Taking the Course of “Organic Chemistry Practice” as an Example [J]. Guangdong Chemical Industry, 2021,48 (07): 192-193.

[4] Chang Guiying, Xing Li, Ye Fei, et al. Construction and Practice of a Biochemical Course Ideological and Political Case Library: A Case Study of Jilin University of Agricultural Science and Technology [J]. Journal of Jilin University of Agricultural Science and Technology, 2021,30 (02): 71-74.

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Strategies for Cultivating Mathematical Core Literacy in Large Unit Teaching

Zheng Zhang

School of Mathematics and Computer Science, Ningxia Normal University, Guyuan 756000, China.

Abstract: With the continuous promotion of education reform in China and the continuous updating of high school mathematics teaching, core literacy has become a new concept in education and teaching. Under the large unit teaching mode, how to cultivate students' core literacy has become an important issue in the current practice of high school mathematics education. In the process of cultivating mathematical core literacy under the large unit teaching mode, this article proposes five effective strategies: cultivating students' exploratory learning ability; Create a positive and active classroom atmosphere; Improve students' autonomous learning ability; Emphasize the integration of mathematical concepts in learning; Reflect the intersection of mathematics teaching.

Keywords: Large unit teaching core literacy

1. Introduction

In recent years, high school mathematics education in China has been continuously updated and improved in teaching models, teaching content, and training objectives. Among them, core literacy, as a new educational concept, has received widespread attention and application. Under the large unit teaching mode, how to cultivate students' core literacy and improve the quality of mathematics education has become an urgent problem to be solved in the current practice of high school mathematics education. In response to the development and existing problems of current mathematics education, this article first sorts out the connotation of mathematical core literacy and explores that large unit teaching is an effective way to cultivate mathematical core literacy. Based on this, this article proposes five effective strategies for cultivating mathematical core literacy, including cultivating students' exploratory learning ability, creating a positive and active classroom atmosphere, improving students' autonomous learning ability Emphasize the integration of mathematical concepts in learning and reflect the intersection of mathematical teaching. These five strategies require teachers to provide comprehensive guidance and guidance to students, help them overcome difficulties, and strengthen their mastery and application of mathematical concepts and methods.

2. The Connotation of Mathematical Core Literacy

Mathematics core literacy is defined as the basic abilities, ways of thinking, and values that students must master in the process of mathematics learning. This includes mathematical abstraction, logical reasoning, mathematical modeling, mathematical operations, intuitive imagination, and data analysis. The educational significance of mathematical core literacy lies in its ability to help students understand and master mathematical knowledge and methods, improve their mathematical learning and application level, cultivate their exploratory learning and problem-solving abilities, and thus lay a solid mathematical foundation for their future development. At the same time, mathematical core literacy is also an important part of building quality education, promoting students' comprehensive development by cultivating their mathematical core literacy.

3.The Application of Three Major Unit Teaching Models in the Cultivation of Mathematical Core Literacy

3.1 Basic concepts of large unit teaching mode

The large unit teaching mode is a teaching mode that focuses on the overall content of the course. In this mode, teachers integrate all the knowledge points and skills of a certain unit for teaching, and students need to continuously explore, discover, solve problems, and apply the learned knowledge throughout the entire learning process. This teaching model emphasizes the relevance and integrity of course content, which can help students better understand and apply the knowledge they have learned, and cultivate their problem-solving and comprehen-

sive application abilities. This teaching model can also cultivate students' self-learning ability and teamwork spirit, laying a solid foundation for their future development. In mathematics teaching, the large unit teaching model has also been widely applied, which can help students better understand mathematical knowledge, improve mathematical learning performance and core literacy.

3.2 The relationship between the large unit teaching mode and the core mathematical literacy

In the large unit teaching mode, the cultivation of mathematical core literacy is closely related to it. Traditional teaching models often focus on explaining and practicing knowledge points, emphasizing students' mastery of the knowledge points and question types in textbooks. In the large unit teaching mode, teachers will combine several relevant knowledge points into a large unit, and improve students' understanding and mastery of mathematical knowledge through exploration, practice, and other learning methods, thereby cultivating students' core mathematical literacy.

The large unit teaching model not only focuses on students' knowledge learning, but also emphasizes the cultivation of their thinking abilities. In large unit learning, students need to exert exploratory thinking, gradually master mathematical thinking in the process of solving practical problems, establish their own mathematical models and problem-solving methods, and guide students to discover the connections and independent characteristics between knowledge points. This way of thinking not only improves students' mathematical literacy, but also cultivates their scientific literacy, enabling them to better explore and research scientific problems.

In short, there is a close connection between the large unit teaching model and the core mathematical literacy. The large unit teaching mode provides students with a broader learning space and more free learning methods, which can better cultivate students' core mathematical literacy. The application of this teaching model will provide richer ideas and means for the development of high school mathematics education.

3.3 Advantages of the Large Unit Teaching Model in Cultivating Mathematical Core Literacy

The advantages of the large unit teaching model in cultivating core mathematical literacy are mainly manifested in the following aspects:

1. Strong comprehensiveness. The large unit teaching model emphasizes the integration and connection of knowledge, which can organically combine different themes and concepts, promoting students' comprehensive and in-depth understanding of mathematical knowledge.

2. It has practical applicability. The large unit teaching model covers courses within a certain time and scope, closely integrating mathematical knowledge with practical applications, improving students' ability to solve practical problems and expanding mathematical thinking.

3. Shift of teaching focus. Large unit teaching shifts the focus of teachers' teaching from imparting knowledge to cultivating students' thinking patterns, emotional attitudes, and cognitive patterns, which can comprehensively enhance students' growth and development.

4. Strong adaptability. The large unit teaching model adapts to different educational environments and needs, enabling teachers to better respond to the challenges of students' learning difficulties, different interests, and subject characteristics, and promoting the continuous development of mathematics education.

4.Strategies for Cultivating Mathematical Core Literacy in Four Major Unit Teaching

4.1 Cultivating students' exploratory learning ability

In large unit teaching, cultivating students' exploratory learning ability is very important. This requires teachers to guide students to actively think, identify problems, and conduct independent exploration during the learning process. Specifically, on the one hand, it is possible to cultivate students' problem awareness and independent thinking ability by organizing students to discuss and research problems; On the other hand, students can be guided to engage in activities such as experiments, simulations, and explorations to cultivate their exploratory learning abilities. Meanwhile, in this process, teachers should focus on guiding and cultivating students' learning methods to improve their

learning quality and efficiency. Only in this way can students truly achieve deep learning and improve their core mathematical literacy.

4.2 Creating a positive and active classroom atmosphere

Creating a positive and active classroom atmosphere is an important strategy for cultivating students' core mathematical literacy in large unit teaching. Firstly, teachers should take students as the main body, fully leverage their initiative and enthusiasm, and encourage students to express their opinions and exchange ideas; Secondly, teachers can adopt various teaching methods, such as group exploration and role-playing, to enable students to fully participate and interact in the classroom, thereby stimulating their learning interest and enthusiasm. In addition, teachers should promptly acknowledge and praise students' performance, and enhance their learning motivation and enthusiasm through incentive measures; Finally, teachers should pay attention to classroom management, strictly control students' classroom discipline, create a harmonious classroom atmosphere, enable students to study with peace of mind, and effectively improve classroom efficiency. Through the above measures, students can be more engaged in learning, enhance their subjectivity and self-learning ability, and thus better achieve the cultivation of core mathematical literacy.

4.3 Improving Students' Autonomous Learning Ability

Improving students' autonomous learning ability is one of the key strategies for cultivating core mathematical literacy in large unit teaching. Teachers can take the following measures to promote students' autonomous learning:

Firstly, establish a good learning atmosphere. Teachers should create a classroom atmosphere that encourages students to focus on self-directed learning and stimulates their enthusiasm and interest in learning.

Secondly, provide appropriate learning resources. Teachers can provide students with some beneficial learning resources, such as recommending mathematical application software and websites, so that students can better master mathematical knowledge.

Thirdly, cultivate students' learning abilities and methods. Teachers should guide students to actively think about learning strategies and methods, and teach some learning skills, such as memory methods, induction and summary methods, etc.

Finally, provide students with sufficient space for autonomous learning. Teachers should give students a certain degree of autonomy and time for autonomous learning, so that they can unleash their learning potential and discover their shortcomings in practice, thereby improving their learning abilities.

Through the above measures, teachers can improve students' autonomous learning ability and enable them to better grasp the core mathematical literacy in large unit teaching.

4.4 Emphasize the integration of mathematical concepts in learning

In large unit teaching, mathematics teaching should focus on the integration of mathematical concepts, that is, through the connection and application of different concepts, to gain a deeper understanding and mastery of mathematical knowledge. Specifically, teachers can guide students in finding connections and applications between different concepts in problem-solving by designing mathematical topics that span different chapters and units, helping students integrate mathematical knowledge. In addition, emphasizing the integration of mathematical concepts in learning also requires encouraging students to explore the essence and significance of mathematical concepts through practical problem-solving, deepen their understanding and application of mathematical knowledge, and thereby improve their mathematical literacy and problem-solving ability.

4.5 Reflecting the Intersection of Mathematics Teaching

In large unit teaching, mathematics teaching should focus on the intersection with other disciplines, linking and integrating mathematical knowledge with other fields. This can help students better understand and understand mathematics, and also cultivate their interdisciplinary thinking and comprehensive application abilities. The specific implementation methods include: deepening students' understanding and application of mathematical knowledge through the cross integration of mathematics, physics, Chinese and other disciplines; Combining

mathematical knowledge with real-life situations, allowing students to experience the practical application and importance of mathematics in daily life; Encourage students to conduct interdisciplinary project research and cultivate their comprehensive and teamwork abilities. Through these measures, it is helpful to enhance students' interest and understanding in mathematics, and promote their comprehensive development.

References

[1] Xu Youbin. Exploration of Mathematics "Big Unit" Teaching under the Background of the New Curriculum Reform [J]. Primary School Teaching Research, 2023, No.829 (15): 40-41.

[2] Wang Congxia. The cultivation of students' core mathematical literacy from the perspective of the new curriculum standards [J]. Shaanxi Education (Teaching Edition), 2023, No.575 (04): 47-49.

[3] Liu Li. Research on the Cultivation Strategy of Mathematical Sense in Primary School Mathematics Core Literacy [J]. Intelligence, 2022, No.702 (36): 96-99.

[4] Xing Hua, Zhang Qiang. Strategies for Cultivating Mathematical Core Literacy from the Perspective of Big Concepts [J]. Tianjin Education, 2022, No.704 (35): 16-18.

[5] Shang Xiangyang. Reflections on Cultivating Students' Core Literacy in High School Mathematics Unit Teaching [J]. Middle School Curriculum Guidance (Teacher Communication), 2021, No.261 (09): 9-10.

[6] Wang Shuqin, Huang Juan. Three paths for developing students' core competencies from the perspective of large units [J]. Jilin Education, 2021, No.1018 (33): 33-35.

[7] Gao Yan A Study on Unit Teaching Design from the Perspective of Large Concepts to Point to the Core Literacy of Mathematics Discipline [D]. Liaoning Normal University, 2022.

Author Introduction:

Zheng Zhang (1998-), male, Huai'an, Jiangsu, with a Master's degree in Education from Ningxia Normal University, engaged in research on mathematics education

Discussion on the Integration and Innovation Strategy of Diverse Music Elements

Jing He[1,2]

1. Nanning College For Vocational Technology, Nanning 530000, China.
2.SAHMYOOK UNIVERSITY, South Korea01795, Korea.

Abstract: It can be seen through the excellent interpretation of diversified music that the development and innovation of music elements are inseparable from songwriting, and the two have each other. Because of its own complexity and interaction, the artistic qualities of music elements, that is, the artistic charm and artistic touch hidden in them, are extremely broad. Whether it is the cultural connotation of vocal music, the cultural construction of musical works, the extension of singing culture, the aesthetics and entertainment of vocal cultural life, the emotional expression of vocal aesthetics, and the creation, popularization and dissemination of vocal works, all of them can not be separated from the influence of culture. Therefore, the innovation and integration of diversified music elements can make people's hearts and minds get true catharsis.

Keywords: diversity; musical elements; integration and innovation

1. Introduction

China is a multi-ethnic country with a profound history and cultural heritage, and its musical and cultural achievements can be described as colorful. Against this background, a wide variety of innovative and unique musical cultures have emerged, and China's traditional music culture has entered a period of diversity and prosperity. However, in the diversified music culture, its inheritance and development are facing new challenges and crises. In order to make China's modern music culture prosperous and enhance the comprehensive competitiveness of the national culture, it is necessary to carry out reasonable inheritance and integration for the current diversified features of China's music culture.

2. Diversified combination of popular music and opera elements

With the rapid development of society, people's taste for music has become more "tricky", and traditional music has been difficult to adapt to the aesthetic needs of the public. As a result, groups of pop musicians began to innovate traditional Chinese culture, blending it with elements of opera. When they first thought of this, the composers were afraid that this type of music would not be accepted by the public. Surprisingly, the music became a huge hit, and "Chinese-style" songs spread rapidly.

When it comes to Chinese style songs, Jay Chou and Tao Zhen are its representatives. Jay Chou and Fei Yuqing sang a song called "A Thousand Miles Away", which has typical Chinese characteristics. The music uses traditional Chinese instruments such as flute, guqin and guzheng, and the melody is extremely ethnic, and the song is still popular today. In addition, in the 2008 Spring Festival Gala, the song "Blue and White Porcelain" deeply touched the hearts of the Chinese people. This is a very ethnic song, the flute sound, there will be a strong sense of spiritual impact. The song uses a unique Chinese musical style that is skillful and coherent in just the right way. The overall musical style blends the traditional small freshness and Chinese classical music to achieve an ultimate harmony. It is mesmerizing and evocative.[1]

3. Integration and Innovation of Tibetan Music Elements in Popular Music

3.1 musical tunes

The creation of popular music based on melody is a mode of music based on mass communication and characterized by mass communication. This is the inherent characteristic of pop music, the creation of which requires not only expressing it out loud, but also having the ability to recognize, remember and express oneself. In order to break through the bottleneck in the development of popular music, attention has been directed to places with a large number of ethnic minorities, so that the culture and music of ethnic minorities can be reborn in the

interface of modern popular music. Tibetans have taken this matter for granted. This is inseparable from the unique charm of Tibetan music. Tibetan music is self-developed and inherited in a highland, closed territory, forming its unique personality and creating its closed and peculiar development trajectory.[2]

3.2 Creative content

Tibet, because of its special geographical location, relatively closed living environment, slow pace of life, poor materials and inconvenient transportation, is religiously but highly valuable. This contrast has brought more people to Tibet. With the influx of foreigners, modern technology has continued to pour into this sacred and inviolable land, and has gradually changed the life of Tibetans across the centuries. Religious life has a special significance in the traditional cultural life of Tibetans. Religious sayings, beliefs, predestination, and reincarnation can all be considered a form of culture, or even the roots of Tibetan culture. The Tibetan folk song "Ascending Drum", composed by He Xuntian and sung by singer Zhu Zheqin, has obscure and dreamy lyrics, without the consistent use of figurative techniques, in which the use of the word Ajia is rare and quite innovative in its single work. Side-by-side reflecting the spirit of traditional music, it is an innovative work that is no longer a fixed way of singing, but combines Tibetan culture with contemporary art, abandoning the original way of singing. Its most prominent manifestation is the reduction of the lyrics part of the song, which is also a deep understanding of the Tibetan cultural background. The implied culture of "woman, destiny, present, cycle, faith" is played out in the heart of the acupuncture points that are groped for in creation.

3.3 Cultural transmission

Tibetan traditional music, popularized by the mass media, has been able to develop rapidly, gradually reaching maturity and perfection. Music is inseparable from other symbolic systems. In order to achieve this, the first thing to do is to understand and apply one's own cultural background knowledge, not to follow the public blindly and write some "brainwashing songs". The visualization of the Tibetan landscape is a thing of the past, no doubt, but it should not stop there. In the long run, it will only destroy the essence of traditional Tibetan music and lead to the decline of Tibetan music. The symbolic medium plays an indispensable role in the creative process, while the blind use of symbolic medium will restrict the creative play. Therefore, innovation in creative techniques will undoubtedly become a powerful weapon for Tibetan popular songs to get out of the excesses of popularization.

4. Innovative Paths for the Integration of Traditional Music and Modern Music

In modern music, the fusion and innovation of traditional music is an irresistible trend and a manifestation of pluralism and tolerance. Grasping the creative thinking and skills of combining traditional and contemporary music is of great significance in guiding the creation of music and is also conducive to cross-cultural communication.

4.1 Echoes of tradition and modernity

In the process of combining traditional music with modern music, both traditional and modern elements are needed. In their creative practice, music practitioners should, first of all, achieve the unity of "classical" and "modern" in terms of musical style, instrumental performance, and expressive methods. In classical music, people pay more attention to the playing of instruments and the creation of atmosphere, while contemporary music focuses more on the rhythm and the expression of popular elements. Combining tradition and modernity, combining the playing skills of traditional instruments with the rhythms and pop elements of modern music, creates a unique musical atmosphere. Secondly, in terms of lyrics, singing and emotional expression, it is important to make tradition and modernity compatible. Traditional music is centered on life, emotion and nature, and the singing method is more traditional, but it is more diverse and personalized in lyrics and singing. In works that combine tradition and modernity, the emotion and mood of the song can be better reflected through the use of "echo", "singing" and other techniques. Finally, traditional music and modern music can be unified in terms of cultural background and artistic concepts. As a cultural carrier, traditional music has a profound influence on the development of contemporary music in terms of its cultural

background and artistic concepts. In the works combining traditional and modern music, the cultural background and artistic concepts contained therein can complement the popular elements of contemporary music, making it more diversified and culturally expressive.

