



A Research on the Correlation between 21st Century Skills and English Reading Strategy of English Majors: A Quantitative Study in Chengdu University

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Abstract: 21st-century skills consist of learning and innovation skills, information, media & technology skills, and career and life skills, according to the Partnership for 21st Century Learning. This study selected 124 English majors from Chengdu University as the research objects, using SPSS25.0 to analyze the questionnaire data to examine the relationship between English majors' 21st-century skills and English reading strategies. The Major findings are shown as follows: First of all, English majors' overall 21st century skills are at a high level. Especially, learning and innovation skills obtain the highest score. Secondly, the majority of English majors excel in using English reading strategies. Specifically, the Global strategy is the one that English majors use most frequently. Thirdly, English majors' 21st century skills have a moderate correlation with their English reading strategy. Furthermore, this study summarizes significant implications for both instructors' pedagogy and students' learning in English reading techniques. Finally, the research's shortcomings are discussed.

Keywords: English majors; 21st century skills; English reading strategies; Correlation

Introduction

As it enters the twenty-first century, countries all over the world have developed in the field of 21st Century skills to adapt to global economic competition and technological advances. While basic abilities and subject knowledge, such as listening, speaking, reading, and writing, are no longer the primary educational goals. The 21st century skills' content and concepts also provide certain enlightenment for understanding the reasons for the rise of quality-oriented education in China.

In 1990, the US Department of Labor established the SCANS Committee (Secretary's Commission on Achieving Necessary Skills) to conduct research on workplaces and determine the skills young people need to successfully cope with work. The OECD (Organization for Economic Co-operation and Development) proposed a key competencies framework through the DeSeCo project (Definition and Selection of Competencies Programme) in 1997, and then countries began to develop their own key competencies or 21st century skills frameworks. Despite the fact that the frameworks for defining and classifying 21st century skills differ from one another, there exists many overlaps and shares great similarity in the concepts and elements of the skills (Dede, 2010). These frameworks share the following main characteristics: they are horizontal or general, which means they do not directly relate to a specific field, but are related to many fields; they are multi-dimensional with regard to knowledge, skills, and attitudes; The core consists of high-level cognitive skills such as critical thinking, problem-solving, learning and invention, cooperative and effective communication skills, as well as ICT skills and civic literacy. For helping students to be creative and survive in the complicated global society, 21st century workforce preparedness necessitates 21st century skills (Larson & Miller, 2011). Voogt and Roblin (2012) defined fundamental 21st century skills as creativity, communication, problem-solving, collaboration, critical thinking, technology literacy, and cross-cultural skills based on a comparative review of international frameworks for 21st century skills. These abilities go beyond knowledge and are necessary for success in education, work, life, and other areas, and They can be demonstrated in core disciplines and interdisciplinary fields.

English reading, as one of the basic skills to develop English using, plays a significant role in improving English majors' comprehensive English ability. In particular, The cognitive process of comprehending written linguistic information is referred to as reading. Students should master the skills to apply reading strategy in college English learning purposefully, such as speculation, critical reflection, and assessment, according to the College English Teaching Guidelines (version 2020).



The worldwide education system's goals and content have altered to meet the vast range of abilities required by 21st century society. And an increasing number of studies on 21st century skills are being conducted. However, research on English majors in the twenty-first century is scarce. Furthermore, the precise link between learners' 21st century skills and their usage of English reading strategies requires additional investigation. Therefore, the current study aims to investigate the correlation between 21st century skills and the English reading strategy of English majors.

Literature Review

21st Century Skills:

Definition of 21st Century Skills:

There are a large number of scholars and organizations researching and discussing 21st century skills, and they all agree that coping with global challenges requires new forms of skills. However, despite this consensus, there is still a lack of a unified definition of 21st century skills nationally (Joynes & Fenyiwa, 2019). 21st Century Skills are not new to the 21st Century, and the characteristics now referred to as 21st Century Skills have been the main elements of human progress across all of history. Voogt and Roblin (2010, 2012) described 21st Century Skills as new competences that society requires from the present workforce and education.

21st Century Skills, according to Scott (2015, p.8), are the knowledge, skills, and attitudes required to be competent in 21st century employment, employ new technology and engage properly in a changing society.

Chalkiadaki (2018, p.5) defined 21st Century Skills as encompassing a broad range of skill sets and professional attributes including critical thinking, team working, communication in mother tongue and foreign languages, mathematical and science competence, digital competence and so on.

