A STUDY ON THE CHARACTERISTICS OF INDIVIDUALIZED ENGLISH LEARNING IN HIGHER VOCATIONAL COLLEGES

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ABSTRACT – With the diversity of intake, the level of students tends to differ more. With the development of information technology, traditional teaching methods can no longer meet the requirements of learning. Promoting personalised learning is the direction of future teaching reform. This study investigated and analyzed the characteristics of individualized English learning. The results show that higher vocational students already have obvious characteristics of personalised learning, and the difference of student foundation will have a certain impact on the learning characteristics. It is imperative to implement the reform of personalised learning in higher vocational teaching in the future. This research can provide useful reference for higher vocational education reform and help relevant teaching workers to design more reasonable personalised learning programs.

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KEYWORDS

Vocational School English Individualisation Learning Characteristics

INTRODUCTION

The Third UNESCO World Conference on Higher Education (WHEC2022) was held in Barcelona, Spain. The conference aims to "reshape the concept and practice of higher education to ensure the sustainable development of the earth and mankind" (2022) and advocates promoting the diversification of higher education and establishing flexible learning approaches. For college students, it is inappropriate to rely on previous teaching ideas to guide students. Students in the new era need a greater interest in learning, give full play to their subjective consciousness, and explore and innovate in the learning process.

According to the formula of the Ministry of Education of China (2021), up to now, more than 20 vocational colleges in China have been upgraded to vocational, undergraduate colleges, indicating that undergraduate-level vocational education has begun to be promoted. By 2025, the enrollment scale of vocational, undergraduate education will not be less than 10% of that of higher vocational education. The expansion of enrollment in higher vocational education and the promotion of the integration of vocational, undergraduate education into the existing bachelor's degree work system indicate that China has begun to promote the vertical integration of vocational education at different levels, promote the horizontal integration of different types of education, and ensure the implementation of the training objectives of vocational education talents at the undergraduate level.

PROBLEM STATEMENT

The expansion of higher vocational education will inevitably increase the number of students (Lu, 2020). Nowadays, the entrance channel of higher vocational education in China has changed from the single way of college entrance examination in the past summer to multiple channels such as the spring college entrance examination, independent enrollment, and comprehensive evaluation. With the implementation of the next step of vocational education reform and enrollment expansion policy, the level difference of higher vocational students will further increase, and the personal foundation of college students will be uneven. Such changes will certainly bring new challenges to English teaching in higher vocational education in the future. From the perspective of learning methods, teachers are the main part, and students are the auxiliary part. The English curriculum in higher vocational colleges continues the previous model. Most students follow the pace of English teachers as always. They do not realise that learning depends on their own initiative, so they are still in a passive position in the learning process, which limits the initiative, creativity and sustainability of students' learning. Faced with such a background, the traditional teaching model has been unable to meet the learning needs of vocational students, and English courses are no exception. Students' desire for personalised learning

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has become increasingly strong, so it is necessary to carry out relevant research. At present, there is little few researches on personalised English learning in higher vocational colleges. Although some researchers have explored personalised learning methods, for example, Sun, Zheng (2015) and Wang (2021) have conducted research on graded teaching based on students' English proficiency, these researches have not revealed the relationship between differences in English proficiency and personalised learning characteristics, which is exactly the problem to be solved in this research. This paper makes an in-depth study of English individualised learning of vocational college students, tries to find new findings in learning characteristics and improves the basic connotation of individualised learning. On this basis, we can promote higher vocational education reform and effectively improve teaching quality.

Focusing on the above issues, this study proposes the following research objectives (RO).

- RO 1: Understand the personalised learning characteristics of vocational students.
- RO 2: Analyze whether individual differences in English proficiency have an impact on English learning characteristics.

In view of the above research objectives (RQ), the research questions of this study are determined as follows.

- RQ 1: What are the characteristics of personalised learning of vocational students?
- RQ 2: Do students with different English proficiency have different learning characteristics?