4.2 Intermingling of various elements

The compositional elements of the work are quite diverse, both in terms of composition and arrangement. In combining traditional and modern music, attention should be focused on new melodic harmonies, rhythms and other aspects. Music practitioners can either add modern music arrangements and acoustics to traditional music, or add traditional instruments to modern music, thus obtaining new musical effects. Secondly, for music practitioners, in the process of integrating traditional and modern music, it is more important to pay attention to the cultural factors in it, so as to achieve cross-cultural communication and mingling. For example, we can incorporate the cultural factors it contains into contemporary music, so as to make the musical works have a stronger regional and cultural character. Finally, it is also important to take the initiative to introduce cross elements. By integrating elements from other art forms such as dance, performance and movie, we can make music and other art forms cross-fertilized, and make continuous excavation of various styles of traditional and modern music, so as to make it have more styles.[3]

5. Conclusion

To summarize, in the diversified music environment, it is necessary to constantly carry out ideological reform and innovation, and at the same time pay full attention to the value and position of various music cultures in art. According to the artistic characteristics of the music culture itself, innovation and integration of useful and diverse music culture elements, in order to conform to the objective law of time and cultural development, to maintain the vitality of music culture.

References

[1] Jia Xiaocheng. Research on the integration and innovation of opera music and western music[J]. Chinese Theater,2019,(10):82-84.

[2] Fan Jing. The integration and innovation of grassland music elements in erhu works[J]. Yellow River Sound,2019,(01):121.

[3] Feng Yiyun. Integration and Innovation of Traditional Cultural Elements and Popular Song Creation[J]. Northern Music, 2015, 35 (07): 157-158.

Mistranslation and Countermeasures in Business Translation from the Perspective of Pragmatics

Feifei Lan, Luning Man

QingDao City University, QingDao 266106, China.

Abstract: With the continuous development of China's economy, business communication between China and the West is increasing, and business translation is becoming increasingly important. However, in the process of business translation, there are some translation errors due to various factors. How to solve such mistranslation problems is a key issue that needs to be considered, which has the significance and value of in-depth research. This paper is based on the perspective of pragmatics, combined with examples of business translation, to explore mistranslation and countermeasures in business translation.

Keywords: pragmatics; business translation; mistranslation

With the continuous promotion of the national "The Belt and Road" policy, economic and trade activities between China and other countries around the world are increasingly vigorous, and business English plays an increasingly significant role in business communication activities. The rapid development of business English has also sparked a demand for business translation. Business English is closely related to serious economic activities such as securities, finance, investment, insurance, documents, contracts, etc. Therefore, business English translation requires "accuracy, rigor, standardization, and fluency". Professional and accurate wording, rigorous translation structure, and standardized and fluent writing are necessary in business English translation. Nevertheless, mistranslation often occurs in actual business translation. This paper attempts to collect and organize mistranslation in business text translation, and explore their root causes and countermeasures from a pragmatic perspective.

1. Pragmatics

Pragmatics is an emerging discipline in various branches of linguistics, focusing on the study of language meaning. Pragmatics is a specialized discipline that studies the understanding and use of language, studying specific utterances in specific contexts, and exploring how language can be understood and used through context.

Simply put, pragmatics is the study of the linguistic meaning of language in a specific context. This paper analyzes mistranslation in business translation from the perspective of pragmatics, including two aspects, namely language and social pragmatics.

2. Mistranslation of language in business translation

The language aspect of Pragmatics refers to the explicit culture carried by language, including surface forms of language such as phonetics, vocabulary, syntax, rhetoric and so on. Due to the significant differences in the surface forms of language between English and Chinese, there are also mistranslation of language in pragmatics in business translation. It will be illustrated from the following three aspects: vocabulary, syntax, and rhetoric.

2.1 Mistranslation caused by incorrect understanding of word meanings

In the study of Business English, there are many professional terms related to business, but in the actual process of business translation, the meaning of the words will change with the different contexts of foreign trade and business. Taking "negotiating documents" for an example, if we just understand the meaning from the surface, it means " 谈判文件 ". But in Business English, it means " 议付单据 ". For another example, the original meaning of "escape clause" should be " 免责条款 ", but if it is mistakenly translated as " 逃跑条款 ", the translator will expose himself to ridicule. In the practice of Business English translation, due to the lack of understanding of the language features of business texts, some frequently used words are easily mistranslated.

Example: 保存期为二至三星期的袋装饼干。

Mistranslation: Packets of biscuits with a guarantee period of two or three weeks.

Analysis: “Guarantee period” means warranty period, but it is generally used for the warranty period of machines. Here “ 保存期 ” refers to the storage period of goods that may spoil, such as food, beverages, drugs, etc. Therefore, it should be translated as “shelf life”. The original translation overlooked subtle differences in word meanings, resulting in mistranslation.

Modified translation: Packets of biscuits with a shelf life of two or three weeks.

2.2 Mistranslation caused by incorrect syntactic understanding

There are significant differences in sentence expression between English and Chinese. English focuses on the structure and form of sentences, while Chinese is different. Chinese people value the logic of language expression, so Chinese emphasizes content and meaning. In the practice of business translation, improper understanding of syntactic features, logical relationships, semantic centers, and other aspects of sentences can lead to a certain degree of mistranslation. The specific examples are as follows:

Example 1: 随函附寄我方试订单一份，请提供现货。

Mistranslation: Enclosed is our trial order list, please supply us with your current goods.

Analysis: Because of the lack of emphasis on the form in English, there is no coherence in this sentence, and translation errors appear in the version.

Modified translation: Enclosed is our trial order list, and please supply us with goods from stock.

Example 2: If the currency of expert sales is different from the currency of the exporting country.....

Mistranslation: 如果外销时使用的货币与出口国货币不同 ……

Analysis: This sentence seems to be prone to misunderstandings.

Modified translation: 假如出口国在出口时使用的货币与本国货币不同 ……

2.3 Mistranslation caused by incorrect rhetorical understanding

Both English and Chinese have certain rhetorical devices used in language, but due to cultural differences, there are significant differences in the use of rhetorical devices between the two. For example, when using animals as a metaphor for foolishness, the Westerners use “donkey”, while the Chinese use “pig”. Chinese people use “ 挥金如土 (spending money like soil)”, while Westerners use “spend money like water”. There are many rhetorical devices used in advertisements, product introductions, and other texts in the business field. In business translation, misunderstandings of the original rhetorical device can also easily lead to mistranslation.

Example: He is a man that eats no fish.

Mistranslation: 他不吃鱼。

Analysis: “Eat no fish” originates from a British allusion. Queen Elizabeth had regulations on the Church of England during her reign. Believers who support the Church of England no longer follow the Roman Catholic rule of eating fish every Friday to show loyalty to the government. Therefore, believers who do not eat fish are considered “good people”. “Eat no fish” has the metaphorical reference to “people who are loyal to the government and honest”. The translation above uses literal translation, ignoring the rhetorical devices used in the original text, causing mistranslation.

Modified translation: 他是个忠实可靠的人。

3. Mistranslation in social pragmatics in business translation

Pragmatics can be used to explain the different behaviors exhibited by people in different cultural backgrounds when using language. The cultural differences caused by the influence of customs, traditions, religious beliefs and other factors can lead to errors in the process of business translation. This paper will provide examples to analyze the mistranslation in business translation from two aspects: cultural traditions and ways of thinking.

3.1 Mistranslation caused by differences in cultural traditions

China and Western countries have distinct history, cultural traditions, and expression habits. If not paid attention to during translation, it may lead to mistranslation.

Example: 请告知：什么时候发货。

Mistranslation: Please inform us when to deliver our ordered goods.

Analysis: The original text adopts the form of imperative sentences. Although the translator also used this form in translation, the translation version appears somewhat stiff. If the difference between English and Chinese correspondences is not noticed, errors may occur in pragmatic and cultural use. The principle of politeness needs to be paid attention to in correspondence translation. Gentlemanly and polite words are preferred. Using declarative sentences for translation is a better choice.

Modified translation: It will be appreciated if you would inform us when to deliver our ordered goods.

3.2 Mistranslation caused by different ways of thinking

In translation, actually not only the changes between languages require attention, but also the transformation between two ways of thinking. When expressing in Chinese, emphasis is placed on the integration of situational aspects, so there will be some humanistic connotations in expression.

Example: No problem too big. No business too small.

Mistranslation: 从不出现太大的问题，从不经营太小的生意。

Analysis: This sentence is the advertising slogan of IBM. The text structure is concise and creative, but it is easy to be misunderstood. If we use Chinese thinking to translate, the above translation will appear. However, due to the syntactic differences between English and Chinese, we have entered a semantic misunderstanding, which is actually caused by the differences in thinking between English and Chinese.

Modified translation: 没有不做的小生意，没有解决不了的大问题。

4. Countermeasures for mistranslation in business translation

4.1 Enhancing discourse awareness

In order to ensure the accuracy of translation, it is best for translators to combine the meaning of the entire article in translation. In the process of browsing business texts, we will form a discourse in our minds that is suitable for the content of the context, so that the meaning of some words in specific situations can be better determined. In order for business translation to be fully accepted, the translator must use the same language expression as the target readers in translation.

4.2 Following pragmatic rules

Pragmatic rules play a very important role in language translation, directly affecting the results of language translation. Pragmatic principles mainly include Politeness Principle, Cooperative Principle, Speech Act Theory, etc. Therefore, in order to meet the basic requirements of translation accuracy in business translation as well as comply with the unique rules and methods in the business field, our translators must strictly follow pragmatic principles.

4.3 Being Capable of cross-cultural communication

Simply put, business translation refers to cross-cultural communication, which requires translators to have basic cultural communication skills. In translation, they should accurately understand the entire text, pay attention to the equivalence of language forms and functions between different cultures, and more importantly, gain deeper understandings of cultures.

4.4 Supplementing business knowledge

It is often said that pragmatics mainly studies the meanings of sentences used in context, while translation is a highly contextual task. Therefore, it is particularly important to grasp the context in translation. It can be seen that the development of language and even translation is very rapid. English is further subdivided into technical English, business English, legal English, tourism English and so on. There are specific specialized vocabulary and requirements for professional knowledge in each field.

5. Conclusion

This paper provides an explanation of common mistranslation in business translation from a pragmatic perspective, and lists some classic examples for analysis and correction. It divides mistranslation in business translation into two categories: language and social pragmatics. It also elaborates on the above two types of mistranslation from the perspectives of word meaning, syntax, rhetoric, cultural level, and thinking mode. Based on relevant knowledge, countermeasures are proposed to avoid mistranslation. Thus it can be seen that pragmatics plays an indispensable role in business translation and even multi-domain translation. Applying pragmatics to business translation can not only improve the accuracy of translation, but also enrich its theoretical connotation.

References

[1]Mao Chunhua. The Phenomenon of Mistranslation in Business Translation from the Perspective of Cross-cultural Pragmatics[J]. Overseas English, 2018(11):146-147.

[2]Meng Dechun. Mistranslation Phenomena and Countermeasures in English-Chinese Business Translation from the Perspective of Pragmatics[J]. Culture and Art, 2020(06):183-184.

The Current Situation and Model of Guangdong Province's Targeted Students Supporting Rural Physical Education Research on Sustainable Development

Haicheng Feng

College of Physical Education and Health, Zhao Qing University, Zhao Qing 526061, China.

Abstract: Using literature review, interview, and field observation methods, this study conducted an in-depth study on the current situation, model, and sustainable development of targeted student support for rural physical education in Guangdong Province. The results indicate that targeted students have formed various effective support models for rural physical education. However, there are also some problems, such as insufficient funding support, unsmooth management mechanisms, and imperfect evaluation mechanisms. In response to this, suggestions have been put forward to strengthen policy guidance, improve funding guarantee mechanisms, strengthen cooperation with universities, and establish scientific evaluation mechanisms to promote targeted student support for the sustainable development of rural physical education.

Keywords: Targeted students; Rural physical education; Mode; sustainable development

1.Introduction

Due to limitations in economic conditions, facilities, and teaching staff, the quality of physical education courses in rural areas is not high, and student participation is low, which seriously restricts the physical and mental health and comprehensive development of rural students. In order to improve this situation, Guangdong Province has begun to try using the model of targeted students to support rural physical education. Directed student refers to a policy formulated to help cultivate talents in remote areas, ethnic minority areas, and industries with difficult working environments, ensuring that they receive a certain number of graduates. Targeted student support for rural physical education refers to the selection of college students or young people with certain sports talents and a love for physical education within a certain area, and the targeted dispatch of them to rural schools as teaching assistants for physical education courses, in order to improve the quality and level of rural physical education. This model can alleviate the shortage of rural physical education teachers, bring new teaching concepts and methods, and promote urban-rural communication and integration. Exploring the current situation, problems, and countermeasures of targeted student support for rural physical education from multiple perspectives, in order to contribute to improving the quality and equity of rural physical education.

2.Research objects and methods

2.1 Research subjects

Guangdong Province Public funded Targeted Normal Students (Sports).

2.2 Research Methods

2.2.1 Literature review method

Through channels such as libraries and online databases, understand the policy background, historical evolution, and research status of targeted student support for rural physical education, and clarify the purpose and significance of the research. Collect literature materials to provide theoretical support and empirical evidence for research.

2.2.2 Semi structured interview method

Using a semi-structured interview method, interviews were conducted with teachers, students, and relevant personnel who have participated in targeted student support projects, obtaining rich first-hand information. During the interview process, a series of open-ended questions were designed to understand the following information: selection and training of targeted students, the role and performance of targeted

students in rural physical education, the improvement situation of rural physical education, challenges and problems faced, and suggestions for future development.

2.2.3 Field observation method

Identify targeted student support projects, rural schools, and relevant teachers, students, etc. that require observation, clarify the purpose, content, methods, and time of observation, and develop a detailed observation plan. Observers need to flexibly apply various observation methods, such as participatory observation, non participatory observation, structured observation, etc., collect relevant data, analyze and organize them, and extract important information and viewpoints.

3.Results and Analysis

3.1 Analysis of the Current Situation of Targeted Students Supporting Rural Physical Education

At present, various regions select eligible targeted students through open recruitment, selection, training and other processes, and assign them to rural schools for physical education teaching assistance. Targeted students not only bring innovative teaching concepts and methods, but also provide more sports and activities for rural students, enhancing their learning interest and participation. Targeted student support for rural physical education projects has achieved certain results. Firstly, the implementation of this project has increased the participation of rural students in sports, allowing them to be exposed to more sports projects and activities, enhancing their physical fitness and teamwork abilities. Secondly, the introduction of targeted students has improved the quality of rural physical education teaching, brought new teaching concepts and methods, and made rural physical education teaching more vivid and interesting. In addition, the project has also alleviated the shortage of rural physical education teachers, reduced the burden on local teachers, and provided them with more learning and improvement opportunities. Finally, the implementation of this project has promoted urban-rural exchange and integration, bringing new vitality and atmosphere to the countryside.

3.2 Model of Targeted Students Supporting Rural Physical Education

(1) Long term dispatch model. Through cooperation between local governments and teacher training institutions, outstanding public funded targeted teacher trainees are selected to work as physical education teachers in rural areas, usually for a period of three or five years. (2) On the job internship mode. During the internship, teacher trainees are required to undertake the physical education work in rural schools, and improve their teaching ability and professional competence through practice. (3) Joint training mode. A cooperation agreement is signed between the local government and normal universities to jointly develop training plans and curriculum settings, ensuring that public funded targeted normal students have solid professional knowledge and skills. (4) The mode of sending education to rural areas. By organizing excellent urban physical education teachers to go to rural schools for on-site teaching and guidance, we provide high-quality physical education for rural students.

3.3 Problems in Targeted Student Support for Rural Physical Education

The selection mechanism is not perfect. The selection of targeted students mainly relies on public recruitment and interviews, lacking scientific evaluation mechanisms and selection standards, which leads to some students who do not have teaching abilities and sports talents entering the project. The training system is not sound. Targeted students need to receive certain training before entering the project , but the current training content and methods are relatively single, lacking specificity and effectiveness. The management mechanism is not smooth. Targeted students need to receive management and guidance from the local education department during their work in rural schools, but due to the lack of effective communication and collaboration mechanisms, management efficiency is low, which affects the implementation effect of the project. The evaluation mechanism is not scientific. At present, there is a lack of scientific evaluation mechanisms and standards for the effectiveness of targeted students, resulting in some students who are not actively working and have poor teaching effects being unable to be detected and dealt with in a timely manner. Insufficient funding guarantee. Including expenses for selection, training, dispatch, management,

and other aspects. However, currently there is insufficient funding guarantee in some regions, which has affected the sustainable development of the project.

3.4 Sustainable development strategies

(1) Establish a stable funding guarantee mechanism and raise funds through various channels such as government investment, social donations, and school self financing. (2) Strengthen cooperation and exchange with universities. We need to strengthen cooperation and communication with universities, establish cooperative relationships, and jointly promote the sustainable development of projects. (3) Improve the selection and training mechanism. It is necessary to establish a scientific evaluation mechanism and selection criteria, and comprehensively consider the teaching ability, sports expertise, comprehensive quality and other factors of targeted students for selection. At the same time, strengthen the targeted and effective training, and improve the teaching ability and level of targeted students.(4) Strengthen the smoothness of management mechanisms. Targeted students need to receive management and guidance from the local education department during their work in rural schools. They need to strengthen communication and collaboration with the local education department, establish effective communication and collaboration mechanisms, and ensure the smooth implementation of the project. (5) Establish a scientific evaluation mechanism. In order to timely identify problems and shortcomings, propose improvement suggestions and suggestions, it is necessary to establish a scientific evaluation mechanism and standards to regularly evaluate the work effectiveness of targeted students. At the same time, establish an information sharing platform to strengthen communication and cooperation among different regions, learn from each other's advanced experiences.

4.Conclusion

The targeted student support rural physical education project implemented in Guangdong Province has effectively increased the participation of rural students in sports, improved teaching quality, alleviated the shortage of rural teachers, and promoted urban-rural exchanges and integration. However, there are also issues related to selection, training, management, evaluation, and funding that need to be further improved and resolved. Suggestion: Strengthen policy guidance and support, and improve relevant laws and regulations; Establish a scientific evaluation mechanism and selection criteria; Strengthen the targeted and effective training; Smooth management mechanism; Strengthen funding support.