Frameworks for 21st century skills:

The current study adopts the framework formulated by P21. As firstly, it is now one of the most renowned and authorized frameworks for 21st century skills; secondly, it is based on students—in early learning, in school, and beyond school—across the country and around the globe, which involves the targeted subjects in the current study. So the three sub-skills in the framework (learning and innovation skills; information, media, and technology skills; life and career skills) are chosen to be the three variables related to 21st century skills in the current research.

Frameworks for 21st century skills

Authorities/ Organizations	Main Elements of Framework
The Secretary's Commission on Achieving Necessary Skills(SCANS)	cognitive skills; fundamental skills; workplace competencies; personal attributes
Organization for Economic Co-operation and Development(OECD)	the ability to use tools; the skills to interact with heterogeneous groups; the skills to take actions independently.
EU	literacy ability, language ability, STEM ability and digital ability; personal, social and learning ability, and entrepreneurial ability; citizenship, cultural awareness and expression ability
U.S. Partnership For 21st Century Learning(P21)	learning and innovation skills; information, media, and technology skills; life and career skills
Assessment & Teaching of 21st Century Skills(ATC21S)	the way of thinking; the way of working; the skills of living in the world
The Ministry of Education of Singapore	core values; social and emotional capability; adaptability to globalization
Canadians for 21st Century Learning & Innovation(C21)	creativity, innovation and entrepreneurship, critical thinking, collaboration and communication; personal character, culture and civic morality; computer and digital technology.

The National Institute of Education Policy of Japan	practical skills; thinking skills; basic skills.
Finnish National Board of Education	cultural literacy, interaction and ICT ability; the skills of living and working, thinking and learning; the ability to care for oneself, manage and plan a sustainable future respectively.



Related Studies 21st Century Skills:

According to the different experimental subjects, this part divides the literature related to measuring 21st century skills into non-EFL-based and EFL students-based.

Shree Prasad Devkota & Dhundi Raj Giri & Shiba Bagale (2017) choose five English language teaching experts with advanced academic degrees and extensive experience in the EFL environment in Nepal. On the basis of research with five research participants, the researchers emphasized the project-based learning (PBL), 21st century skills and the role of the teacher, 21st century learners, problems, and possibilities in Nepal as EFL context. Additionally, the study offers considerably effective information regarding PBL, involving its problems and its applications in the context of EFL in Nepal.

Motallebzadeh, Khalil; Ahmadi, Fatemeh; Hosseinnia, Mansooreh (2018) invited 122 EFL learners from three private language institutes of Mashhad to participate in their study, which aims to figure out the relationship between 21st century skills, speaking and writing skills based on Structural Equation Modeling. The results indicate that communication and cooperation had the strongest link with foreign language speaking among the five sub-constructs of the 21st century skills, while technological literacy had the highest correlation with foreign language writing.

Eryanstah & Erlina & Fiftinova & Ari Nurweni (2019) conducted a survey study that assessed the status quo of EFL students' current knowledge and ICT skills. According to the data, EFL students' present level of digital literacy is classed as poor. Moreover, EFL students need to enhance their digital literacy abilities, such as mastering computer skills of using online apps, which would be of assistance to achieve the integration between digital literacy and language studying.

Hadiyanto, H. (2019) intended to explore students' perceptions of 21st century skill practices through e-learning activities by distributing related questionnaires to 33 students who study in TESOL program, to assess their mastery of 21st century skills in e-learning. The findings revealed that the pupils' general 21st century skills were at a high level. And through e-learning activities, the students were able to improve their 21st century skills.

Saleh(2019) carried out qualitative research by asking 24 Libyan EFL university instructors to finish an open-ended questionnaire, aiming to investigate the conceptions, implementation and challenges of critical thinking in the FL classroom. Fahad Saud Albahlal(2019) investigated the 21st century abilities mentioned in the relevant literature and examined the function of 21st century skills in EFL classrooms, with an emphasis on English as a Foreign Language (EFL). The study's goal is to explore how 21st century skills can be integrated into English language learning. Baran-Łucarz Małgorzata&Klimas Anna(2020) researched the perspectives, opinions, and self-awareness of English teachers regarding the 21st century skills in the Polish education system, especially 4Cs, which include Critical Thinking, Creativity, Communication, and Cooperation. They developed a questionnaire for 53 undergraduate and master English instructors and found that there is a need to enhance EFL teachers' awareness of the adoption of 21st century skills in the classroom.

English Reading Strategies:

Definition of Reading Strategy:

With the constant enrichment of research, domestic and foreign scholars have continuously expressed their opinions on reading strategies and have given different definitions.

According to Block (1986), utilizing reading strategies is a process in which readers interact with the text material intentionally and actively.

Wallace (1992) believes that reading strategy is a dynamic method of reading, which will change with the reading materials and purposes.