LITERATURE REVIEW

CONCEPT OF PERSONALISED LEARNING

In 2003, Milliband, the former British Minister of Education, defined personalised learning as follows: personalised learning means paying attention to and exploring the unique talents of each student and designing teaching according to the different learning styles of students (Hu, 2006). Yang (2003) defined personalised learning. He believed that personalised learning refers to a learning method carried out in a small team composed of teachers or learners. It is implemented according to learners' personality characteristics and can provide appropriate learning methods and strategies for learners according to their needs. Tian (2007) pointed out that personalised learning is an educational activity based on the comprehensive, free and coordinated development of students and the personality characteristics of learners. As exploratory, practical and creative learning, personalised learning should give full play to learners' initiative and promote the development of students' personality and potential (especially the advantage potential). Deng (2003) believed that, as an educational concept, personalised learning, on the premise of recognising learners' individual differences in social background, attitude and value, intelligence background, emotion and physiology, strives to achieve a balance between learners' personality characteristics and learning environment, so as to achieve an overall improvement of learners' quality.

CHARACTERISTICS OF PERSONALISED LEARNING

a. Autonomous learning

Dickinson (1978) believed that autonomous learning is when learners are responsible for all strategies in the learning process, including what to learn, how to learn, learning time and place, methods, etc. The report "Personalised Online Learning Plan" (2005) issued by the British BECTA organisation clearly points out six elements of learners' personalised learning in the network environment, one of which is to support service learners to carry out autonomous learning. In order to achieve autonomous learning, Keller (2003) pointed out that personalised learning emphasises learners' own responsibility in the teaching process.

b. Diversification of learning content and style

The report of Personalised Online Learning Plan (2005) released by the British BECTA organisation pointed out that learning content should adapt to the needs and learning styles of users,

which is the basic requirement of personalised learning for learners in the online environment. There may be several ways to organise the teaching materials of a subject, from which students can choose their own way, and students can control their own learning progress according to their own academic tendencies and levels. Gu (2020) believes that the uniqueness of learning style is the basic feature of personalised learning.

c. E-learning

In the era of network information, the view of time has become non-serialized, fragmented and unsteady due to the acceleration of changes in reality. Such changes have directly changed learning behaviour. Yang, Li and Li (2010) generally believe that college students can reasonably arrange their learning order according to their own needs and learning ability through hypertext and big data technology in learning activities. The convenient interaction of the network can enable students to get appropriate teacher guidance and peer communication. In the whole teaching process, learners can obtain more freedom and convenience and reflect their will to a greater extent.

d. Highlight communication and interaction

Steve Maharey, Minister of Education of New Zealand, pointed out in Personalised Learning: Putting Learning at the Center of Education that the prominent feature of a personalised learning environment is the transformation of the education centre (Hu, 2006). The focus on "teaching" is constantly changing to "learning", which is particularly prominent in personalised learning environments. In 2007, the Vision 2020: Report of the 2020 Teaching and Learning Review Group, written by the "2020 Teaching and Learning Review" expert group entrusted by the British government, pointed out that "interaction, decentralisation and decentralisation are the main characteristics of a personalised learning environment." The report of Personalised Online Learning Plan (2005) released by British Becta also emphasised the importance of promoting dialogue and communication between peers, teachers, and students to achieve personalised learning.

INFLUENCING FACTORS OF PERSONALISED LEARNING

Personalised learning is a special way of learning. Its theoretical research mainly focuses on the influencing factors of personalised learning. What factors will affect personalised learning? Around this problem, many scholars have carried out relevant research. Based on the current research results, students' individual differences are the main factors affecting personalised learning. According to the research of Sun and Zheng (2015), teachers need to pay attention to the "four main" differences in personalised teaching goals, including the differences in students' academic abilities, interests, cognition and life experiences. These factors will have a direct impact on students' personalised learning. Ren (2006) mainly analysed the unfavourable factors affecting the implementation of individualised college English teaching in the three levels of teachers, students and teaching management in college English teaching at Yanbian University, including teachers' teaching concepts, teaching methods, teaching contents, evaluation methods, students' learning strategies, autonomous learning ability, the evaluation mechanism of college English teaching, and then put forward corresponding suggestions and countermeasures. Focusing on the learning experience of personalised online learning platforms and the demand points in the online learning process, Fan (2019) investigated and excavated the target population. From the perspective of learning motivation, he sorted out and summarised the influencing factors of a personalised online learning experience, supplemented the influencing factors of learning motivation, and improved the personalised online learning experience model. At the same time, the diversified demand points of users in the personalised online learning process are determined through demand analysis, and the learning needs are transformed into function points, providing the design direction for the personalised online learning platform.