References

[1] Yan Zhu, et al. Current Situation and Reflection on Undergraduate Teaching of Traditional Chinese Medicine for Targeted Students in Western Medical Colleges and Universities in Suburban Areas [J]. CHINESE HEALTH CARE, 2022 (013): 040.

[2] Jian fen Pan, Feng Guang Hu. Analysis of the Structure and Optimization Strategy of the Physical Education Teacher Team in China in the New Era [C]//Compilation of Abstracts from the 11th National Sports Science Conference. 2019.

[3] Lei Cao, Xin Ge. Research on the Dilemmas, Attributions, and Countermeasures of the Development of Physical Education in Rural Schools in Central and Western China in the New Era [C]//Compilation of abstracts from the 11th National Sports Science Conference. 2019.

[4] Lijun Miao. Research on the Effectiveness of the Implementation of "Sending Education to the Countryside" Training - Taking the English Training Program of the "National Training Program" as an Example [J]. Employment and Security, 2023 (2): 64-66.

[5] Jun Yan, Caiyan Chen. Research on the Factors and Relationships Influencing the Teaching Intention of Public funded Targeted Physical Education Teachers: An Empirical Analysis Based on Structural Equation Modeling [J]. Journal of Guangzhou Institute of Physical Education, 2022, 42 (04): 26-34.

Exploration and Practice of Teaching Reform in Numerical Analysis Course

Liang Zhang*, Peng Guo, Tao Song, Xiukun Hu, Hanzheng Dai

College of Mechanical and Architectural Engineering, Taishan University, Taian 271000, China.

Abstract: With the continuous development of science and technology, the teaching content and methods of numerical analysis courses also need to be constantly updated and improved to meet the needs of the times and the development of students. This paper explores the main aspects of teaching reform in numerical analysis, including optimizing teaching content, innovating teaching methods, enhancing teachers' teaching abilities and reforming assessment methods. The aim is to improve students' comprehensive quality and ability level, improve teaching quality and effectiveness, and promote the development and application of numerical analysis courses.

Keywords: Numerical analysis; Teaching reform; Teaching quality; Assessment method

1. Introduction

The origin of numerical analysis can be traced back to ancient times, when people began to use simple numerical calculation methods to solve various problems. Classical numerical analysis mainly refers to the study of numerical calculation methods by mathematicians during the period from the late 19th century to the early 20th century. For example, Gauss et al. proposed an iterative method for solving linear equations; Taylor and Peano et al. studied methods for approximating functions using polynomials[1]. The main purpose of classical numerical analysis is to solve various practical problems encountered at that time, such as astronomy, physics, engineering, etc. The resolution of these problems laid a solid foundation for the subsequent development of numerical analysis[2].

Modern numerical analysis mainly studies how to use computers to efficiently perform numerical calculations, including solving linear equations, optimization problems, interpolation and approximation, integration and differentiation, etc. During this period, many important numerical calculation software was developed, such as FORTRAN, C, MATLAB, etc[3]. The application of these software enables people to perform numerical calculations more conveniently, while also promoting the development of numerical analysis. The application range of numerical analysis is becoming increasingly widespread, and it has become an indispensable part of scientific research, engineering design, data analysis, and other fields[4]. With the continuous development of technologies such as artificial intelligence and machine learning, numerical analysis will also become more intelligent[5].

The in-depth learning of numerical analysis is of great help to the learning and research of fields such as mathematics and computer science. This paper explores and practices the teaching reform of numerical analysis from the perspectives of teaching content, teaching methods, teachers' teaching abilities and assessment methods, as shown in Figure 1.

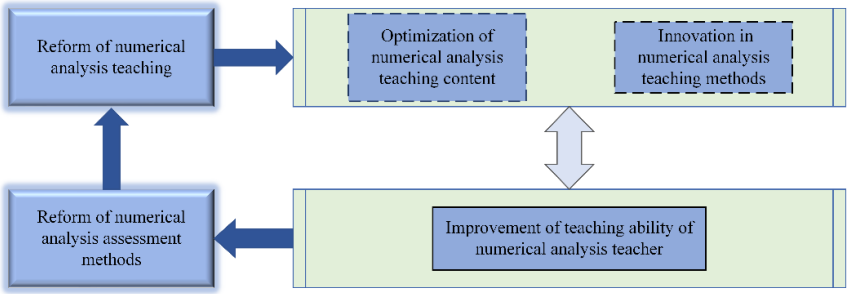

Figure 1 Structural diagram of numerical analysis teaching reform

2. Optimization of Numerical Analysis Teaching Content

Optimizing teaching content is the core of the reform of numerical analysis teaching content. In order to better adapt to the needs of the times, we need to optimize and update the existing teaching content.

In the teaching process of numerical analysis, teachers should pay attention to updating teaching content to meet the needs of modern technological development. In order to enable students to better handle large-scale data in real life, modern computing technologies such as big data processing, cloud computing, and artificial intelligence can be integrated into teaching content. Teachers can design some experimental plans and steps, such as using numerical methods to solve the roots of functions, solving integrals, and solving differential equations. Students can apply their knowledge to practical operations, implement these experimental plans and steps, understand the practical application and implementation process of numerical analysis methods, and deepen their understanding and mastery of numerical analysis methods.

Numerical analysis is a highly applied discipline aimed at solving mathematical problems in practical situations. Therefore, attention should be paid to cultivating students' ability to solve practical problems. In practical teaching, teachers can use mathematical modeling to guide students to use numerical analysis methods to solve practical problems based on practical problems.

3. Innovation In Numerical Analysis Teaching Methods

In order to improve teaching effectiveness and cultivate students' innovative and practical abilities, the innovation of numerical analysis teaching methods is particularly important. This section summarizes innovative teaching methods for numerical analysis, which mainly include the following aspects, as shown in Table 1.

Table 1 Teaching method

Types of teaching methods	Mode and content
Discussion mode teaching	Discussion mode teaching is a student-centered teaching method that guides students to actively participate in classroom activities and enables them to better understand the design and implementation of numerical algorithms.
Case teaching	Case teaching is a method of teaching theoretical knowledge by analyzing practical problems as the background, which enhances students' interest in learning and their ability to solve practical problems.
Experiment teaching	Experimental teaching verifies the correctness and feasibility of numerical algorithms through experimental operations, improves students' practical abilities, and enables them to better grasp the application of algorithms.
Flipped classroom	Flipped classroom is a teaching method that inverts the learning process inside and outside the classroom, such as pre class preview and post class review, to help students better grasp the course content and improve their independent learning and innovation abilities.

4. Improvement of Teaching Ability of Numerical Analysis Teachers

With the increasingly widespread application of numerical analysis in scientific research and engineering practice, teachers need to constantly update and improve their teaching abilities to improve the teaching quality and effectiveness of numerical analysis courses.

In order to improve their teaching skills, teachers need to continuously learn and master effective teaching methods, including classroom organization, teaching strategies, selection and application of teaching methods, etc. According to different teaching content and objectives, teachers need to pay attention to the development and application of online resources, such as online textbooks, online experimental platforms, etc., to provide students with more abundant learning resources and practical opportunities. Furthermore, teachers need to choose appropriate teaching tools and techniques to improve their teaching efficiency and effectiveness.

Teaching practice is a key link in improving the teaching ability of numerical analysis teachers. By participating in professional training, teachers can continuously update their knowledge and skills, improve their teaching level and practical ability. Based on practical teaching experience, teachers can better understand students' needs and learning characteristics, thereby better guiding students' learning and practice. Teachers need to continuously learn and master the academic dynamics in the field of numerical analysis, understand the latest research trends and directions, and transmit the latest research results in the field of numerical analysis to students.

5. Reform of Numerical Analysis Assessment Methods

In the assessment process of numerical analysis, in order to evaluate students' learning effectiveness more comprehensively and accurately, the assessment methods are reformed from the following aspects, as shown in Table 2.

Table 2 Numerical analysis assessment method

Assessment method	Reform content
Theoretical examination	Theoretical assessment is to ensure that students fully understand the basic concepts of numerical analysis. Generally, some application questions are added to the theoretical assessment to better evaluate students' practical application abilities. Comprehensive questions involving multiple knowledge points can be set to assess students' ability to comprehensively apply knowledge.
Practical operation assessment	In practical operation assessment, attention should be paid to the assessment of students' programming abilities, including algorithm implementation, program debugging, etc. In order to better evaluate students' data processing abilities, some questions on data analysis and processing can be added to the practical operation assessment. By setting challenging questions, students' innovation and independent thinking abilities can be stimulated.
Case analysis assessment	Select representative cases, such as solving linear equations or optimization problems, to better evaluate students' ability to analyze and solve problems. In the case analysis assessment, students are allowed to independently collect and analyze data, with the aim of examining their ideas and methods, including problem modeling, algorithm design, etc.
Classroom interactive assessment	In the classroom, encourage students to actively participate in discussions, propose their own opinions and ideas, in order to better evaluate students' thinking and expression abilities. It is necessary to pay attention to the examination of students' thinking styles, including logical reasoning, problem analysis, etc.
Stage test	Stage test can effectively help students discover and solve problems in a timely manner, and improve learning outcomes. Continuously improve the content and difficulty level of stage tests based on students' learning situation and feedback, in order to better meet students' learning needs and improve learning outcomes.

6. Conclusion

When discussing the reform of numerical analysis teaching, it is necessary to review traditional teaching methods and textbooks in the past, and consider whether they are still applicable to modern technological society. The traditional teaching method of numerical analysis mainly focuses on theory, emphasizing formula derivation and theoretical proof. However, in practical applications, students often lack understanding of the essence of numerical analysis and necessary computational skills. This paper optimizes the teaching content from the perspectives of modern computing technology, students' practical operation ability, and students' problem-solving skills. By adopting methods such as discussion mode teaching, case teaching, experimental teaching, comparative teaching, and reverse classroom teaching, the quality and effectiveness of teaching can be effectively improved. Teachers enhance their teaching abilities through the cultivation of teaching technology, practical skills, and scientific research abilities, in order to better meet the learning needs of students. The numerical analysis assessment has been reformed from theoretical assessment, practical operation assessment, case analysis assessment, classroom interaction assessment, and stage testing, with the aim of comprehensively and accurately evaluating students' learning effectiveness. The reform of numerical analysis teaching needs to continuously summarize experience, improve and improve in order to cultivate more high-quality talents that meet the needs of modern technology society.

References

[1] Hamming, R. W. (2012). Introduction to applied numerical analysis. Courier Corporation.

[2] Riley, K. F., Hobson, M. P., & Bence, S. J. (1999). Mathematical methods for physics and engineering.

[3] Burden, R. L. (2011). Numerical analysis. Brooks/Cole Cengage Learning.

[4] Ye, Y. (2021, May). Teaching Practice and Reforms of the Course of Mathematical Analysis. In 2021 2nd International Conference on Computers, Information Processing and Advanced Education, pp. 435-439.

[5] Lee, S. Y. (2021). Research status of mathematical problem posing in mathematics education journals. International Journal of Science and Mathematics Education, no. 8, pp. 1677-1693.

An Analysis on the C-E Translation of the Museum of the Yao Nationality from Cultural Translation Theory

Xianqi Zhu

School of European American Languages and Culture, Guangxi University of Foreign Languages, Nanning 530222, China.

Abstract: The museum of the Yao nationality, opened to the tourists in 1992, is located in the Jinxiu county of Guangxi province, China. The museum has been equipped with both Chinese and English publicity materials to people, which is convenient to the world to know more of Yao nationality. Under the guidance of Cultural Translation Theory, this paper aims at studying the English translation of the publicity materials in the museum, analyzes and improves some English publicity material so as to make the text more readable and understandable to the foreign tourists. Based on the case analysis, the paper summarizes some useful translation techniques and methods under the guidance of Cultural Translation Theory.

Keywords: museum translation; Cultural Translation Theory; Yao nationality in Jinxiu county

1. Introduction

The museum of Yao nationality is the first museum introduced the Yao people's history, life, culture and wisdom to the whole world. It was built in 1991, and opened to the public in 1992. The museum was expanded and decorated in 2002 and 2012. Its construction area is 4,700 square meters and the coverage area is over 6,000 square meters. The museum is formed by a major one and five subsidiary ones, including Chashan Yao Ecological Museum, Pan Yao Museum, Hualan Yao Museum, Ao Yao Ecological Museum and Shanzi Yao Ecological Museum. Therefore, the museum is also called Jinxiu "1+6" museum.

In recent years, many scholars are interested in the study of Yao culture. When typing " Yao's culture in Jinxiu" in the CNKI search engine, there are 106 journals, 34 dissertations, and 2 conference papers and 7 papers from newspaper (search date: Aug. 25th, 2023). According to the statistics in CNKI, the researches can be divided into four categories: costume culture of Yao nationality, the exploration of tourism in Jinxiu county, festival and fork song culture, translation of publicity materials in Jinxiu. However, there are only two papers on the translation study of Yao's culture. Liao Fei analyzed the publicity materials on Yao's wedding culture from the perspective of Eco-translatology[4]. Based on the three-dimension in Eco-translatology, Liao has improved some translation errors in the publicity materials in Jinxiu county. Li Guanlan investigated the status quo of the translation of publicity materials in Jinxiu county, she also pointed out some translation errors in the materials and called on more translators to improve its translation so that it can better spread Yao's culture to the world[3].

According to the above literature review, the previous studies of Jinxiu county are varied from each other. Researchers have done complete studies in Yao's culture from different perspectives. However, there are only two papers related to the translation of the publicity material of Yao nationality, which is not enough to spread the Yao's distinctive culture to the world. The Museum of the Yao Nationality is a non-profit organization to display and show culture, history and life of the Yao people. To translate the publicity material in the museum is both important and urgent to the government-supported organization to spread the culture of Yao nationality to the foreign friends around the world.

2. Cultural Translation Theory

During 1920s-1960s, researchers studied translation mainly from linguistic perspectives, such as semantics and semiotics. Therefore, translation at that time tended to be word-to-word correspondence without considering different cultures and varied expressive habits. In 1980s, translation researches are inclined to study different cultures carried by different languages. And more and more researchers believed that translation with a cultural perspective is both acceptable and understandable by the target readers.

One of the most influential and well-known scholars of cultural translation is Susan Bassnett. During 1980s-1990s, she has published a lot of books in this field, including Translation Studies(1980), Translation, History and Culture (writing in collaboration with Lefevere in

1990), Constructing Cultures(1997) etc. Those works not only have a profound influence on cultural translation, but also pave the road for future study of cultural translation.

In her study, she finds that machine translation works very well in most genres of text except the literature[1]. As for this phenomenon, she thinks that the translation unit should be changed from text to culture. This idea is later developed by her with "Culture Turn". Culture Turn requires the researchers and translators to study the translation from the perspective of politics, culture, history, philosophy, historiography and poetics[5]. In order to emphasize the Culture Turn as well as to further explain the relationship between language and culture, Bassnett believes that culture to language is what human's body to its heart. Only when the heart coordinates with the body, can the human keeps energetic and active. Just like when the surgon takes a cardiac surgery, he or she will strive to maintain other internals in a good condition. The translator will by no means neglect the distinctive culture elements during the translation.

Bassnett and Lefevere make an formal summary of the Cultural Translation Theory in Translation, History and Culture. Their viewpoints can summarize into the four aspects. Firstly, translation not only deals with the linguistic level, but also the culture deeply rooted in the language. Secondly, translation is not just a simple process of decoding. The essence of translation is a cross-cultural communication. Thirdly, translation is not merely a decoding of source language text, but obtains a functional equivalence of culture in target language text. Lastly, translation is to satisfy the needs of culture and the needs of different groups in a certain culture[1].

To translate culture correctly is not an easy task. It requires the translators to understand two or more cultures and use their subjective initiative to explain the culture to the target readers in an acceptable way. Bassnett puts forward a term — "culture interpreter", which requires the interpreter should not only translate the verbal expression but predict its implication. In her work Constructing Cultures, she proposes "translation turn"[2]. When the studies on "culture turn" became popular in 1990s, she thought there was a "translation turn" in translation study. "Translation turn" offers a broader horizon to translation study. Thanks to the "culture turn", researchers and translators have long been considered the cultural background of the source text during their translation. While "translation turn" requires them to consider the material conditions in which the text is produced, sold, marketed and read [2].

3. Case Analysis Based on Culture Translation Theory

Before analyzing the C-E translation of the Museum of the Yao Nationality, it is necessary and useful to discuss and summarize the characteristics of the publicity material in this museum. The function of the material is to introduce the culture, history and wisdom of Yao people. Therefore, most texts in the museum belongs to the informative and introductory ones. In order to have full play of these two functions of text, defining expressions and numbers are widely used in the source text, for example, " 成立于 1952 年 5 月 28 日，是全国最早成立的瑶族自治县。"(It was founded on May 28, 1952, which is the earliest autonomous county of Yao nationality in China). Besides that, culture-load expressions are embedded in the introduction, for example, " 圣塘山，离城一百里，石山高峻，人莫能攀登 "(With a hundred miles away from the city , Shengtang Mountain is a stone mountain which is too high for one to climb it). Obviously, proper nouns have been widely used to introduce each branch of Yao people and different customs in Yao's life, like " 坳瑶 "(Ao Yao), " 瑶族石碑 "(The stele rule).

Faced with the linguistic characteristic of the publicity material, translating Yao's culture properly and correctly is a challenge to the translators. The following part will analyze the C-E translation in the museum from a cultural perspective, trying to find some adaptable and concrete translation methods and techniques to deal with the translation difficulties.

3.1. Case Analysis on the Translation of Pronouns

Pronoun is widely used in the publicity material of the museum. Most pronouns are culture-loaded words which only used among Yao people. Though it has been introduced with vivid pictures beside most pronouns, it challenges the translators in their translation.