Reading strategies, as defined by Johnson K. and Johnson H. (1998), are actions that learners purposefully take to overcome problems during the reading activity.

To summarize, the definition of reading strategies varies from different angles and research fields. Based on previous scholars' research on reading strategies from different perspectives and focuses, and synthesizing existing definitions at home and abroad, the reading strategies in this research refer to specific methods that readers intentionally applied during the reading activity to facilitate their better understanding of the reading materials.

Categories of English Reading Strategies:

According to Block (1986), there are two types of reading strategies. The first is partial strategies, which are primarily related to specialized linguistic expertise, such as re-reading, paraphrasing, querying sentence meaning, and overcoming vocabulary problems. The second is general comprehension approaches, which include strategies that refer to comprehension-gathering and monitoring methods.

Reading strategies were categorized by O'Malley and Chamot (1990) into three types: social/affective strategies, cognitive strategies, and metacognitive strategies.

Oxford (1990) classified reading strategies into two categories: direct strategies and indirect strategies.

Mokhtari and Sheory (2002) developed the Survey of Reading Strategies (SORS), aiming to deepen EFL and ESL students' understanding of reading strategies and improve their reading comprehension abilities. SORS sorts the reading strategies into three groups: problem-solving strategies, global strategies, and supporting strategies. The SORS has been extensively adopted in domestic, and its main objectives are teens and adult students who speak English as a second or foreign language. Therefore, SORS is employed in the current research to evaluate the reading strategy of English majors.

Related Studies on English Reading Strategies:

When it comes to English reading strategies, the earliest related research can be traced back to the 1970s.

Philips (1975) studied how second language learners complete reading tasks and cope with vocabulary problems while reading by adapting the "Think Aloud Protocol". According to the results, she concluded that there were considerable differences between skilled readers and unskilled readers with regard to mastering fresh words. The former did a better job in guessing new words based on context and categorizing words with grammar rules.

Hosenfeld (1977) surveyed 40 learners who study English as a second language, using the "Think Aloud Protocol", and found that skilled learners and unskilled learners have different reading strategies for dealing with new words. Skilled learners tend to try all strategies first when confronted with obstacles in reading, while unskilled learners prefer looking up the dictionary directly when encountering new words. Additionally, he found that successful readers are more capable of skipping unimportant words whereas unsuccessful readers fail to apply this strategy.

Bereiter and Bird(1985) conducted two studies on readers' reading methods and strategies. The research results show that, on the one hand, excellent readers generally resolve obstacles by repeating dictation and reading, finding relevance when faced with obstacle-type learning materials. On the other hand, the more difficult reading methods have higher requirements for the readers themselves, because the implementation of these methods not only requires the readers to have a deeper understanding

of the method but also requires the readers to have a high level of self-awareness. Therefore, to improve Readers should be taught in accordance with their aptitude in reading proficiency, and should not blindly inculcate high-level reading methods. Phakiti (2003) classified 384 students from a university in Thailand into the high-level group, middle-level group, and low-level group. Research results indicate that readers of different reading levels apply metacognitive strategies at different frequencies. And students who prefer using metacognitive strategies usually have better performance in fully understanding the reading materials.

Kay Hongnan (2014) and other experts conducted a survey on English reading strategies use and English reading achievement, selecting high school students from two different schools as research subjects. The study shows that varying levels of high school pupils have different self-assessment skills and reading strategies use inclinations, especially when it comes to metacognitive strategies. His study has highlighted the significance of English reading strategies for English learning.

Islamiah (2017) examined the usage of reading strategies among learners of different genders and discovered that women's reading comprehension scores were considerably higher than men's overall due to women's natural advantages in verbal thinking. As far as the reading strategy itself is concerned, the inclination of some specific English reading strategies is irrelevant to gender. Therefore teachers should train students of different genders in the same level of reading strategies in actual teaching and there is no need to distinguish it from genders.

Soomro & Hussain (2019) employed MARSII to investigate the status quo of the students' use of reading strategies. The study results indicate that students' reading attainment could be anticipated by their reading strategy use. This suggests that raising students' awareness of reading strategies can help them gain a deeper and more accurate understanding of reading materials. Through carrying out Reading Comprehension Test and distributing the Metacognitive Strategies Questionnaire, Muhid and Abdul (2020) discovered that 11-grade students' reading attainment improved significantly by using metacognitive reading skills, particularly selective reading methods.

With the assistance of SORS (The Survey of Reading Strategy), Leonardus Par (2020) conducted a study on 56 EFL English majors in Indonesia, the purpose of which is to find out the correlation between reading achievement and reading strategies. The final findings point out that reading achievement can be influenced greatly by reading strategies. In addition, problem-solving strategies benefit readers the most.