There are also some scholars who try to study the relationship between English learning and majors. For example, Ma and Li(2021) and others have investigated college students in many universities. Most of the respondents hope that the learning environment of college English fully takes into account their own professional characteristics. Hu (2021), after studying English for art majors in higher vocational colleges, believes that improving students' English learning ability will affect the

sustainability of their professional learning and even their personal growth and development in the future. Shao (2018) integrated English courses to build a trinity of "Basic English+Industrial English+Professional English" in aviation electrical and mechanical maintenance English courses.

PRACTICAL RESEARCH ON ENGLISH PERSONALISED LEARNING

Wang (2021) grouped the students according to their basic English level, assigned different writing tasks with different difficulties, and finally summarised the learning achievements in the form of group cooperation. Ma (2017) carried out a survey on English-graded teaching in some universities. Tianjin Agricultural University and Three Gorges University teach modules according to listening, speaking, reading and writing. Sun Yat-Sen University has adopted the teaching mode of grading and credit division according to the students' level. By setting different credit requirements for compulsory English and advanced English courses, it has realised the innovation of English personalised learning mode. Among them, the expansion of the module learning resource library focuses on meeting the needs of learners who want to further improve their English ability and, at the same time, focuses on supplementing and expanding English knowledge related to their majors, which has a strong practical significance for their career development.

Learning through MOOC or related teaching resources is the main way of personalised English learning at present. Zhang (2021) conducted personalised teaching in a university by using micro courses. She created different micro course resources according to different themes to meet various English learning needs of different types of students. In order to solve the problems of the current traditional classroom and improve students' English listening and speaking ability, Zhang (2017) used MOOC video resources, adopted the teaching method of "flipped classroom", reformed mixed teaching, and implemented it in the course of Advanced English Listening and Speaking. Gu (2016) took Tianjin Vocational and Technical College of Biotechnology as an example and, based on the college's vocational English situation, designed the vocational English learning resource library as a whole. He (2020) built an autonomous learning platform to allow students to arrange their learning time independently, which was verified by English teaching at Shaoyang Vocational and Technical College.

SUMMARY

To sum up, although some scholars have conducted relevant research on English personalised learning, they basically focus on the undergraduate level, and there is less research on English personalised learning in higher vocational education. Many pieces of research focus on students' English proficiency. Although they have explored personalised teaching methods, they have not conducted in-depth research on the relationship between differences in English proficiency and personalised learning characteristics. This paper intends to study the individualised learning of higher vocational college students in English and try to find new learning features and improve the basic connotation of individualised learning on the basis of distinguishing students' English proficiency.

Theoretical Framework

The theoretical framework of this research plan includes five variables, namely, English learning motivation, English learning initiative, English learning methods, English learning strategies, and professional English needs. As shown in Figure 1.

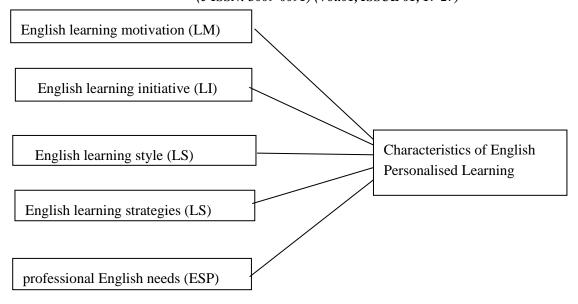


Figure 1. Proposed theoretical framework

METHODOLOGY

RESEARCH DESIGN

This research adopted the quantitative research method, taking the students of vocational colleges in mainland China as the research object, and collected data through a questionnaire survey. Using SPSS software to analyse the collected data, investigate the learning characteristics in detail, and judge the needs of vocational students' personalised learning. In order to judge whether students' individual differences in basic knowledge will have an impact on English learning characteristics, students' English proficiency was divided into two groups: high and low. Data statistics and analysis were carried out, respectively, and research was conducted through comparison.

POPULATION AND SAMPLING

The overall survey of this survey is the students of a vocational college. This research plan adopts the stratified sampling method, and stratified sampling is carried out according to the differences in the students' grades, and then several different majors are randomly selected in each grade for sampling. Due to the difference in professional courses in different majors, the professional knowledge reserves of students in different grades are also different, so we can judge the impact of professional differences on personalised learning. The sampling plan is designed according to the above ideas, and the sample size is determined to be 120 in combination with the actual situation of the school.