ST: 盘王节

TT: King Pan Festival

King Pan is a character in China's ancient myth. He was called as Pan Hu originally. Because he killed the rebel named General Wu for

the emperor, the emperor was so delighted to the success and kept his promise to grant the princess to marry Pan Hu. By this brave deed, Pan Hu became popular among his people and was called King Pan by the later generations. King Pan's kindness and generosity has long been celebrated and memorized by Yao, Miao and Li people of Chinese ethnic minorities. King Pan festival is to memorize and offer sacrifices to Pan Hu among Yao people. Since King Pan and King Pan festival are unique items in China, literal translation can remain its traditional culture and draw more people's attention to the cultural background embedded in the festival.

3.2. Case Analysis on the Translation of Expressions with Chinese Characteristics

Although the publicity material in Yao's museum is belonged to an informative one, the source text has been full of words and phrases with distinctive Chinese characteristics. Such expressions are quite familiarized by Chinese people while are very strange to the target readers, especially when they are not translated properly. According to the collective materials, it can be divided into three categories. Firstly, it contains some four-character and eight-character idioms, such as " 五谷丰收 ", " 神通升天，求神送鬼 ". Secondly, there are phrases related to the expressions in Chinese lunar calendar, for example, " 闰月 ". Thirdly, it is the expression Chinese people frequently used in both the oral and written communication, like " 天然氧吧 " .

ST: 五谷丰登

TT: bumper harvest

" 五谷丰登 " is a four-character idiom that is used to describe a big harvest in the agriculture. " 五谷 " refers to five major crops in Chinese agriculture, namely, rice, broomcorn millet, millet, wheat and bean. " 丰登 " used to express "great harvest". The English translation doesn't translate " 五谷 " (the five crops) for considering the length of the text in a display hall. Additionally, there are few millet and wheat grown in Jinxiu county. Thus, the translation of all those five crops may confuse the target tourists. Though " 五谷 "has been cut in the translation, it becomes more acceptable and understandable, which are two basic principles in the cross-culture communication.

ST: 中国天然氧吧

TT: China's Natural Oxygen Bar

" 天然氧吧 " is first proposed by the Chinese ecologist—Lv Jian, when he explains the standard to evaluate the air quality in some reserves. As the phrase is very clear and understandable by most ordinary people, it has been widely used in newspaper and publicity material recently. Nowadays, the phrase " 天然氧吧 " often uses in the introduction to some scenic spots and mountain areas to describe its clear air and reflect its high coverage of trees. This metaphorical phrase has been translated literally in the above case. The target readers can taste the original flavour by literal translation and will not confuse by the illustration beside the text.

3.3. Case Analysis on the Syntactic Translation

Since English and Chinese are varied in their expressions, the sentence structures are quite different in written text, especially in some publicity material. Thus, it is necessary to restructure the sentence pattern and remain the key information in the translation. Only by this way, can it be understood by the western tourists and spread Yao's culture to the world. The following cases will be analyzed from a syntactic level.

ST: 有人统计，中国发现《过山榜》126 份，泰国 3 份，越南 2 份，共 131 份。

TT: According to statistics, it has been found 126 ones in China, 3 in Thailand, and 2 in Vietnam, totaling 131 ones.

The above case has introduced a historical literature — Guoshanbang, which records Yao's history in characters. As the source text doesn't mention the people who calculated the amount of Guoshanbang, the target text has omitted it by restructuring the sentence. Moreover, the original text is written in an active voice, while the target text is a passive one so as to adapt to the expressive habit of the target readers. Taken the different expressions between Chinese and English into consideration, free translation is adopted in the translation. Though the target text has restructured the sentence pattern of the original, it remains the important information, namely the amount of Guoshanbang, which is the important information in this informative text.

ST: 瑶族在不断迁徙的历史中逐渐形成了依山而居、据山而坐、靠山而食的生活方式。

TT: In the history of constant migrations, the Yao people have gradually formed a lifestyle of living close to mountain, living on the mountain, and relying on the mountain for food.

The above case describes Yao people's lifestyle. The source text is a simple sentence with three parallel attributes, namely "依山而居", "据山而坐" and "靠山而食". All the three attributes are modified "生活方式"(lifestyle). Pre-modifier has been widely used in Chinese, no matter how many modifiers appears in a sentence. However, English is apt to adopt post-modifier when the amount of modifier is more than two. In order to make the translation smooth to read, the translator puts those three modifiers behind "lifestyle" and uses V-ing form to translate the four-character modifiers in Chinese. By the help of inversion, it maintains all the information of the original and present a target text which foreign readers are quite familiar with.

4. Defaults and Improvements

By collecting and analyzing the publicity material in the Yao nationality museum, it has found some defaults in the English translation, which is detrimental to better spread its culture to foreign friends. Some of the errors are spelling mistakes which can be avoided if the translators check the translation after finishing it. However, other translation errors are caused by the misunderstanding of the distinctive culture in Yao nationality. The reason for such default may be that the translators are lack of the knowledge of Yao's culture. Besides that, some of the English expressions are not grammatically and logically correct, which fails to present a smooth and coherent translation. The following part will analyze the defaults from lexical and syntactic level.

4.1 Lexical Default and Improvement

The following cases are contained some defaults in lexical level. By analyzing the default in each case, this paper will provide a better solution to translate the lexical expression in the publicity materials of the Yao nationality museum.

ST: 坳瑶是勉瑶的一支，自称"三盘四赵"。

TT: Being a branch of Mian Yao, Ao Yao calls itself "Three Pan and Four Zhao".

"盘 (Pan)" and "赵 (Zhao)" are two surnames that enjoy the most population in the branch of Ao Yao. According to the source text, the number "三 (three)" and "四 (four)" are abstract in the underlined phrase, "三盘四赵". Cultural Theory requires the translator strive to maintain the original culture in a text as much as possible. Thus, it can be used transliteration plus annotation to translate "三盘四赵" into "San Pan Si Zhao"(most people share the surnames Pan and Zhao).

4.2 Syntactic Default and Improvement

The syntactic defaults can be divided into three categories. Firstly, the target sentence doesn't translate the information hidden in the source. Secondly, the target sentence misunderstands the meaning of the original. Lastly, grammatical mistakes make the translation less logical and relevant to the context.

ST: 费孝通先生初上瑶山负伤后，回江苏吴江休养。

TT: Mr. Fei Xiaotong first went to Yaoshan to investigate his injury and returned to Wujiang, Jiangsu Province for rest.

Fei Xiaotong, a well-known Chinese anthropologist went to Jinxiu county with his wife, Wang Tonghui in 1930s. Unfortunately, they had an accident when they were on their way to Ao Yao village. Wang Tonghui died in the accident while Fei Xiaotong was seriously injured. The underlined part in the above target text mistranslates the information in the source. It regards "his injury" as an object of Mr. Fei's investigation. Such a translation will cause misunderstanding and confusion to foreign friends who come here to know more about Mr. Fei's story. Thus, it can be revised as follows. "After Mr. Fei Xiaotong was seriously injured in his first visit of Da Yao mountain, he returned to Wujiang, Jiangsu Province for rest." The improvement can achieve an equivalence with the original text and provide a correct logic to the foreign guests.

5. Conclusion

As one of the few museums that has both Chinese and English publicity material in Guangxi, the museum of the Yao nationality has

shown the distinctive culture of Yao people with vivid illustration and decent introduction. Guided by the Cultural Translation Theory, most of the translations provided in the museum are acceptable and readable. When translating culture, the translators should try their best to achieve a functional equivalence rather than a word-to-word equivalence with the original text.

As it is known by all, translation is by no means an easy task, especially when it comes to cultural translation. By analyzing the defaults in the above cases, it has summarized some principles dealing with cultural translation. First and foremost, translators should have a full understanding of culture-load expressions before they start to translate the publicity material. Before they render the translation, translators not only serve as decoders but readers with cross-cultural thinking. When it comes to some unfamiliar expressions, they should try their best to search the correct meaning and strive to explain the meaning to the target readers. Moreover, translators should grasp the grammatical rules, contextual coherence, and expressive habit of target culture and language, which will ensure the culture they conveyed is accepted and understood by target readers. Last but not the least, translators should be more considerate when they translate the culture literally. Literal translation is an effective and convenient method to translate culture. But sometimes the culture of ethnic minorities is too unfamiliar to be understood by the target readers. For this sense, connotation, paraphrase and free translation are likely to use in translation so as to achieve a functional equivalence with the source text.

References

[1]Bassnett, Susan & Andre Lefevere. Translation, History, and Culture [M]. London: Printer, 1990.

[2]Bassnett, Susan & Andre Lefevere. Constructing Cultures: Essays on Literary Translation[M]. Bristol: Multilingual Matters, 1998.

[3]Li Guanlan. Investigation on the Current Situation of External Publicity and English Translation of the Intangible Cultural Heritage in Jinxiu [J]. Study of Language and Culture, 2023(3):171-174.

[4]Liao Fei. A Study on the Cultural Translation of Yao Nationality of Jinxiu County from the Perspective of Eco-translatology: a case study of Yao's marriage culture [J]. English Square, 2022(6):28-30.

[5]Zhang Xinpeng. A Study on the English Translation of Expressions with Chinese Characteristics from the Perspective of Cultural Translation Theory: A Case Study of China's Government Work Report from 2018-2020 [D]. Jilin University, 2021.

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The practical exploration of PBL teaching method in the teaching of Marxist philosophy theory courses

Chenyu Li

Beijing Forestry University，Beijing 100091, China.

Abstract: In the field of education, the evolution and innovation of teaching methods have always been the key to pursuing more effective learning. Problem driven learning, as a cutting-edge teaching method, has attracted much attention due to its emphasis on problem-solving and student-centered learning. On the other hand, Marxist philosophy, as a theoretical system of critical thinking and social practice, is equally important for modern education. This article aims to explore the practical application of PBL teaching method in Marxist philosophy theory courses. By combining the problem driven and student engagement characteristics of PBL, as well as the ideological connotations of Marxist philosophy, this article will delve into how to effectively integrate these two, providing students with more challenging and practical learning experiences, aiming to provide new insights for innovative teaching methods in the field of education.

Keywords: Marxist philosophical theory; PBL teaching method; Course teaching; practice

The PBL teaching method is problem oriented, student-centered, organized through group discussions, and fundamentally aimed at cultivating abilities and qualities. It is a new teaching method based on problem-based learning. In the teaching of Marxist philosophy theory courses, by learning and drawing on the beneficial components of PBL teaching method, exploring and attempting student-centered and student-centered teaching methods and means, cultivating students' comprehensive abilities and qualities, and improving the effectiveness of theoretical course teaching.

1. Overview of PBL teaching method

1.1 The Principles and Basic Framework of PBL Teaching Method

The PBL teaching method focuses on problems and aims to promote students' self-directed learning and deep thinking. The principle is to establish real-life problems, encourage students to think across disciplines, and promote learning through collaborative problem-solving. The basic framework includes problem posing, team collaboration, self-directed learning, and presentation of results. Teachers are no longer traditional knowledge imparters, but guides who inspire students to learn. Students play an active role in PBL, actively building knowledge systems and cultivating problem-solving abilities. The PBL framework encourages independent and critical thinking, providing students with a deeper learning experience, promoting deep absorption and long-term memory of knowledge, and making it easier to apply knowledge to practical scenarios.

1.2 Comparative analysis of PBL and traditional teaching methods

Traditional teaching methods focus on teachers imparting knowledge, emphasizing classroom lectures and note taking memory, while PBL focuses on student independent exploration and teamwork. Traditional teaching often involves linear and one-way knowledge transfer, while PBL is a problem centered, iterative learning process. Traditional teaching tends to focus on standardized content teaching, while PBL encourages students to solve practical problems, cultivate critical thinking, and problem-solving skills. Traditional teaching usually limits the level of student participation and thinking, while PBL encourages students to provide independent insights and explore diverse solutions. These comparisons highlight the student-centered and diversified learning paths of PBL teaching method, enabling students to participate more deeply in learning and cultivate problem-solving abilities.

2. The Practice of PBL Teaching Method in Marxist Philosophy Theory Course

2.1 Problem design

The problem design of PBL in Marxist philosophy theory courses needs to be carefully conceived to promote students' deep understanding and application of Marxist thought. The key to problem design lies in selecting practical problems that can stimulate students to think and explore, while incorporating the core concepts of Marxist philosophy. Questions can be designed to address contemporary social issues, such as class differentiation under capitalism or the impact of commodity economy on social relations. Questions may include: "How to understand class contradictions and exploitation in contemporary society?" or "How to apply Marxist perspectives to interpret the essence of commodities in contemporary market economy?" Such questions can guide students to use Marxist ideological frameworks to analyze social phenomena and explore possible solutions. In addition, problem design can also be combined with case studies to enable students to apply Marxist theory in practical scenarios. For example, proposing a social problem in real life requires students to propose solutions based on Marxist perspectives, such as "How to use Marxist perspectives to solve the impact of multinational enterprises in developing countries in the current wave of globalization?" The problem design should be flexible, guiding students to explore and think deeply, while closely adhering to the core of Marxist philosophy, stimulating students' interest and critical thinking ability.[1]Through such problem design, students can more intuitively understand and apply the theories of Marxist philosophy, cultivate critical thinking and the ability to solve practical problems.

2.2 Group exploration

Group exploration encourages students to jointly study problems within the group, and to discuss and cooperate with Marxist philosophical theories. This collaborative learning approach stimulates students' teamwork spirit and promotes the collision and communication of different thoughts. Each group member can provide unique perspectives and insights for problem-solving, thereby enriching the entire learning process. Through group exploration, students can not only gain a deeper understanding of the complexity of Marxist philosophy, but also cultivate teamwork and communication skills. Teachers play the role of guides in this process, providing timely guidance and feedback to ensure that students understand and apply Marxist ideas in exploration, and apply them to the ability to solve practical problems. This group exploration approach promotes comprehensive learning and thinking, providing students with a richer academic experience.

2.3 Design scheme

In PBL teaching, designing a plan is an important link to ensure that students deeply explore Marxist philosophical theory. The design of the plan needs to combine the problem context and the learning needs of students, creating a challenging and inspiring learning environment. An effective design solution is to provide a comprehensive case that requires students to analyze, discuss, and propose solutions within the team. For example, in the context of contemporary social issues, such as the impact of globalization on social structure and culture, students are required to analyze them using Marxist perspectives and concepts, and propose feasible solutions. This design requires students to deeply explore the essence of the problem, apply the Marxist theory they have learned to engage in practical thinking and problem-solving. The design plan should focus on cultivating students' critical thinking and problem-solving abilities.[2]To achieve this goal, the program design can include a series of learning tasks and resources, such as literature reading, case analysis, group discussions, and coaching guidance. Through these tasks, students will continuously explore and apply the core theories of Marxist philosophy, and apply them to practical problems.

3. Strategy Analysis of Improving PBL Teaching Method in Marxist Philosophy Theory Course Teaching

3.1 Integration of theory and practice

The teaching of Marxist philosophy involves both theoretical connotations and practical applications. The integration of theory and

practice is crucial when integrating PBL teaching methods. In teaching, specific cases and problems need to be designed, combined with the core concepts of Marxist thought, to stimulate students' attention to social issues and guide them to analyze and solve them from a Marxist perspective. This integration can help students better understand theories and apply them to practical situations.

3.2 Accuracy of problem design

Accurate problem design is the key to guiding students to think and deepen their learning. Regarding Marxist philosophy, problem design needs to consider its core ideas, take real-life social problems as the background, and stimulate students' ability to use Marxist perspectives for thinking and analysis. These questions should be challenging and can stimulate students to think critically, rather than just requiring simple answers. The setting of the problem needs to take into account the history and contemporary practice of Marxism, and encourage students to explore its applicability and significance in real society. Through problem design, students are inspired to study and analyze social phenomena, and apply Marxist philosophical theories for thinking and discussion. This kind of problem design can arouse students' interest, guide them to deepen their learning and thinking, and thereby enhance their understanding and application ability of Marxist philosophical theory.[3] At the same time, problem design should also take into account the actual level and knowledge reserve of students, ensuring that the problem can stimulate students to actively learn and explore under certain difficulties, rather than making them feel too difficult or too simple. Therefore, the accuracy of problem design is not only related to the learning effectiveness of students, but also to the practical application effect of PBL teaching in Marxist philosophy courses.

3.3 Student participation and guidance

The active participation of students is the key to implementing PBL teaching methods. Teachers need to ensure that students can effectively explore Marxist theory and understand its application in solving social problems. Teachers should provide timely feedback and guidance, guide students to think deeply and explore, and promote their understanding and application of Marxist philosophy theory in practice. In addition, teachers need to pay attention to the learning progress and difficulties of students, flexibly adjust guidance strategies, and ensure that every student can receive support and encouragement during the learning process. The effective implementation of student participation and guidance strategies can stimulate students' learning motivation, cultivate their understanding and application ability of Marxist philosophy. Through full participation and guidance, students will have a more comprehensive understanding of Marxist theory, while also developing practical abilities to solve practical problems. This teaching strategy can stimulate students' interest in learning, promote their academic development and depth of thinking.

3.4 Evaluation and continuous improvement

Through regular evaluations, teachers can understand the learning situation of students and the actual effectiveness of PBL teaching method in Marxist philosophy theory courses. Based on the evaluation results, teachers can adjust problem designs, optimize teaching plans, and even improve teaching methods to better serve the learning needs of students. The continuous improvement process has led to the continuous development of PBL teaching method in Marxist philosophy courses, continuously improving teaching effectiveness and student learning quality.

4.Conclusion

In summary, the integration of PBL teaching method into Marxist philosophy theory courses has promoted students' deep understanding and application of theory and practice. Accurate problem design triggers students to deeply reflect on social reality, while student participation and guidance strategies cultivate their critical thinking and teamwork abilities. In this process, teachers play the role of guides, inspiring and guiding students to explore the core concepts of Marxist philosophy. Continuous evaluation and improvement ensure the effectiveness of teaching strategies and the quality of student learning. The perfect combination of PBL teaching method and Marxist philosophy not only expands students' academic horizons, but also cultivates their ability to solve practical problems, laying a solid foundation for their

future academic and social practice.