Materials and Methods

Content Analysis :

This study examines the relationship between English majors' 21st century skills (three main skills: learning and innovation skills; information, media & technology skills, career & life skills) and their use of English reading strategies quantitatively by using SPSS25.0.

Case Selection :

In terms of case selection, two variables: 21st century skills (variable 1) and English reading strategy (variable 2) were examined, which included relationships of variable 1 & variable 2 and sub-variables of variable 1 & sub-variables of variable 2.

Research Design:

Research Subjects:

In this research, 124 English majors from Chengdu University participated in the study, and the study is conducted among freshmen to seniors equally (31 students in each grade).

Measuring Instruments:

In this research, four types of measuring instruments will be utilized to collect data on 21st century skills and English reading strategy.

(1) The Inventory of 21st Century Skills:

The instrument chosen to assess the status quo of 21st century skills is adapted from the Multidimensional 21st Century Skills Scale, which targets students in the 15–25 age group and was made by Cevik, M. & Senturk C. (2019). Its reliability and validity were proved in the research of Cevik and Senturk. It is a 5-point Likert scale consisting of three dimensions (16 items in total), including learning and innovation skills (items 1–6), information, media & technology skills (items 7–12), and life & career skills (items 13–16).

In order to ensure the reliability and validity of the questionnaire, a pilot study has been carried out. According to the results of the pilot study, the Cronbach Alpha coefficient is 0.943, which is higher than the standard coefficient of 0.6 proposed by Eisinga R & Te Grotenhuis M & Pelzer B. (2013), and the data in the formal study is presented in Table 1, which is still much higher than 0.6 (0.927); Chung R H & Kim B S & Abreu J M. (2004) suggested that the value of KMO should be bigger than 0.6, the KMO value in the pilot study is 0.903 (sig=0.000), which is found to be higher than the required value. Table 2 shows

that the KMO value of the formal study is 0.915(sig=0.000). Since all the indexes of the pilot study and formal study had met the requirement, the reliability and validity of the questionnaire can be ensured.

Table1: Cronbach Alpha Coefficient of the Inventory of 21st Century Skills

Numbers of Items	Sample Size	Cronbach Alpha
16	124	0.927

Table2: KMO and Bartlett’s Test of the Inventory of 21st Century Skills

Kaiser-Mayer-Olkin (KMO) value		0.915
Bartlett’s test of sphericity	Approx. Chi-square	1076.892
	Df	120
	Sig.	0.000

The Inventory of SORS:

The inventory of SORS was used to assess the status quo of English majors’ English reading strategies use. It was developed by Mokhtari and Sheory (2002) and revised by Zhang and Wu (2009) in China. For Chinese EFL learners, it is extremely useful to help them realize their own English reading strategy use. The SORS is composed of three dimensions(28 items in total,): global reading strategies (abbreviated as "GLOB") (items 1-12), problem-solving strategies (abbreviated as "PROB") (items 13-19), and supporting strategies (abbreviated as "SUP") (items 20-28).

In the current research, the pilot study shows that the Cronbach Alpha coefficient is 0.908(>0.60) and the KMO value of validity is 0.824(>0.60). Finally, as seen in Table3 and Table4, the formal investigation shows that the Cronbach Alpha coefficient is 0.915(>0.60), and the value of KMO is 0.839(>0.60), indicating the questionnaire has good reliability and validity.

Table 3: Cronbach Alpha Coefficient of the SORS

Numbers of Items	Simple Size	Cronbach Alpha
28	124	0.915

Table 4: KMO and Bartlett’s Test of SORS

Kaiser-Mayer-Olkin (KMO) value		0.839
Bartlett’s test of sphericity	Approx. Chi-square	1562.195
	Df	378
	Sig.	0.000

Results and Discussion

This chapter primarily reports the results and discussion of the questionnaires, and the data were analyzed by the SPSS 25.0.

The Correlation of 21st Century Skills and English Reading Strategy of English Majors

Table5: Correlations between 21st Century Skills and English Reading Strategy

		21st Century Skills	English Reading Strategy	GLOB	PROB	SUP
21 st Century Skills	Pearson Correlation	1	0.744**	0.631**	0.642**	0.639**
	Sig.(2-tailed)	0.000	0.000	0.000	0.000	0.000
	N	124	124	124	124	124

* p<0.05 ** p<0.01

The correlation between two variables, according to Hauke J&Kossowski T(2011), may be classified into three categories depending on the value of coefficients. If the value is below 0.3, it shows that the correlation between the two variables is poor; if the value is from 0.3 to 0.7, it indicates that there is a moderate relationship between them; if the value is higher than 0.7, it implies that the two variables have a high correlation.