DATA COLLECTION

In this study, the questionnaire referred to previous relevant studies. Before the questionnaire was distributed to the respondents, several experts conducted a pre-test to determine their views and opinions on each project. According to the feedback of experts, necessary corrections and revisions were made to the format, design and wording of the questionnaire. Affected by the epidemic situation, this study was unable to conduct a face-to-face questionnaire survey, and this study conducted a questionnaire survey through the Internet. After confirming the validity of the questionnaire, the researcher officially distributed the questionnaire in November 2022. The questionnaire is mainly distributed by English teachers and collected at the same time to ensure a high recovery rate. With the help of the online survey platform, 119 valid samples were obtained.

DATA ANALYSIS

After data processing, SPSS22.0 is used for data analysis. Focusing on the characteristics of English learning, this study mainly analyses the differentiation degree of related variables through the coefficient of difference. The coefficient can be expressed by the proportion of standard deviation and average value, that is, CV=S/V%, where CV is the difference coefficient, S is the standard deviation, and V is the average value. Experience shows that CV value is generally 5% - 35%. Empirical criteria for differentiation are: if CV<9%, it means that there is no differentiation; If CV>20%, it indicates severe differentiation; If 9%<CV<20%, it means there are signs of differentiation, which should be paid attention to. For some variables, the mean value is directly calculated for analysis.

RESULTS

The data collected by the questionnaire shows that the respondents come from many different majors, among which the students in artificial intelligence (23.5%), engineering management (28.6%) and building intelligence (20.2%) are the most, followed by information engineering technology (15.1%), construction engineering technology (1.7%), construction equipment engineering technology (1.7%) A small number of students from heating ventilation and air conditioning technology (0.8%) and other majors (8.4%) participated in the survey. There are significant differences between higher vocational majors, including English proficiency. Students from different majors often have certain differences.

ANALYSIS OF THE CHARACTERISTICS OF PERSONALISED ENGLISH LEARNING IN HIGHER VOCATIONAL COLLEGES

a. Personal English Foundation

It can be seen from the calculation that there are obvious differences in the English foundation of vocational college students (the CV reaches 0.46), and the students have different English levels. Among them, 30.3% of the students passed the spring college entrance examination, 58.9% of the students scored below 100 in the summer college entrance examination, and only 10.9% scored above 100 in the summer college entrance examination. It can be seen that the overall English level of most vocational students is low. **Table 1.** Descriptive statistics of Student English Foundation

Item No.	Valid N	Average Min	Average Max	Mean	Std. Deviation	CV
Q1	119	1	5	2.210	1.016	0.460

b. Motivation for learning English

The calculation shows that there is obvious differentiation in the personal development of vocational college students. Most students choose to upgrade from college to college and look for jobs, accounting for 75.6% in total. A small number of students choose to start their own businesses or others. Personal development direction directly affects the purpose of learning English. The proportion of consulting English literature, upgrading to junior college, going abroad, and CET-4/CET-6 examinations is 22.3%, 11.4%, 31.9%, 4.4% and 30.1%, respectively. It can be seen that there are significant differences in the motivation of vocational college students to learn English.

Table 2. Descriptive statistics of English learning motivation

Item No.	Valid N	Average Min	Average Max	Mean	Std. Deviation	CV
LM1	119	1	5	2.320	1.164	0.502
LM2	119	1	5	3.087	1.502	0.486

c. Learning initiative

Around the initiative of English learning, the Likert scale was used for statistics. The results show that higher vocational students have a higher interest in learning, but their motivation for autonomous learning is slightly insufficient. **Table 3.** Descriptive statistics of English learning initiative

Item No.	Valid N	Average Min	Average Max	Mean	Std. Deviation
LI1	119	1	5	3.250	1.237
LI2	119	1	5	3.590	1.548

d. Learning style

The respondents' choice of learning methods is relatively consistent. 61.3% of higher vocational students prefer online and offline learning methods, while 17.6% prefer online learning methods. It can be seen that most students have adapted to using the Internet for English learning. There are significant differences in the English learning time of vocational college students. Similarly, for the requirements of the learning process, learning evaluation and online learning, the respondents' choices also show obvious differentiation, indicating that vocational college students have a personalised pursuit of English learning. **Table 4.** Descriptive statistics of English learning style