References

[1] Han Shiqiang Reflection on the Applicability of PBL Teaching in the Course of “Introduction to Basic Principles of Marxism” [J]. Journal of Northwest Adult Education College, 2021 (3): 44-49.

[2] Chen Xiaolin Integrating PBL into ideological and political education to achieve the unity of indoctrination and inspiration [J]. Volume, 2020, (3): 246-247.

[3] Cheng Huimin Research on the Application of LBL+PBL Teaching Method in “Introduction to Basic Principles of Marxism” [J]. Heihe Academic Journal, 2018 (1): 156-157.

Construction of a Reading Promotion Model for University Libraries Based on Student' User Needs

Wenhui Ai*, Junzhi Wang

Department of Management, International Education Management Major,Woosong University, Daejeon, 34606, Republic of Korea

Abstract: Modern libraries' functions are shifting to the direction of improving the quality of reading promotion, and it is of great significance to promote the construction of reading promotion in college libraries based on the needs of student users. From the perspective of analyzing the elements of student user demand in colleges and universities, the necessity of student user participation in reading promotion in college libraries is explained. To address the problems of low participation and poor effect of student users in the reading promotion model of college libraries, and to combine the psychological characteristics and developmental needs of student users in reading promotion activities, we try to build a diversified reading promotion model. The main measures of this model include: doing a good job of researching the reading needs of student users, strengthening the publicity and training of student users, establishing a sound system of reading promotion in college libraries, and improving the intelligence of reading promotion in college libraries.

Keywords: Reading Promotion; College Libraries; Student User Needs

1. Introduction

From the 2006 initiative issued by the Central Propaganda Department in conjunction with 11 departments on launching reading activities for all, to the promulgation in 2021 of the Outline of the Fourteenth Five-Year Plan for the National Economic and Social Development of the People's Republic of China and the Vision 2035, reading for all has entered the national policy documents and risen to the level of a national strategy. Over these ten years, reading for all has shifted from concept to practice, as evidenced by the development of a multifaceted system of regular work, educational projects, and educational planning, and coupled in practice with public services, the cultural industry, education and teaching, and integrated media technology, among other important areas, to form a cultural ecosystem that continues to act as a catalyst for reading for the whole nation. At the school level, in order to improve students' information literacy, ideological and moral quality, and scientific and cultural literacy, the State Council considered and passed regulations on the promotion of reading for all in 2017, and the Ministry of Education issued the Regulations on Libraries of Elementary and Middle Schools in 2018, which explicitly puts the active creation of a book-scented campus and the organization of various forms of reading activities to promote the work of reading for all; and encourages the development of book lending and reading data analysis and targeted improvement of student Reading as an important task of school library work [1]. It can be seen that the functions of modern libraries are being transformed in the direction of improving the quality of reading promotion.

Since 2003, the Chinese Library Association has included the work of reading for all in its annual plan, and after nearly two decades of efforts, reading promotion has gradually developed from a spontaneous, extraordinary and complementary library service to a conscious, regularized and institutionalized library service work. From the conceptual point of view, it is generally believed that reading promotion is a general term for all the work that libraries engage in utilizing all kinds of resources, building all kinds of platforms, and constructing mechanisms to carefully plan and innovatively promote in order to cultivate the reading habits of readers, stimulate their interest in reading, enhance the quality of reading, and guide the direction of reading, as well as to enrich the readers' daily life, knowledge reserve, and improve their school ability. In this study, whether it is reading promotion depends on whether its services have played a substantial role in promoting student users, enriching campus life as well as academic and professional knowledge reserves through reading. Based on such considerations, college libraries should be based on the development needs of student users, oriented to user needs, build a reading promotion service model, establish a sound long-term mechanism for reading promotion, and better serve the overall development of students in colleges and universities.

2. Significance of the research

In the era of popularization of higher education, the demand of university student groups for library subject services and higher-quality reading promotion services is becoming more and more diversified and individualized, and the contradiction between the service capacity of the existing reading promotion platform and the demand of student users is becoming more and more acute, and the reading promotion service platform and the corresponding mechanism can no longer satisfy the demand of student users, who urgently call on the library to carry out the innovation and service upgrading of the reading promotion business.

2.1 Helping to optimize and enrich the reading promotion service system of college libraries

The vitality of reading promotion activities in college libraries comes from the content, that is, reading promotion activities should adhere to the principle that content is the king. The reading promotion construction of university libraries should take advantage of its rich resources and scientific planning to play the functions of subject specialization construction, teaching, teaching and research, student development, campus culture construction services, so as to highlight the core competitiveness of university libraries and the development trend of the future. Thus, it is crucial to establish and optimize the content system of reading promotion in college libraries to highlight the uniqueness, richness and systematization of reading promotion. However, the current reading promotion activities in college libraries are generally characterized by the low participation of student users, the lack of participation mechanisms and poor participation. The reason for this is that the problem-oriented construction of reading promotion in college libraries is not clear, the content construction is not systematic, and there are many problems in the way of service supply. Promoting the construction of reading promotion in college libraries based on users' needs will be conducive to optimizing and enriching the content system of reading promotion in college libraries, and constructing a demand-oriented reading promotion service and work mode.

2.2. Helping to promote the transformation and development of university library functions into reading promotion services

The functions and service programs of university libraries in the traditional sense are manifested in the aspects of education and teaching, scientific research, talent cultivation, cultural cultivation, etc., and the core functions are educational functions and information services. The promotion of reading activities for all teachers and students and the creation of knowledge-based bookish higher education is one of the core indicators of the connotative development of a university. The strategic competitiveness of a university is inevitably the enhancement of talent cultivation capacity brought about by connotative development after the accumulation and perfection of the sectional system. In the era of knowledge economy, the reading atmosphere and reading habits of college students are important for the overall enhancement of talent cultivation capacity of colleges and universities. Under this background, the reading promotion function of college libraries is getting more and more attention. Throughout the current situation, reading promotion service in college libraries is generally characterized by backward service concepts and methods, incomplete service teams, and incomplete service mechanisms leading to low service quality. For this reason, colleges and universities combined with the service attributes of reading promotion activities, cultural characteristics and the overall situation of students' professional development, innovation to promote reading promotion supply-side and demand-side reforms, fully mobilize the participation of college and university student users enthusiasm, will help to improve the overall level of reading promotion construction, and further force the reading promotion supporting service system construction and service quality improvement, revitalization of the reading promotion of the innovation and development of vitality, and to promote the transformation and development of college and university libraries to reading promotion services.

2.3. Helping to fully activate the value function of reading promotion activities in college libraries

The development of reading promotion is an important path for college libraries to seek core competitiveness advantages in the era of knowledge and informationization, and college libraries carry out reading promotion services, focusing on scientific planning and design to

bring into play the value function of precise services. According to the basic function requirements of college libraries, their function can be specified as the establishment of a sound literature and information resource system and service system to serve colleges and universities, and their purpose is to participate in the construction of informationization of education and teaching in colleges and universities, high-quality talent cultivation and the construction of campus culture, and to utilize their own advantages in information resources and professional services for the connotative development of colleges and universities. Therefore, reading promotion in college libraries should break through the traditional book resource reading-based form in terms of connotation and service content, such as bibliographic promotion, guided reading activities, book exhibitions, etc., and should open up reading horizons, focusing on the needs of students' extensive reading, in-depth reading, and media integration, cultivating diversified reading promotion participants, expanding the reading promotion service horizons, integrating the reading promotion media, and cultivating the theoretical connotations of reading promotion. Reading promotion theory connotation, to create and form a new form of reading promotion centered on information technology, such as the establishment of a reading promotion model based on new media, big data, artificial intelligence and other information technology. Based on the needs of student users to promote the construction of reading promotion in college libraries, it helps college libraries to deeply embed and support the talent cultivation work and connotative development of colleges and universities, and fully release its value function.

3. Analysis of the demand elements of student users' participation in reading promotion in college libraries

From the point of view of demand theory, user demand in this paper includes two aspects of user psychological needs and user development needs, is the user in the process of engaging in creative thinking activities, in order to solve some of the problems arising from the psychological activities of the demand for information on knowledge. User needs to a certain extent with the user's education, major (discipline), information literacy, occupation, thought and behavior, mental state and so on there is a close connection.Under the background of knowledge economy, information society and education informatization, students' demand for library content also gradually presents diversified and personalized trends, college libraries are facing unprecedented challenges and changes, and library management and services are gradually forming the concept of user demand-centered. Academics have reached a consensus on user needs and improving user satisfaction, and have put forward user-centered theory and demand-centered theory and other related theories. The demand-centered theory insists that demand is the fundamental driving force for the development of all affairs, which provides the theoretical basis and support for the transformation and development of reading promotion function in college libraries in the new era.

Analyzed from the perspective of psychology, the theory of needs plays an important role in the formation and change of students' reading behavior. Psychological needs are the important driving force of individual behavior, and human behavior is directed by the basic psychological needs and the degree of satisfaction [2]. By mining the key psychological needs of student users and their degree of satisfaction, the mechanism of reading behavior can be explored and analyzed, so as to formulate a targeted reading promotion model that promotes the formation of good reading behavior and habits.

Table 1 A Framework of Requirement Elements for Student User Participation in Reading Promotion Activities

Reader Type	Psychological Characteristics	Development Needs
University student	Hobbies and interests	Reading ability
	Sense of recognition	Expanding horizons and enriching knowledge
	Curiosity	Research capability
	Herd mentality	Future development

In order to accurately understand the psychological mechanisms and obstacles of student users' participation in library reading promotion activities, this study took the student users of Yulin College Library as the survey object, and carried out a survey on the willingness of student users to participate in reading promotion activities in college libraries (below referred to as the willingness to survey) from October to December 2022. The willingness survey utilized the interview method and the network questionnaire system Questionnaire Star to distribute 200 network questionnaires, of which 192 questionnaires were recovered.

3.1 Analysis of Psychological Needs of Student Users to Participate in Reading Promotion

Psychological demand analysis is to analyze the strength of the psychological characteristics of student users in the process of participating in library reading promotion activities, so as to grasp the general psychological characteristics of student users in participating in reading promotion activities, and to strengthen the pertinence of the construction of reading promotion activities. Through the statistical analysis of the survey results, 87.50% of the student users indicated that hobbies and interests were the most important factor that motivated them to participate in reading promotion activities in libraries, 36.98% of them believed that they participated in reading promotion activities in libraries out of curiosity, and 41.67% pointed out that they participated in reading promotion activities in libraries in order to obtain a positive sense of recognition from the libraries. It has been argued that positive identification with the library by readers helps to increase their emotional attachment to the library, which tends to generate motivation to utilize the library [3]. In addition, statistical analysis found that some students (about 8.85%) tend to make consistent choices with their roommates and classmates, i.e., herd mentality. Therefore, hobby, sense of recognition, curiosity and herd mentality are the main psychological characteristics of college students' participation in reading promotion activities, and the strength of the role of different psychological characteristics varies.

Table 2 Population distribution of psychological characteristics

Levels	n	%
Hobbies and interests	168	87.50
Sense of recognition	80	41.67
Curiosity	71	36.98
Herd mentality	17	8.85

3.2 Analysis of the Development Needs for Student User Participation in Reading Promotion

The highest level of human needs is the development needs, i.e., the needs for comprehensive development of human beings in all aspects of morality, intelligence, physicality, aesthetics, and labor, and the development needs centrally reflect the essence of human beings. Through the statistics of the survey results and interviews with some students, it is found that in addition to the four psychological factors mentioned above, the improvement of reading ability, the development of vision and knowledge, the improvement of scientific research ability, and the future development plan have become the most important developmental needs and internal impetus for student users to participate in library reading promotion activities. The survey results show that 92.71% of the student users want to improve their reading ability, 88.54% want to expand their horizons and enrich their knowledge by participating in reading promotion activities, 42.19% think that the main reason for their participation in reading promotion activities is to improve their academic level, so as to lay a foundation for their future graduate studies, and 38.02% want to improve their reading ability by participating in reading promotion activities, while 38.02% want to improve their reading ability by participating in library reading promotion activities. 38.02% of the student users hope that participating in reading promotion activities can help them in their future development planning. The results of the survey show that whether students participate in library reading promotion activities depends on whether they can help them improve their abilities, which will further promote the breakthrough in the design of reading promotion activities in college libraries in terms of breadth and depth.

Table 3 Population distribution of development needs

Levels	n	%
Reading ability	178	92.71
Expanding horizons and enriching knowledge	170	88.54
Research capability	81	42.19
Future development	73	38.02

In summary, the cognitive development of contemporary college students is in the rising stage and tends to be mature and stable, as a social independent individual has become more and more clear about what kind of knowledge and ability enhancement can be obtained by participating in reading promotion activities in libraries, which is no longer only out of curiosity, herd mentality and other factors. College

libraries should deeply grasp the expectations and psychological needs of student user groups for reading promotion activities, so as to plan and design high-quality, in-depth and broad reading promotion activities to attract more student user groups to participate in them. At present, many colleges and universities in China to organize reading promotion activities still remain in the book recommendations, book clubs, book drifting, expert lectures and other themes, a single mode of the traditional form of a single level, to meet the growing demand for the enhancement of college students for the enhancement of the comprehensive ability, especially the enhancement of the level of the inherent needs of the academic level, and to ignore the essential differences between the libraries of institutions of higher learning and the public libraries, which will lead to the library of higher education These will lead to a series of problems such as lack of professionalism, lack of innovation and transformation, and poor effect of reading promotion activities in college libraries.

4. The Method of Constructing the Reading Promotion Model in University Libraries

4.1 Make a research on the reading needs of the students' users

Through surveys and interviews with some college students, we found that the reading needs of college students are characterized by dynamism, complexity and multi-level. In this context, reading promotion staff in college libraries must conduct in-depth surveys to grasp the reading needs of college students and understand their real development needs. They should actively communicate with students, such as conducting relevant research before reading promotion activities are held, or arranging professional subject librarians to conduct in-depth survey visits to faculties and departments, collecting information related to professional (subject) teaching and students' reading needs, capturing students' reading direction and reading needs, accurately grasping the types of books to read and reading preferences, and filtering out the relevant books based on the results of the survey through professional book resources. At the same time, it is necessary to dynamically update the library collection resource base, do a good job in book purchasing, editing, shelving management and information retrieval, to ensure the timely introduction and updating of the collection of library resources, to meet the dynamic and diversified reading needs of college students, and to enhance the effectiveness of the library's reading promotion.

4.2 Enhancement of reading promotion publicity and training in college libraries

All the services of reading promotion in college libraries should always meet the basic needs of student users, and strengthening the publicity and training for student users is the basic work to meet the needs of student users. With the rapid development of Internet information technology and new media platform technology, it will become more convenient to carry out reading promotion and training. College libraries should strengthen the publicity and training for student users of reading promotion activities, and should combine the professional problems encountered by student users in the process of professional development and specific course learning, and periodically hold reading promotion publicity and training activities, which will help to cultivate the information literacy of student households and improve the user's retrieval skills, enhance the ability to improve professional learning and professional development, and cultivate a healthy and positive mindset. At the same time, periodic library reading promotion and publicity activities also help to enhance student users' knowledge of various library resources, help to improve the efficiency of the utilization of university library collection resources, and lay the foundation for the sustainable promotion and development of university library collection resources.

4.3 Establishment of a sound reading promotion system in college libraries

Along with the enrichment and diversification of digital resources in college libraries, the dynamization and complexity of students' user needs, as well as the automation and intelligence of the reading resource platform, the reading promotion system mechanism of college libraries should be upgraded simultaneously. Practice has proved that a scientific management system is the fundamental to improve the quality of reading promotion services in college libraries. Through the analysis of related literature, it is found that although the reading promotion in college libraries in China has some achievements in the system construction, it mainly focuses on the formulation of the activity rules of reading promotion activities, while the evaluation system and feedback mechanism that can reflect the effectiveness of the reading

promotion activities are very lacking. Therefore, college libraries should strengthen the systematic construction of reading promotion related systems to ensure that reading promotion activities release their due value, for example:

First, it is necessary to strengthen the construction of the team and its training system, to build a professional team of library reading promotion librarians based on subject (specialty) areas, and to establish and implement the responsibility system of subject librarians. Secondly, it is necessary to strengthen the awareness and ability of project management for reading promotion, establish a reading promotion project system, and lead the high-quality development of reading promotion activities with the construction and innovation of high-quality projects. Thirdly, to establish a feedback mechanism for evaluation of reading promotion activities, the organizers of reading promotion activities in colleges and universities should go deep into the faculties and departments through surveys and researches to understand the evaluation, satisfaction, suggestions and feelings of the users on reading promotion activities, so that the organizers and planners of reading promotion activities can improve in time and absorb the good feedbacks to make reading promotion activities with high satisfaction of the users. Fourth, the establishment of reading promotion alliance mechanism, in the context of the double dilemma of shortage of funds and talents, college libraries should strengthen the construction of reading promotion alliance mechanism among multiple subjects, with the help of intelligent resource platform to build a common construction, governance and sharing of the collection of resources and data security mechanism and disciplinary service ecosystem, and make full use of the advantages of various resources to organize high-quality reading promotion activities to meet the readers' high demand.

4.4 Enhance the intelligence of reading promotion in college libraries

Accompanied by the development of big data, cloud computing, artificial intelligence, Internet of Things, virtual reality information technology and deeply embedded in the field of education, technology in the construction of educational service platforms and the service process around the platform to play an obvious driving leading role [4]. In the construction process of reading promotion in college libraries, it is necessary to make good use of big data technology and artificial intelligence technology to carry out accurate discovery, identification, prediction and intelligent and personalized service of user demand, further realize accurate positioning and management of users, and improve user literacy and platform service capacity [5]. It is necessary to make full use of the real-time data collection, acquisition, statistics, analysis, storage and other functions of Internet information technology, increase the construction of reading promotion platforms, establish a reading promotion intelligent platform combining third-party communication tools and self-research open platforms, and establish a regular platform as the carrier of the pluralistic and ubiquitous reading promotion interaction. In terms of content, it is necessary to strengthen the construction of reading promotion content and provide hierarchical service content; in terms of service, it is necessary to develop functional modules with different needs, such as intelligent recommendation, sharing, in-depth reading, intelligent push, paid service, personalized customization, etc., so as to improve the automation and self-service experience of student users when using the platform, and to satisfy the multilevel, diversified and personalized reading service needs of students.