Item No.	Valid N	Average Min	Average Max	Mean	Std. Deviation	CV
LS1	119	1	3	2.440	0.777	0.318
LS2	119	1	4	1.560	0.646	0.414
LS3	119	1	3	1.380	0.582	0.422
LS4	119	1	3	1.390	0.556	0.400
LS5	119	1	3	2.160	0.770	0.356

e. Learning Strategies

There are significant differences in the choice of English learning strategies. Whether it is the overall learning method or the learning strategies of listening, speaking, vocabulary and grammar, vocational students have their own personalised choices.

Table 5.Descriptive statistics of Learning Strategies

Item No.	Valid N	Average Min	Average Max	Mean	Std. Deviation	CV
LS1	119	1	3	1.330	0.554	0.417
LS2	119	1	3	2.320	0.780	0.336
LS3	119	1	3	1.650	0.684	0.415
LS4	119	1	3	1.370	0.565	0.412
LS5	119	1	3	1.500	0.687	0.458
LS6	119	1	3	1.610	0.690	0.429

f. The need for professional English

For the needs of professional English, the respondents made relatively consistent choices. Specifically, 79.8% of higher vocational students know or are familiar with their majors, which indicates that the freshmen of higher vocational students have a certain professional foundation. Because the foundation of English is still there, as many as 90% of students generally hope to start learning in their freshman year. As many as 84% of students hope that their English learning content can be connected with their future professional posts, which shows that students have a strong desire to combine English with their majors.

1	able 6.Descriptive s	tatistics of the	e need for pro	ressional En	giisn

Item No.	Valid N	Average Min	Average Max	Mean	Std. Deviation	CV
ESP1	119	1	4	1.990	0.786	0.395
ESP2	119	1	3	1.090	0.368	0.338
ESP3	119	1	3	1.220	0.539	0.442

Comparative analysis of English proficiency on learning characteristics

According to the students' English proficiency, the samples are divided into two groups, namely the high-level group (HG) and the low-level group (LG), and their learning characteristics are counted and compared. The results showed that the learning initiative of the high-level group (mean 0.379) was significantly higher than that of the low-level group (mean 0.318). Relatively speaking, in terms of learning styles, the low-level group (CV is 0.389) is more diversified than the high-level group (CV is 0.364). Similarly, in terms of learning strategies, the low-level group (CV is 0.389) is more differentiated than the high-level group (CV is 0.364). In terms of professional English needs, the performance of high-level and low-level groups is basically the same. Regardless of the students' English level, they all hope that English learning can be combined with their majors. In general, the low-level group pursues more diversified learning, and the personalised learning characteristics are more significant.

Table 7. Comparative analysis of English proficiency on learning characteristics

HG					LG			
Variables	Valid N	Mean	Std. Deviation	CV	Valid N	Mean	Std. Deviation	CV
LM	72	2.626	1.398	0.535	47	2.812	1.228	0.435
LI	72	3.180	-	-	47	3.790	-	-
LS	72	1.764	0.675	0.389	47	1.822	0.642	0.364
LS	72	1.733	0.689	0.405	47	1.472	0.570	0.384
ESP	72	1.420	0.545	0.384	47	1.457	0.575	0.387

DISCUSSION

The personalised learning characteristics of vocational students are basically the same. Generally speaking, vocational students have a diversified pursuit of learning methods and learning strategies, and they generally have the ability to learn online. Relatively speaking, vocational college students' awareness of autonomous learning is slightly insufficient. The reason is that it has a certain relationship with the learning environment. At present, vocational colleges lack a learning atmosphere, leading to the lack of students' learning autonomy. When it comes to English learning, vocational college students generally have a desire to learn professional English. They hope that English courses can be combined with their majors, which conforms to the teaching objectives of vocational college English. For students, improving the practical application of English has a strong learning attraction. This study found that the differences in English proficiency of vocational college students can have a certain impact on learning characteristics, and students with lower levels are more eager to choose personalised learning methods and learning strategies. The above conclusions have improved the existing personalised learning theory and confirmed the value of this research. This study can provide a reference for the reform of higher vocational education in the future, but there are also some shortcomings. As a preliminary study, the sample size of data collection is slightly small, and there is a certain difference in the number of samples between the high-level group and the low-level group, which may have some impact on the survey results. The follow-up study needs to further improve the sample of the questionnaire survey.