References

[1] Ministry of Education. (2018). Circular on Library Regulations for Primary and Secondary Schools [EB/OL].http://www.moe.gov.cn/srcsite/A06/jcys_jyzb/201806/t20180607_338712.html.

[2] Deng, L. Y., Fang, X. Y., Wan, J. J., Zhang, J. T. & Xia, Cuicui. (2012). The relationship between college students' psychological needs and their fulfillment and Internet addiction. Psychological Science (01), 123-128. doi:10.16719/j.cnki.1671-6981.2012.01.002.

[3] Ding, L. H. (2013). The effect of reading promotion on college students' library identity - A perspective based on personal perception. Library Forum (04), 153-156+161. doi:CNKI:SUN:TSGL.0.2013-04-032.

[4] Zhong, H., Wang, T. Y. & Ma, X. F. (2022). Research on the construction of intelligent subject service platform of university library driven by user demand. Intelligence Theory and Practice (02), 182-190. doi:10.16353/j.cnki.1000-7490.2022.02.024.

[5] Chu, J. W. & Wang, M. (2018). Research on the countermeasures of disciplinary precise service of university libraries under the background of Double First-Class construction. Modern Intelligence (07), 107-112+127. doi:CNKI:SUN:XDQB.0.2018-07-015.

An Exploration of Senior High School English Teaching Based on Rogers' Humanistic Learning Theory

Xuran Zhao

Teacher Education Institute, Hebei Normal University, Shijiazhuang 050024, China.

Abstract: The Humanistic Learning Theory emerging in the 1960s and 1970s emphasizes fully manifesting the students' subjective position and utilizing teacher's role as a facilitator in education, advocates the cultivation of the "whole" child, and stresses the learning process and learning ability. And the theory serves as an important source of inspiration and reference for English teaching in China. Based on a psychological perspective, this paper takes senior high school English teaching as the research object, exploring the advantages of using Rogers' humanistic learning theory and giving inspirations for senior high school English teaching.

Keywords: Rogers' Humanistic Learning Theory; Senior High School English Teaching

1. Introduction

According to the General Senior High School English Curriculum Standard (2017 edition), the English curriculum integrates instrumental and humanistic characteristics. English curriculum aims to develop students' language abilities, cultural awareness, thinking capacity, and learning ability. It emphasizes both language competence and humanistic literacy to prepare students for future English learning and lifelong development. Rogers, a humanistic psychologist, emphasizes student-centered education, focusing on the holistic development of students and promoting the acquisition of learning strategies and healthy values. The humanistic learning theory provides a new perspective for achieving English curriculum goals and maximizing students' learning potential. It is highly inspiring for English teachers to establish correct teaching views and update their educational philosophy.

2. Basic principles of Rogers' humanistic learning theory

Rogers put forward a series of hypotheses on meaningful learning in "Freedom to Learn", providing a novel and unique perspective on children's learning. The following are the basic propositions of his learning theory.

2.1 Learning process

According to Rogers, emotion and cognition are inseparable in student learning. Learning cannot occur without considering children's emotional feelings. The aim of education is to cultivate well-rounded individuals who excel in both cognitive and emotional aspects. They are called "perfect human beings" or "fully functioning person "by Rogers, who suggests that the focus of education should shift from knowledge acquisition to the development of sustained learning ability. The success of teaching relies on students' mastery of learning methods rather than the curriculum itself. At this point, the curriculum knowledge system is[1]secondary. Only those who can learn, adapt to change, understand the impermanence of knowledge, and actively seek knowledge are truly educated.

2.2 Learning influencing factors

Rogers identified two main factors influencing learning. The first is the "human" factor, where schools and teachers should prioritize students' needs and place them at the center of learning activities. Teachers should have faith in students' potential and respect their personal experiences and individuality. The second is psychological factors, including motivation, values, attitudes, and emotional experiences. Rogers believes that everyone has an inherent motivation for self-improvement and teachers should create a positive atmosphere that promotes students' personal growth. Additionally, the evaluation from others also affects learning as it can lead to positive or negative experiences and subsequently impact students' learning activities.

2.3 Recommended learning style

Rogers promotes meaningful learning, which goes beyond acquiring knowledge and encompasses the development of attitudes, per-

sonalities, and behavioral patterns. It involves integrating all aspects of an individual's experience. The degree to which children learn from materials depends on their personal connection to the material and their awareness of its significance. Unlike Ausubel's view, Rogers emphasizes that meaningful learning should consider the learner's entire state during the learning process, involving their physical and mental being. Rogers highlights four characteristics of meaningful learning: full attention, spontaneous and automatic learning, comprehensive development, and self-assessment.

2.4 Recommended teaching philosophy

Based on the humanistic perspective, Rogers believes that teachers should provide resources, create a conducive learning environment, and allow students to determine their own learning approach. The key to promoting student learning lies in fostering an atmosphere of sincerity, respect, concern, acceptance, and empathic understanding. Rogers suggests that teachers should act as facilitators and collaborators, respecting, understanding, and empathizing with students. They should anticipate and trust in the students' emotional and developmental growth and believe in their potential. Teachers should consistently treat students with sincerity, value their emotions, opinions, perspectives, and desires, and lead by example to build positive relationships and create an emotionally harmonious learning environment.

3. Implications of Rogers' humanistic learning theory for English teaching in senior high schools

3.1 Teaching objectives focus on cognitive and affective unity

Influenced by washback effect of the college entrance examination, English teaching often focuses excessively on vocabulary and grammar, neglecting students' core English competencies, especially their thinking capacity and learning ability. This contradicts China's advocacy for quality-oriented education. Therefore, when setting teaching objectives, teachers should not only aim for language knowledge acquisition but also focus on nurturing students' values, attitudes, emotions, and healthy personalities.

For instance, in the reading lesson "The Chinese Writing System" of book 1 unit 5 "Languages around the World" from People's Education Press for senior students, the teaching objectives extend beyond mastering new words related to Chinese characters. They also include understanding the development of the Chinese character system, developing reading strategies, enhancing cultural confidence, and cultivating logical thinking and expressive abilities through group debates.

3.2 Teaching methods emphasize learning by doing

According to Rogers, "learning by doing" is the most effective way to improve learning, that is, allowing students to directly face various practical problems. Therefore, we should carefully design various activities to provide students with real situations, so that students can gain cognitive knowledge of things through active participation in activities. As English teachers, we should make full use of characteristics of the subject to provide students with activities such as role-playing, interviews, debates, English corners, etc... Therefore, students can acquire knowledge and feel the joy of learning English through a series of activities. And This will enable students to take the initiative to find out the problems in their daily lives, learn English and use English with questions, and be bold enough to practice and innovate.

3.3 Teaching Content focuses on meaningful learning

The humanistic learning theory emphasizes respecting students, valuing their intrinsic motivation and needs, and selecting relevant teaching content to stimulate their interest and enhance their enthusiasm for learning. Meaningful learning occurs when students perceive the content as meaningful and applicable to real life. The newly revised senior high school English textbooks from People's Education Press are diverse, integrated with students' real-life experiences, and feature interesting topics that provide teachers with ample opportunities for implementing meaningful learning.

For instance, in the reading lesson "From Problems to Solutions" in Book 2 Unit 5 of English for Senior Students by People's Education Press, teachers can design pre-class questionnaires to explore the challenges faced by high school students at present. Presenting the questionnaire results during the lead-in section not only fosters a closer teacher-student relationship but also motivates student engagement. Additionally, teachers can incorporate familiar cultural heritage videos and pictures (such as paper cutting or Peking Opera) to prompt stu-

dents' reflection on heritage definition while promoting cognitive and emotional involvement.

3.4 Teaching evaluation Incorporates student self-assessment

According to Rogers, self-evaluation as the main basis for learning can develop students' independence, creativity, and autonomy. The General Senior High School English Curriculum Standards (2017 edition) advocate a diverse evaluation approach that combines formative and summative assessments. They emphasize the philosophy of evaluation for learning and consider students' emotions, attitudes, and values in English learning. However, traditional teaching mostly relies on teacher-centered evaluations which often result in limited feedback for students due to time constraints. This affects their learning quality. Therefore, self-evaluation advocated by humanistic learning theory has implications for senior high school English teaching.

Implementing student self-evaluation through the establishment of English learning portfolios is one way to achieve this goal. Portfolio assessment focuses on learners' reflection and self-assessment as its core element; hence it is also known as self-assessment[2]. For instance, improving English writing skills requires a step-by-step approach where student self-evaluation becomes crucial. Teachers can guide students in collecting their own writing works including first drafts, second drafts, or even third drafts to demonstrate progress. This process may also include self-assessment notes and plans for the next stage. Through such activities, students can develop their abilities in self-evaluation and reflection while improving their academic performance.

3.5 Teacher-student relationships emphasize harmony

Rogers believes that a harmonious classroom atmosphere promotes student development whereas a negative atmosphere makes them feel threatened, suppressed, and insecure. Establishing a good teacher-student relationship contributes to creating a harmonious learning environment. To establish such relationships teachers should first have a solid understanding of the English subject and be knowledgeable about students' lives and they should meticulously prepare the content for each class[3]. Secondly, teachers should skillfully use the question chain to guide students, allowing them to ask questions and providing them with positive feedback. Finally, teachers need to continuously enhance their own charisma and shape their personal style. Teachers should play the roles as guides and collaborators, in order that students can feel the charm of English with full attention and spontaneity.

4. Summary

The development of learning theories impacts the updating and progress of teaching theories. Important discoveries in psychology, especially in educational psychology, can influence education and teaching[4]. Applying Rogers' humanistic learning theory to high school English teaching aligns with the humanistic and instrumental aspects of the subject and promoting the development of contemporary secondary school students. However, no learning theory is perfect. Humanistic learning theory may overly emphasize students' individuality and emotions while neglecting knowledge impartation and systematicity, which may not conform the current teaching reality in China. Therefore, it is advocated to extract the essence of the theory and discard its drawbacks, and combine it with China's reality to form a teaching model suitable for the English language environment, so as to enhance the ability of English teachers to timely and flexibly apply humanistic learning theory in their teaching practices

References

[1] Pihuan. Application of Rogers' Humanistic Learning Theory in Piano Teaching[J]. Sichuan Drama,2021(11):149-151.

[2] Bahous, R. The self-assessed portfolio. A case study[J] Assessment&Evaluation in Higher Education,2008,33(4):381-393.

[3] Zhang Ying. Enlightenment of Rogers' Humanistic Education Thought on Junior High School English Teaching[D]. Nanjing: Nanjing Normal University,2013.

[4] Liu Xuanwen. A Review of Humanistic Learning Theory[J]. Journal of Zhejiang Normal University(Social Science Edition),2002(01):90-93.

Reflections on Higher Chemistry Education

——Study based on the aspartame carcinogenicity controversy

Song Deng, Xiaochun Wu*

School of Chemistry and Materials Science, Sichuan Normal University, Chengdu 610066, China.

Abstract: In this paper, we begin with a review of animal and human experiments on the carcinogenicity of aspartame, and then draw out the "seemingly contradictory" conclusions of two internationally renowned organizations, in order to arrive at a unanimous conclusion on the carcinogenicity of aspartame. Secondly, with the analysis of the in vivo reaction of aspartame, we analyze the criteria of the International Agency for Research on Cancer (IARC) for classifying the carcinogenicity grade of substances in order to dispel people's meaningless fears. Thirdly, based on the discussion of the carcinogenicity of aspartame, we reflect on the current problems in higher chemistry education. Finally, we will give rational advice on how to deal with aspartame in light of the lack of empirical studies.

Keywords: aspartame; carcinogenicity; carcinogenicity rating scale; higher chemical education

1. Introduction

On June 29, 2023, the International Agency for Research on Cancer (IARC) evaluated the potential carcinogenicity of aspartame (identification of carcinogenic hazards), and aspartame is once again in the "spotlight" of food additives. As early as 1981 when aspartame entered the market, the controversy surrounding it is continuous. What is aspartame? Is it really carcinogenic?

Following the International Agency for Research on Cancer (IARC) assessment, the Joint FAO/WHO Expert Committee on Food Additives (JECFA) will update its aspartame risk assessment, including a revision of the Acceptable Daily Intake (ADI) and an assessment of aspartame-related dietary exposures.[1] . In fact, long before this fiasco, there was a proliferation of papers analyzing the carcinogenicity of aspartame, with heated arguments for and against, for example, aspartame's adverse effects on blood cells, the brain, the liver, the kidneys, the nervous system, and so on[2] . But on the other side, for example, the European Food Safety Authority re-examined critically all existing scientific research on the safety of aspartame in animal and human trials, and the agency's experts ruled out the potential risk of aspartame causing genetic damage and cancer. The report states that a safe intake dose of aspartame for the general population is no more than 40 mg per kilogram of body weight per day, but that this upper dose limit does not apply to people with phenylketonuria[3] The report states that the safe dose of aspartame for the general population is no more than 40 milligrams per kilogram of body weight per day, but this dose limit does not apply to people with phenylketonuria.

2. Discovery of aspartame and its structure

Aspartame is an artificial sweetener that is an amino acid dipeptide derivative. Aspartame entered the market in 1981 when it was officially approved by the FDA for use as a food additive, and like saccharin and sweetener, it is a product of chance. It has been reported that G . D . Searle chemist Jim Schlatter was synthesizing a tetrapeptide, a molecule containing four amino acids, to test drugs for stomach ulcers. Schlatter inadvertently got a small amount of the dipeptide intermediate aspartyl-phenylalanine methyl ester on his hands. Later, he unknowingly licked his fingers before picking up a piece of paper, and a sweet flavor bloomed on his taste buds. At first he thought it was a donut he had eaten before the experiment, but suddenly remembered that he had already washed his hands prior to the experiment. Thus, like Falberg and Sveda, Schlatter traced the sweet flavor back to his lab[4] . Aspartame is chemically known as methyl aspartyl phenylalaninate, and after it enters the body, it is broken down in the gastrointestinal tract by esterases and peptidases into phenylalanine, aspartic acid, and methanol[5] It is also known as aspartyl phenylalanine methyl ester. Its structural formula is shown in the figure.

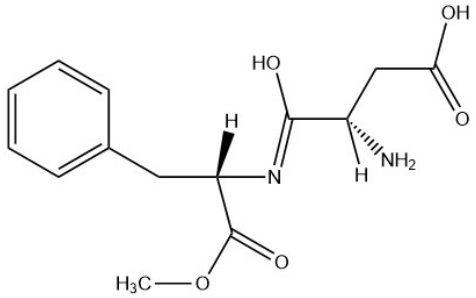

Figure 1 Chemical structure of aspartame

Aspartame is white powdery or needle crystal with hydrolysis degree of 1g/100ml (20℃). It is very stable at room temperature and weak acid environment[6] . Sweetness is 200 times that of sucrose; pure sweetness without any aftertaste; low-calorie weight loss; no need for insulin digestion, so it is suitable for obesity, diabetes and cardiovascular patients; anti-microbial, not afraid of mold, no caries; mixed with other sweeteners have a synergistic effect.[7] It has a synergistic effect when mixed with other sweeteners.

3. Aspartame in vivo reaction

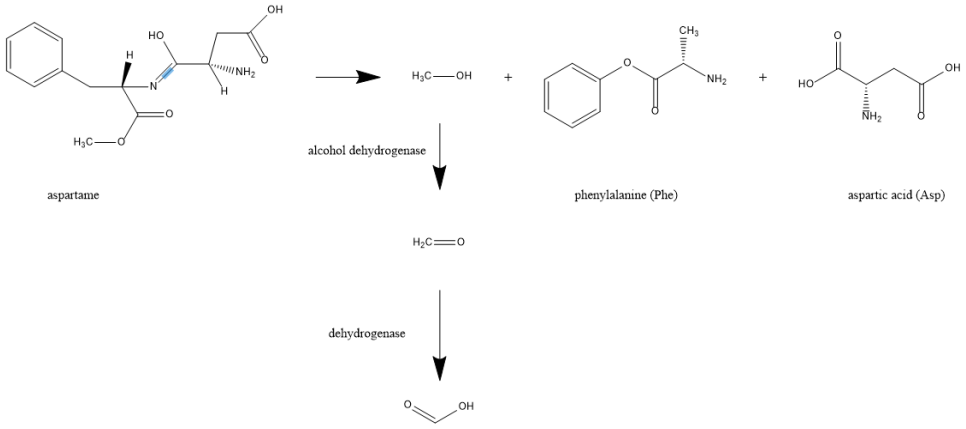

Figure 2 Reactions of aspartame in humans

As can be seen in Figure 2, aspartame undergoes the action of esterases and peptidases to produce substances such as methanol, which in turn reacts with alcohol dehydrogenase to produce formaldehyde, which is a class I carcinogen rated by WHO and the focus of many researchers' controversy over the carcinogenicity of aspartame. In addition to this, phenylalanine, as another in vivo product of aspartame, is also of concern because of its neurotoxicity[8] . Through the in vivo reaction of aspartame, we know that its breakdown products, methanol and phenylalanine, are biotoxic - further reaction of methanol produces formaldehyde, which is a class 1 carcinogen; when the concentration of phenylalanine is too high, it is difficult for other amino acids to pass through the blood-brain barrier, which affects neurotransmitter transmission.[2] . Formaldehyde may seem like strong evidence of aspartame's carcinogenicity, but the truth is that methanol from aspartame is rapidly metabolized to formaldehyde by alcohol dehydrogenase, which then oxidizes the formaldehyde to formic acid in a few minutes, and the formic acid enters the urine and is excreted, or it is further metabolized to carbon dioxide and excreted through respiration.[5] 。

4. Controversy over the carcinogenicity of aspartame

Whether aspartame is carcinogenic has been debated since its introduction. Zhang Aike objectively described domestic and international experiments on aspartame's carcinogenicity through the enumeration method, but did not reach a valid conclusion.[9] The experimental data are specific to the same experiments. The fact that the experimental data are for the same subjects, but with unrelated results, casts a veil of mystery over the carcinogenicity of aspartame. Let's try to analyze it from the perspective of official documents. There are two "contradictory" official documents about the carcinogenicity of aspartame, one is about the International Agency for Research on Cancer (IARC) classifying aspartame as a Group 2B carcinogen, and the other is about the Joint FAO/WHO Expert Committee on Food Additives (JECFA) Third As-

sessment of Aspartame reaffirming the safety of aspartame in trace amounts, and the other is about the Joint FAO/WHO Expert Committee on Food Additives (JECFA) Third Assessment of Aspartame. safety for consumption. Why did two very specialized international bodies come up with such very different results? In order to answer this question, we may need to first understand the responsibilities of these two bodies.

IARC is an agency of the World Health Organization, with offices in Lyon, France. Its main task is to study the causes of cancer, and it also carries out epidemiological surveys and research on cancer worldwide. However, it is only a purely operational technical organization and is not involved in risk management.[10] JECFA, on the other hand, is a Codex Alimentarius international organization. JECFA, on the other hand, is one of the three standing expert committees established by the Codex Alimentarius Commission in 1955, whose members are top experts in the field of food safety evaluation recommended by governments and international organizations, and are responsible for the establishment of quality standards for compounds, methods of analysis, and food safety standards, and the provision of technical advice and recommendations to the Codex Alimentarius Commission. From the point of view of the division of responsibilities of the above organizations, IARC is only a "technical party", without considering the interests of many parties involved in this substance, while JECFA is to weigh the advantages and disadvantages of many parties before coming to a conclusion, and its assessment results are the main scientific basis for the Codex Committee on Food Additives (CCFA) to develop international food additive standards. Secondly, we also need to understand the criteria of IARC classification, only by clarifying the evaluation criteria can we have a deeper understanding of the meaning of the "labels" put on the substances by the organization. IARC classifies substances in our life into four carcinogenicity classes - Class I, Class II (subdivided into A and B), Class B (subdivided into A and B) and Class B (subdivided into A, B and C). IARC classifies substances in our lives into four classes of carcinogenicity - Class I, Class II (subdivided into two categories, A and B), Class III, and Class IV.

Grade I, can be clearly recognized as carcinogenic to humans. The criteria that can be classified as Grade I are that there is clear experimental confirmation and data verification, the experiment excludes other possible factors that cause cancer, there is a direct relationship between the substance and cancer, there is a response relationship in terms of dosage, and the amount of dosage is more or less than the amount of dosage, and which kind of effect has on inducing cancer. Class IIA, likely to be carcinogenic. There is insufficient evidence of carcinogenicity in humans for these substances, but the evidence of carcinogenicity in experimental animals is conclusive. Class IIB, probably carcinogenic. There is limited evidence of carcinogenicity in humans and insufficient evidence of carcinogenicity in animals in this group. Aspartame belongs to Class IIB. Possible carcinogens in the same class as it include cell phone radiation and pickled vegetables. Class III, carcinogenicity to humans cannot be categorized. Grade IV, probably not carcinogenic to humans. To summarize in layman's terms, the substances belonging to Grade I will increase the incidence of cancer if they are eaten or contacted, for example, ethanol, as long as you drink any alcohol-containing liquor or beer, it may lead to oral cancer and esophageal cancer. Class II is divided into AB, the difference is that A is a substance with solid evidence of carcinogenicity to animals but limited evidence of carcinogenicity to humans, while B is a substance with limited evidence of carcinogenicity to both animals and humans. In general, as long as IARC classifies a substance as Class II it means that the substance has insufficient evidence of carcinogenicity to humans and may or may not be carcinogenic.

So, in fact, these two organizations are saying the same thing - both state that aspartame is safe to consume if in safe doses. Many substances can be harmful to health if people consume them unchecked, such as white sugar, lobelia, and even drinking plain water can lead to water intoxication. Max's philosophical principle mentions that one of the causes of material change is that quantitative change leads to qualitative change. Therefore, in our daily life, we do not need to be overly cautious and listen to the wind, but to eat and drink according to the international or domestic safety standards. The value of popularization of science is to dispel the public's myths and show the way. Therefore, this article suggests: still fear of aspartame crowd can choose to eat other safer natural sweeteners, such as sugar alcohols, glycosides class[5] And aspartame difficult to give up the "heavy patients" can also rest assured that there is no sufficient evidence to prove that aspartame must be carcinogenic. For enterprises can also be assured that the production, while saving for a rainy day for innovation - to create a more non-controversial, healthy sweeteners.

5. Implications of the aspartame carcinogenicity controversy for higher chemistry education

The aspartame carcinogenicity fiasco reflects not only the problems of basic chemistry education (dosage aside), but also the problems

of higher chemistry education. Higher chemical education refers to the study and training involving the chemical sciences provided in universities or other institutions of higher education, with the aim of assisting students in constructing a comprehensive understanding of the knowledge and principles of chemistry and in developing their scientific and critical thinking skills. However, many people who have received a higher chemistry education continue to unthinkingly boycott aspartame and even all sweeteners in general, lacking the necessary critical and investigative thinking. Higher chemistry education also provides opportunities for collaboration with other disciplines and fields, such as biology, physics, and engineering. It is the cross-application of chemistry and biology that has given birth to synthetic sweeteners that benefit the obese population[11] .

6. Conclusion

This article then generates significance by combing through the existing literature to draw succinct conclusions, thus helping to understand the current hot scientific issues and giving sound advice. Finally, this article also needs to make a reasonable summary of the mutually exclusive evidence that makes aspartame so complicated and dazzling - IARC and JECFA, the two international authorities on the carcinogenicity of aspartame debate to come to the same conclusion, that is, with regard to the current animal experiments, human experiments, and the study of a number of mechanisms, that are insufficient to prove the direct relationship between aspartame and carcinogenicity. With this clarification, we can treat aspartame more rationally. This article also has some limitations - it consolidates the findings of two major international organizations, but fails to make a clear judgment on whether aspartame is carcinogenic. The limited evidence from both domestic and international studies is not yet conclusive, and more experiments and longer follow-ups are needed to prove the carcinogenicity of aspartame.

References

[1] Update on IARC Monograph Session 134 - ACRI [EB/OL]. [2023-07-03]. https://www.iarc.who.int/fr/news-events/update-on-iarc-monographs-meeting-134/.

[2] Xiao, Jinghuan. Health hazards of aspartame in animal testing. China Food Industry, 2022(21): 88-92.

[3] EFSA says aspartame harmless in safe doses. Food Science and Economy, 2013, 38(6): 4.

[4] SAWANT M. Aspartame: History of the Artificial Sweetener. Berkeley Scientific Journal, 2011, 14(2)[2023-09-03]. https://escholarship.org/uc/item/8r30s9hf.

[5] Y. Yan, Y. L., M. Fan. Exploring the sweetness of sugar-free drinks . Chemistry Education (in Chinese and English), 2023, 44(11): 1-8.

[6] Zhou L. Production and application of aspartame. Food Science, 1997(7): 18-21.

[7] Wang JG. Status and development of sweeteners. Jiangxi Chemical Industry, 2008(4): 82-84.

[8] SONG Yan, FAN Yongxiang, LI Ning. Progress of safety evaluation of aspartame. Chinese Journal of Food Hygiene, 2010, 22(1): 84-87.

[9] Zhang AK, Kan JQ, Chen JW, et al. Progress of safety studies on aspartame. Food Industry Science and Technology, 2008(4): 243-244+247.

[10] Li C. Does aspartame cause cancer or not? . China Science Bulletin, 2023-07-20: 003.

[11] Fu S-H, Li F, Jiang W, et al. Determination of multiple synthetic sweeteners in oral liquid health foods by LC-MS/MS. Modern Chemical Industry, 2018, 38(9): 233-236.

About the author:

Wu Xiaochun,Associate Dean, College of Chemistry and Materials Science, Sichuan Normal University, 1995.9-1999.7 Department of Chemistry, Sichuan Normal University (B.S. Chemistry Education), 1999.9-2002.7 College of Pharmacy, Sichuan University (M.S. Pharmaceutical Chemistry), 2004.9-2008.7 College of Pharmacy, Sichuan University (Doctor of Science in Medicinal Chemistry).

Brief Discussion on Risk Identification and Management in University Construction Projects

Jiaojiao Chen, Chunhua Liu*

Yunnan Open University, Kunming Yunnan 650500, China.

Abstract: The significance of studying risk identification and management in university construction projects lies in ensuring the smooth progress of projects, enhancing their success rate, safeguarding the interests of investors, improving project management standards, and promoting the sustainable development of universities. This holds great importance for the development and overall management of universities.

Keywords: risk identification; management; university construction projects

Introduction

Risk identification in university construction projects refers to systematically analyzing and evaluating various potential risks that may arise during the project implementation process, as well as factors that could negatively impact project objectives and progress. The objectivity and universality of project risks make it necessary to effectively prevent and control these risks, rather than completely avoid them. Therefore, understanding risks proactively, identifying them, actively managing them, and effectively controlling them are crucial steps to minimize project risks. This, in turn, ensures the successful achievement of the expected goals of university construction projects, maximizes benefits, safeguards investors' interests, enhances project management standards, promotes the sustainable development of universities, and ensures project compliance with legal and regulatory requirements.

1. Major Risks in University Construction Projects

University construction projects typically involve the development, construction, renovation, expansion, or maintenance of various aspects of academic resources, information technology projects, infrastructure, teaching equipment, laboratories (and practical training), and more within the campus. Analyzing the focus of university construction projects reveals several major risks that may exist:

1.1 Financial Risk

University construction projects often require substantial financial investment, including construction costs, the purchase of specialized equipment, and resource development expenses. Financial risks may include unstable funding sources, funding shortfalls, and inefficient fund utilization.

1.2 Schedule Risk

From project initiation to the entire construction process, university construction projects often have strict time requirements that need to be adhered to as per the construction task plan. Schedule risks may include construction delays, time conflicts, poor project schedule control, and unforeseeable events.

1.3 Technical Risk

University construction projects span various professional domains, including architecture, structures, mechanical and electrical systems, and information technology. Technical risks may include inadequate planning, unclear designs, construction quality issues, and unsolvable technical challenges.

1.4 Management Risk

Effective project management is essential for university construction projects, including decision management, financial management,

asset management, contract management, supplier management, and human resources management. Management risks may encompass contract performance issues, uncooperative suppliers, and personnel changes.

1.5 Market Risk

University construction projects may also be influenced by market demand and competition. Market risks may involve changes in project demand, intensified market competition, and lower-than-expected project returns.

1.6 Environmental Risk

University construction projects can be affected by natural and social environmental factors. Environmental risks may include natural disasters, environmental pollution, and social protests.

1.7 Legal Risk

University construction projects must comply with relevant laws, regulations, and policy requirements. Legal risks may involve contract disputes, violations of laws and regulations, and changes in legal requirements.

1.8 Communication Risk

University construction projects involve multiple stakeholders, including university management, faculty, students, suppliers, and construction parties. Communication risks may entail ineffective information transmission, communication barriers, and conflicts of interest.

These risks can be interrelated and impact the smooth implementation and achievement of goals in university construction projects. In project management, identifying and assessing these risks and implementing appropriate risk management measures are crucial steps to ensure project success.

2. Common Methods and Tools for Risk Identification in University Construction Projects

Identifying and assessing risks in university construction projects is a critical safeguard for ensuring project success. Here are common methods and technical tools used for risk identification in such projects:

2.1 Team Discussions

Organize project team meetings, including project stakeholders, professionals, and relevant parties, to collectively identify potential risks. This collaborative approach allows for the gathering of diverse opinions and perspectives.

2.2 Literature Research and Experience Summation

Refer to relevant literature, case studies, and completed projects of a similar nature to understand common risks and challenges in university construction projects. Leveraging past experiences and lessons learned helps prevent repeating mistakes.

2.3 Risk Identification Tools and Techniques

Common tools and techniques for project risk identification include brainstorming, SWOT analysis, storyboards, cause-and-effect diagrams, Failure Mode and Effects Analysis (FMEA), risk matrices, and more. These tools and techniques allow for systematic identification of potential risk factors, their relationships, and risk assessment.

2.4 Risk Categorization and Priority Sorting

Categorize identified risks, such as technical risks, financial risks, schedule risks, etc. Based on the potential impact and probability of risks, prioritize them to determine areas of focus.

2.5 Risk Assessment Indicators and Models

Establish appropriate risk assessment indicators and models for quantifying and assessing the severity and impact of risks. Common assessment methods include qualitative and quantitative assessments, such as risk probability matrices, risk impact matrices, and risk value assessments.

2.6 Expert Opinions and Professional Consultation

Seek expert opinions and advice, especially from experts in technical fields and project management. They can provide valuable insights and experiences to aid in risk identification and assessment.

2.7 Development of Risk Response Strategies

Based on the priority and impact of identified risks, develop corresponding risk response strategies, such as risk avoidance, risk transfer, risk mitigation, risk acceptance, etc. This ensures clear action plans for addressing each risk.

2.8 Risk Monitoring and Updates

Risk identification and assessment in a project are dynamic processes that require continuous monitoring and updates. As the project progresses, new risks may emerge, and existing risks may change. Regularly review and update the results of risk identification and assessment.

By identifying and assessing risks in university construction projects, project teams can gain a better understanding of the challenges and potential hazards the project faces. This allows for the formulation of appropriate risk management strategies and measures to increase the likelihood of successful project implementation and goal attainment.

3. Unique Risk Assessment Indicators and Methods for University Construction Projects

Unique risk assessment indicators and methods for university construction projects can be customized based on the specific circumstances and characteristics of the project. Here are some common risk assessment indicators and methods applicable to university construction projects:

3.1 Education Quality Risk Assessment Indicators

For risks related to education quality in university construction projects, key indicators can include teacher qualifications, teaching facilities, and teaching resources. Assessment methods may involve teacher evaluations, student satisfaction surveys, and evaluations of teaching facilities.

3.2 Funding Risk Assessment Indicators

When addressing funding risks in university construction projects, relevant indicators to consider include funding sources, funding scale, and funding utilization efficiency. Assessment methods may encompass cash flow analysis, funding utilization rate assessments, and gap analysis of funding needs.

3.3 Schedule Risk Assessment Indicators

To assess schedule risks in university construction projects, factors such as project timelines, project progress, and schedule control can be considered. Assessment methods may include schedule plan evaluations, project progress monitoring, and critical path analysis.

3.4 Technical Risk Assessment Indicators

In the context of technical risks in university construction projects, indicators such as technical feasibility, technical complexity, and

technological innovation can be referenced. Assessment methods might involve technical feasibility analyses, assessments of technical challenges, and evaluations of technological innovation potential.

3.5 Management Risk Assessment Indicators

For management risks in university construction projects, relevant indicators could encompass project organizational structure, project management capabilities, and project decision-making mechanisms. Assessment methods may involve organizational structure assessments, management capability evaluations, and decision-making mechanism assessments.

3.6 Market Risk Assessment Indicators

When addressing market risks in university construction projects, considerations may include enrollment demand, competitive conditions, and market prospects. Assessment methods could involve market demand research, competitive analysis, and market forecasting models.

3.7 Environmental Risk Assessment Indicators

To assess environmental risks in university construction projects, indicators such as environmental impact assessments, ecological conservation measures, and resource utilization efficiency may be relevant. Assessment methods might include environmental impact assessment reports, environmental monitoring, and resource utilization efficiency evaluations.

Therefore, it is essential to select suitable risk assessment indicators and methods tailored to the specific circumstances of the university construction project. This comprehensive assessment helps in understanding and addressing the risks the project faces and formulating corresponding risk management measures and strategies. Additionally, drawing from relevant industry experiences and best practices can enhance the accuracy and feasibility of risk assessment.

4. Effective Risk Control Measures for University Construction Projects

Risk control for university construction projects is a comprehensive, systematic, and scientific process that requires multiple approaches and means to ensure the project is completed on time, on quality, on quantity, and in compliance with safety and legal requirements. Therefore, the development and implementation of effective risk control measures are crucial for the success of university construction projects. Here are some recommendations for effective risk control measures for the project:

4.1 Risk Planning

Develop a detailed risk management plan during the project initiation phase, clearly defining the responsibilities and roles of the project team. Determine the risk management processes, methods, and tools, as well as the schedule and milestones for risk management.

4.2 Risk Identification and Assessment

Utilize the methods mentioned earlier to identify and assess the risks associated with university construction projects. Prioritize risks and identify those that require special attention.

4.3 Risk Response Strategies

Develop specific response strategies for each identified risk. Depending on the nature and impact of the risks, select appropriate response strategies such as avoidance, transfer, mitigation, or acceptance.

4.4 Risk Control Measures

Establish concrete control measures to reduce the probability and impact of risks. This may include the development of clear work-

flows, enhanced quality control, improved management of construction contractors and suppliers, and strengthened communication and coordination.

4.5 Risk Monitoring and Updates

Implement a risk monitoring mechanism to regularly track and monitor risks within the project. Ensure timely identification and handling of new risks and updates and adjustments to previously identified risks.

4.6 Risk Communication

Establish effective risk communication mechanisms to facilitate timely communication between the project team and stakeholders. Share risk information and control measures to enhance the team's risk awareness and consensus.

4.7 Team Training and Cultivation of Risk Awareness

Provide necessary training and development for project team members to enhance their risk awareness and capabilities. This helps them better identify and respond to risks and take appropriate measures within the project.

4.8 Continuous Improvement

Continuously review and learn from the project execution process. Make improvements and adjustments to risk management based on actual circumstances. Draw from past experiences and lessons to optimize risk management methods and measures.

By developing and implementing effective risk control measures, university construction projects can better address potential risks, reduce the risk of project failure, and increase the likelihood of successful implementation and goal achievement.