Students' personal development direction directly affects the content and needs of English learning. At present, vocational college students learn English mainly to meet the needs of work and entrance examinations. On the one hand, the future development direction of most students in employment and the occupation position has certain requirements on the English of employees. On the other hand, many students have the desire to improve their academic qualifications. English is a necessary part of the entrance examination. In addition, some students will consider going abroad in the future, which also represents a part of the demand for English learning. Because of the differences in learning needs, it is necessary for students to choose appropriate learning content, which can improve the motivation for learning. However, affected by the overall learning environment, students who have just entered higher vocational colleges often lack the initiative to learn English. Relatively speaking, students with poor foundations are more obvious. The combination of English and majors may be an effective way to solve this problem. No matter how personal the foundation of students is, they all have such aspirations. At present, many vocational colleges have set up professional courses in the first year, which can help students to have a necessary understanding of the major. On this basis, the combination of English courses and professional courses can improve the practical application of English. Due to the differences among majors, English learning contents of different majors have significant differences, which is a factor that must be considered in personalised learning.

Influenced by the epidemic in recent years, students have adapted to online learning regardless of their personal foundation. Network learning has become a mainstream learning method that can effectively cultivate the ability of autonomous learning. At the same time, the learning process and evaluation of higher vocational students tend to be diversified, and they prefer to adopt their own learning content, learning strategies and evaluation methods.

Especially the students with a good foundation have a stronger pursuit of personalised learning.

CONCLUSION AND IMPLICATIONS

This research shows that higher vocational students already possess the remarkable characteristics of personalised learning, which is more obvious for students with lower foundations. In addition, the obvious differences in their own foundation of higher vocational students make it imperative to promote the reform of personalised learning. The conclusion of this study can provide a reference for the future development of personalised learning programs.

On the whole, students' personal English foundation is not high, and they are quite different from each other, which is directly related to the enrollment channels of students. In fact, this is the

result of the expansion of vocational education in China. The differentiation of students' basic differences has become a significant feature of vocational students. Through further analysis, it is found that students' English level has a certain relationship with their majors. Those relatively popular majors are more attractive to students, and their English foundation is relatively better. The difficulty of English learning materials needs to adapt to the students' English level; otherwise, it will affect the enthusiasm for learning. Students can adopt their own learning methods to improve learning efficiency and effect.

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APPENDICES

Appendix A: **Table 8.** Investigation on the Characteristics of English Personalised Learning in Higher Vocational Colleges

Variables	Items	References
	Q1: How is your English foundation?	Juhuasaizi et al. (2022)
English learning motivation	LM1: What is your personal future development plan? LM2: What is your main purpose of learning English?	Maqin et al. (2017) Maqin et al. (2017)
English learning initiative	LI1: Do you have the motivation to learn independently? LI2: As a college student, what is your current interest in learning English?	Juhuasaizi et al. (2022) Juhuasaizi et al. (2022)
English learning style	LS1: Which way do you like to learn English? LS: How long does LS2 study English online every week? LS3: What are your expectations for online learning? LS4: What assessment method do you expect for online	Zhiming et al.(2016) Zhiming et al.(2016) Zhiming et al.(2016)
	learning?	Zhiming et al.(2016)
	LS5: What are your requirements for online English learning?	Zhiming et al.(2016)
English learning strategies	LS1: What is your overall English learning strategy? LS2: What is your overall English learning strategy? LS3: What is your spoken language learning strategy? LS4: What are your listening learning methods and strategies?	Juhuasaizi et al. (2022) Juhuasaizi et al. (2022) Juhuasaizi et al. (2022) Juhuasaizi et al. (2022)
	LS5: What are your vocabulary learning methods and strategies?	Juhuasaizi et al. (2022)
	LS6: What are your grammar learning methods and strategies?	Juhuasaizi et al. (2022)
The need for special professional English	ESP1: Are you familiar with your major? ESP2: When did you start to study professional courses? ESP3: What do you want to learn in English?	Maqin et al. (2017) Maqin et al. (2017) Maqin et al. (2017)