5. Conclusion

In summary, risk identification and control are crucial for the successful implementation of university construction projects. It helps project teams better manage risks, avoid potential issues and failures, improve project efficiency and quality, enhance stakeholder satisfaction, and achieve project goals and value. Therefore, university construction projects should place high importance on risk identification and control and incorporate them into the core processes of project management.

References

[1] Wei Qinchai. Risks and Countermeasures in University Construction Projects[J]. East China Economic Management. 2008, Vol. 22, No. 1.

[2] Ren Ying, Long Fenjie. Problems in the Approval Management of University Construction Projects and Improvement Suggestions[J]. Construction Economics, 2013(8).

[3] Zhou Lin. Risk Analysis and Countermeasures for New Campus Construction Projects in Universities [D]. Xi'an University of Architecture and Technology, 2011.

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Advances, Insights, and Future Trends of Research on Learning progression in mathematics: A Perspective

Sicen Tao *

Shandong Normal University, Jinan 250307, China.

Abstract: The paper provides a comprehensive and in-depth analysis of the study of learning progression in the field of mathematics. Through combing and analyzing the relevant literature at home and abroad, the paper summarizes the importance and current situation of learning progression in the field of mathematics education. Learning progression refers to the process of deepening and expanding students' understanding and mastery of knowledge in the learning process. Research on learning progression in mathematics focuses on conceptual understanding and skill mastery, providing guidance for instruction by analyzing elements such as learners' thinking patterns, problem-solving abilities, and conceptual understanding. Meanwhile, learning progression also provides an effective tool for assessing students' learning progress and understanding. Based on the literature review, the dissertation also explores the implications of current research on learning progression for mathematics education and future research questions. In conclusion, the dissertation provides a systematic review of learning progression in mathematics, which provides important references and insights for further in-depth research.

Keywords: Learning progression; Mathematics.

1. Introduction

The study of the progression of learning has its roots in U.S. education reform. In 2006, the National Research Council[1] published Bringing Science to School: Learning and Teaching in Kindergarten through Grade 8, which pointed out that the U.S. elementary and middle school science curricula lacked a comprehensive curriculum. School: Learning and Teaching in Kindergarten through Grade 8, which pointed out that the U.S. elementary and middle school science curricula lacked depth and called for educators to propose a framework for the progression of learning that would be more effective and more efficient.

The following will summarize and analyze the progress, educational revelation, and future trend of learning progression research in mathematics from The following will summarize and analyze the progress, educational revelation, and future trend of learning progression research in mathematics from the definition of learning progression.

2. Theoretical framework for progression of learning in the field of mathematicson

Smith[2] considers a progression of learning (where students think about a concept in a series of successive, more integrated ways) to be better connected to concepts that students will encounter in future learning. In fact, there is a concept in the field of mathematics education that is similar to the concept of "learning progression", i.e., "Learning Trajectories" (LTs). "(LTs). Simon[3] first used Hypothetical Learning Trajectory to refer to a teacher's prediction of the possible paths of student learning, and to describe the "paths of learning" that students take as they move from a starting point to a desired learning goal. "the path by which learning might occur." The path of the trip is your "hypothetical trajectory", which is a characteristic of anticipatory tendency. The path you travel is your "trajectory", and the path you expect to take at any given point in time is your "hypothetical trajectory".

According to Confrey et al.[4] , a learning trajectory is "a researcher-suggested, empirically based description of the ordered network that students experience through instruction (i.e., activities, tasks, tools, forms of interaction, and methods of assessment, etc.) in order to make a gradual transition from informal ideas, through a continuum of expression and reflection, to more and more complex concepts. " Maloney & Confrey (2001)[5] suggest that LTs represent a progression of cognitive power that, while not necessarily linear, is not random. The trajectories depict ordered expected trends that have been developed through empirical research designed to identify the highly probable steps that students follow in developing initial mathematical ideas into formal concepts, recognizing that each student's path is unique.

3. Key Findings and Conclusions of the Learning Progression in the Area of Mathematics

Reviewing from an international perspective, it can be assumed that research on learning progression in mathematics education is in its initial stage. Generally speaking, there are two main types of research on learning progression in mathematics education: first, basic research on learning progression, which mainly refers to the use of empirical methods to establish a learning progression that describes the in-depth development of students' cognition on a certain mathematics learning topic; and second, applied research on learning progression in the fields of mathematics curricula, teaching, and assessment.

Lam Chit-Min has studied the learning progression of factors and multiples in elementary school math clocks[6], he systematically sorted out the relevant contents about factors and multiples in the mathematics curriculum outline and textbooks, clarified the main learning objectives of the content, and then decomposed the learning progression of factors and multiples into 3 dimensions, namely, division, factors, and multiples, and identified 3 developmental variables on the basis of this.

In recent years, scholars have carried out a lot of useful research on the concepts related to "function". Xu Na[7] takes "primary function" as the core concept, establishes a learning progression model based on the theory of APOS, the teaching requirements of functions in the compulsory education curriculum standard and the contents of three versions of textbooks, and on the basis of which the hypothetical model of the learning progression of primary function is verified and revised through test questions. The specific performance of students' learning progression in learning the primary function

Meanwhile, the research results on learning progression in "fraction" and "probability" are also fruitful. Chen Xiaoyan took "probability" as the core concept, and constructed a learning progression model from four dimensions, such as understanding the problem and the object, the arrangement of probability content text， and the students' cognitive knowledge in the compulsory and elective phases, and then tested, examined and corrected the model by using the Rasch assessment tool, and finally put forward teaching strategies in the aspects of curriculum arrangement and teachers' teaching. Finally, teaching strategies are proposed in terms of curriculum organization and teachers' teaching.

Song Yuyang[8] takes "Graphics and Geometry" as an example, establishes the criteria for determining whether a concept is a core concept through the difference between concepts of different levels, identifies 12 core concepts and 5 hierarchical structures between concepts, and studies the teaching of "core concepts" in depth from the perspective of "learning progression". The teaching of "core concepts" is studied in depth from the perspective of "learning progression". After combing through, it can be found that current research in the field of mathematics on the theory of learning progression has been more fruitful in the Algebra, Graphics and Geometry, and Probability segments.

4. Implications of Learning Progression Research for Mathematics Education

4.1 Setting Clear Teaching and Learning Objectives in Terms of Learning Progression

Students are expected to undergo conceptual shifts during the learning process. Before a student learns a concept, there must be a certain cognitive foundation, which may have correct or incorrect notions. This requires further understanding on the part of the teacher, and if there are misconceptions, they need to be corrected.

4.2 Design the Teaching and Learning Process Based on the Learning Progression Framework to Break through Barriers to Progression

Learning progression reflects the process of change in the thinking level of students when they learn a core concept. Teachers need to reflect on and constantly sort out the key points, difficulties, and error-prone points of conceptual teaching, so as to further refine the teaching process, set up a reasonable problem situation, ask questions scientifically and effectively, and transform the basic concepts into basic questions to deepen students' understanding of the concepts.

4.3 Apply Learning Progression Theory to Teaching and Learning Evaluation and Implement Dynamic Management

Apply the learning progression theory to teaching evaluation, use the learning progression theory in the evaluation after the implemen-

tation of the classroom, to find out the strengths and weaknesses of the lesson, which will attract the attention of students and teachers, so as to enhance the effectiveness of teaching. As teachers in the new era, they need to have some control over the cognitive trajectory of students' learning, so as to promote students' cognitive progression.

5. Future Directions for Research

5.1 Pedagogical Research on Promoting Students' Progression in Mathematics Learning

While current research has discussed students' level of mathematical thinking primarily from an assessment perspective, how to facilitate students' progression in regular math instruction is an issue that is rarely addressed. Teaching and learning in all areas of mathematics is a larger and more specific issue, and to do so, we must consider what kind of mathematics curriculum should be provided to students and how mathematics instruction should be evaluated.

5.2 Constructing Norms and Standards for Assessing Students' Mathematical Ability

Although a lot of work has been done in the current study, it is a systematic project that requires large samples, repeated expert consultation, questionnaire surveys and student tests, and even more in-depth thinking and making original designs. There are still some problems that need further in-depth thinking and research, such as the reliability and validity of the compiled survey tools need to be improved, the sample size taken in the survey is not large and the area is not wide enough, and the repeated validation is not enough.

5.3 Intelligent Assisted Teaching and Personalized Learning

Through intelligent technology, learning resources can be personalized, learning effects can be assessed, and learning problems can be diagnosed, thus providing learners with more accurate learning guidance and support. Learning progression research in the field of mathematics can make use of these technological means to tailor personalized learning paths and teaching strategies for students according to their different characteristics and needs, so as to improve the learning effect.

References

[1]National Research Council. (2006). Taking Science to School: Learning and Teaching Science in Grade K-8.Washington, DC: The National Academy Press. pp. 31-32.

[2]Smith, C. L., Wiser, M., Anderson, C. W. & Krajcik, J. (2006). Implications of research on children's learning for standards and assessment: A proposed learning progression for matter and the atomic molecular theory.Measurement: Interdisciplinary Research and Perspectives. no. 14(1&2), pp. 1-98.

[3]Simon M A.(1995). Reconstructing Mathematics Pedagogy from a Constructivist Perspective. Journal for Research in Mathematics Education. no. 26(2), pp. 114-145.

[4]Confrey J, Maloney A, Nguyen K.(2009). Equipartitioning/splitting as a foundation of rational number reasoning using learning trajectories.

[5] Confrey J, Maloney A.(2010). The construction, refinement, and early validation of the equipartitioning learning trajectory// International Conference of the Learning Sciences. International Society of the Learning Sciences. pp. 968-975.

[6]Lin Zhemin.(2013). Advanced Study on Elementary School Factor and Multiplier Learning. Taipei: Taiwan Normal University. pp. 117.

[7]Xu Na. (2019). Construction and testing of an advanced model for student first-order function learning based on APOS theory. Northeast Normal University.

[8]Song Yuyang.(2017) Teaching Core Concepts from the Perspective of Advanced Learning: Taking "Graphics and Geometry" as an Example. Changchun: Northeast Normal University Press. no. 12.

Research and Practice on the Development of Senior Undergraduate Programs in Applied Chemistry in Regional Teacher Education Colleges and Universities

Donghua Hu, Zhongyao Du, Yang Sun*

Yunnan Normal University，Kunming 650500, China

Abstract：With the development of higher education and socio-economic changes, the senior undergraduate program in applied chemistry at regional teacher training colleges and universities is facing unprecedented challenges and opportunities. This paper provides an in-depth discussion of the development status of the program in the current environment, such as the quality of education, teaching resources, and student employment. At the same time, the paper also analyzes the external environmental changes, educational reform and cooperation with industry, and puts forward a series of practical and innovative strategies.

Keywords：Regional Teacher Education Colleges; Applied Chemistry; Senior Undergraduate; Developmental Research

1.Status of Applied Chemistry Programs in Regional Teacher Training Colleges and Universities

1.1 Educational Quality and Teaching Resources

In recent years, with the updating of research equipment and technological advances, some universities have made remarkable progress in the construction of teaching experimental equipment and laboratories, providing students with a richer and more advanced experimental environment. However, for some regional teacher training colleges and universities, their teaching resources are still relatively scarce due to the limitations of financial and technical support, resulting in unsatisfactory experiences for students in experiments and practices. In addition, the selection and updating of teaching materials also directly affects the quality of education. At present, some teaching materials can no longer meet the development needs of modern applied chemistry, and the contents of the teaching materials need to be timely adjusted and updated to meet the new technical and theoretical developments.

1.2 Students' Employment and Social Demand

Students' employment and social demand is an important criterion to measure whether the development of a specialty is healthy or not. In recent years, students majoring in applied chemistry have performed well in the job market after graduation, and have been favored by many enterprises and institutions [1]. This is due to the fact that the students trained in this specialty have strong practical ability and innovative thinking in practical application. However, at the same time, with the rapid change of society and industry, the demand of enterprises for talents is also changing, which puts forward higher requirements for students' professional skills, comprehensive quality and innovation ability. Therefore, regional teacher training colleges need to constantly communicate and cooperate with enterprises and industries in the cultivation of senior undergraduate majors in applied chemistry, to understand the changes in social demand, and to adjust the direction and strategy of education in time to ensure the employment competitiveness of students.

2. Challenges and Opportunities

2.1 Changes and challenges of external environment

With the acceleration of globalization and the rapid development of technology, the external environment has brought a series of changes and challenges to the senior undergraduate specialty of applied chemistry in regional teacher training colleges. Technological innovations and the development of new materials have led to rapid changes in the field of applied chemistry, placing new demands on teaching

content and methods. Such rapid changes require educational institutions to update their curricula in a timely manner to ensure that students are equipped with the latest knowledge and skills. At the same time, the global trend of environmental protection and sustainable development has also posed new challenges to applied chemistry education, as students not only need to master traditional chemistry knowledge and skills, but also need to be equipped with knowledge related to green chemistry and environmentally friendly technologies. In addition, the increase in international cooperation and exchanges makes it necessary for students to have stronger cross-cultural communication skills and international perspectives. The globalization of the economy has also led to a gradual shift of the chemical industry to low-cost regions, which has brought new opportunities and challenges to the applied chemistry programs in regional teacher training colleges. To cope with these challenges, universities need to work closely with industry to ensure that the content and direction of education are synchronized with industrial development. At the same time, colleges and universities need to strengthen cooperation with foreign universities and research institutions, introduce advanced teaching methods and research results, and improve the international competitiveness of students.

3. Practice and Innovation Strategy

3.1 Innovation of Curriculum System and Teaching Methods

The senior undergraduate program of applied chemistry in regional teacher training colleges continues to explore the innovation of the curriculum system and teaching methods in order to adapt to the ever-changing technology and market demand. Traditional teaching methods tend to emphasize the transmission of theoretical knowledge, while modern teaching models pay more attention to practice and application. For example, a regional teacher training college has opened a new course “Green Organic Synthesis Technology” to address the research of new organic synthesis methods and the needs of the industry. The course not only teaches the latest green synthesis theory, but also combines real industrial cases, allowing students to simulate the production in the laboratory, in-depth understanding of the advantages and disadvantages of various synthesis methods and application scenarios. In addition, the innovative teaching methods provide students with a richer and more personalized learning experience. Taking “Nanomaterials and Applications” as an example, in addition to traditional classroom lectures, teachers also make use of virtual laboratories and computer simulation software to help students understand more intuitively the structure and properties of nanomaterials, as well as their roles in various applications. Meanwhile, project-based learning and teamwork have also been widely introduced into teaching [2]. Students are required to work in teams to research and solve real industrial problems, which not only hones their practical and innovative abilities, but also enhances their teamwork and interdisciplinary communication skills. In addition, with the development of online education and distance learning technology, many universities have also introduced new teaching methods such as online courses and MOOCs, which breaks the limitations of time and space and provides students with more flexible learning opportunities.

4. Future Prospects and Suggestions

Under the background of the era of rapidly changing technology and continuous industrial development, the education and research of applied chemistry majors in colleges and universities are facing unprecedented opportunities and challenges. In order to better adapt to these changes, it is recommended that colleges and universities further strengthen their cooperation with industry, ensure that the teaching content is synchronized with industrial development, and provide more practical opportunities for students. For example, a university has cooperated with a new material enterprise to provide students with opportunities for internship in the enterprise, so that they can better understand the application of chemical knowledge in practice. In addition, colleges and universities should also strengthen scientific research and technological transformation, transform research results into actual products and technologies, and provide technical support for industrial development. For example, a university has achieved a series of research results in the field of organic synthesis, which have been successfully transformed into new synthesis methods, bringing new development opportunities for the chemical industry. Meanwhile, in order to cultivate more innovative talents, it is recommended that universities further strengthen students’ innovative education and practical training, provide more innovative projects and competition opportunities, and stimulate students’ innovative consciousness and ability. For example, a university has set up a course called “Innovation Experiment”, in which students are required to design their own experiments to solve real scientific research problems, which greatly improves their practical and innovative abilities. Finally, considering the background of globalization, it is suggested

that colleges and universities further strengthen international cooperation and exchanges, and provide students with more opportunities for overseas study and research, so as to broaden their international horizons. For example, a university has established cooperative relationships with a number of well-known universities overseas, providing students with opportunities for exchange and short-term study visits, enabling them to communicate and cooperate with international experts and scholars, further enhancing their international competitiveness. Overall, for the senior undergraduate program of applied chemistry in regional teacher training colleges and universities, the future outlook and suggestions are the key to its sustainable development, and the colleges and universities need to continue to innovate and forge ahead in order to make a greater contribution to the development of the chemical industry and education.

Conclusion

After in-depth research and analysis, regional teacher training colleges and universities have demonstrated their unique advantages and challenges in the development of senior undergraduate majors in applied chemistry. These colleges and universities have already achieved remarkable results in teaching, scientific research and social service by continuously improving the quality of education, optimizing teaching resources, actively connecting to the needs of the society, and combining with regional characteristics. Facing the changes in the external environment and the challenges of education reform, the universities have realized the two-way mutual benefits of education and industry through in-depth cooperation with the industry. At the same time, they emphasize practice and innovation strategies, provide students with rich practice opportunities and innovation platforms, and cultivate a group of applied talents with both theoretical foundation and practical ability. Looking ahead, regional teacher training colleges and universities should continue to strengthen cooperation with all parties, constantly innovate the education mode and content, and lay a solid foundation for the sustainable development of the senior undergraduate program in applied chemistry.

References

[1] Luo Xujian, Qiu Yan, Tan Mingxiong, et al. Exploration and Practice of Innovative Talent Training Model in Applied Chemistry: Taking Yulin Normal University as an Example [J]. Teacher, 2022 (07): 111-113.

[2] Sun Xubing, Liu Yiwu, You Yaohui et al. Construction and Reflection on the “Three Part” Talent Training Model for Applied Chemistry Majors - Taking Neijiang Normal University as an Example [J]. Guangdong Chemical Industry, 2020,47 (07): 233-234+247.

[3] Chen Shiping, Shi Qing, Peng Yiru. On the Training Model of Applied Chemistry Innovation and Entrepreneurship Talents in Normal Universities [J]. Science and Education Guide, 2020 (06): 59-61.

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