According to Table5, English majors' 21st-century skills are strongly associated with English reading strategies, with a Pearson $r=0.744$ (Sig.=0.000), indicating that the participants' 21st century skills are significantly correlated with their English reading strategy use on a high level. Specifically, students' 21st century skills have positive correlations with all three English reading strategies. Among the three, the figure for 21st century skills and the figure for Problem-solving strategy is most relevant with the Pearson $r=0.642$ (Sig.=0.000), followed by Supporting strategies ($r=0.639$, $p=0.000$) and Global reading strategies ($r=0.631$, $p=0.000$). Problem-solving reading strategy is more positively related to 21st century skills than global and supportive reading strategy, implying that learners who have good 21st century skills are inclined to use problem-solving methods like guessing the meanings of new phrases as well as adjusting the reading speed.

Table6: Correlations between 21st Century Skills Subscales and English Reading Strategy Subscales

		English Reading Strategy	GLOB	PROB	SUP
learning and innovation skills	Pearson Correlation	0.694**	0.591**	0.627**	0.572**
	Sig.(2-tailed)	0.000	0.000	0.000	0.000
	N	124	124	124	124
information, media, and technology skills	Pearson Correlation	0.643**	0.539**	0.531**	0.576**
	Sig.(2-tailed)	0.000	0.000	0.000	0.000
	N	124	124	124	124
life and career skills	Pearson Correlation	0.693**	0.591**	0.603**	0.588**
	Sig.(2-tailed)	0.000	0.000	0.000	0.000
	N	124	124	124	124

As is listed in Table6, all the dimensions of 21st century skills have moderate correlations with English reading strategies. Among which, learning and innovation skills have the highest coefficient($r=0.694$, sig.=0.000) with English reading strategy. The coefficient between life and career skills and English reading strategy is slightly lower than the highest one, being

$r=0.693$ ($\text{sig.}=0.000$). Information, media & technology skill and English reading strategy are slightly less correlated($r=0.643$, $\text{sig.}=0.000$)

To be more specific, in terms of learning and innovation skills, it is most relevant with Problem-solving strategy as their coefficient is the biggest($r=0.627$, $\text{sig.}=0.000$), which suggests that students who master learning and innovation skills well could take full advantage of Problem-solving strategies such as visualizing the information or inferring unfamiliar words. Additionally, it also has a positive relation with Global strategies and Supporting strategies with $r=0.591$, $\text{sig.}=0.000$, and $r=0.572$, $\text{sig.}=0.000$ respectively.

A similar correlation could be discovered when it comes to life and career skills since Problem-solving skills have still been the one which have the highest correlation with it($r=0.603$, $\text{sig.}=0.000$), indicating that the better the students master their life and career skills, the more inclination they have to use Problem-solving strategy such as adjusting the reading speed and so on. Moreover, Global strategies and supporting strategies are correlated with the life and career skills with $r=0.591$, $\text{sig.}=0.000$, and $r=0.588$, $\text{sig.}=0.000$ accordingly.

As for information, media, and technology skills, according to the research results, it has the highest coefficient with Supporting strategies($r=0.576$, $\text{sig.}=0.000$), indicating students who learn information, media, and technology skills well will also excel in applying strategies such as taking notes, circling and underlining. Besides, it also has positive but less relations with Global strategies($r=0.539$, $\text{sig.}=0.000$) and Problem-solving strategies($r=0.531$, $\text{sig.}=0.000$).

Conclusion

This research adopts quantitative research methods by distributing questionnaires. The overall research findings are as follows:

English majors' 21st century skills have a high correlation with their English reading strategy. Besides, the research results also reveal the certain relations between the first variable's dimensions and the second variable's. In detail, English reading strategy has the highest correlation with learning and innovation skills and less relation with both life&career skills and information, media, and technology skills. Moreover, among the three reading strategies, the Problem-solving strategy has a significant correlation with learning and innovation skills and life and career skills; the Supporting strategy has the highest correlation with information, media, and technology skills.

The findings of the current research have revealed some critical implications for both teachers' pedagogy and students' learning.

since the study results now prove the positive correlation between 21st century skills and English reading strategy, it could be a guide to the training of English reading strategies. The results give information that learning and innovation skills, which consist of critical thinking skills, problem-solving skills, and so on affect the application of English reading strategy most. Teachers can improve students' use of English reading strategies by cultivating their abilities of multi-dimensional thinking, asking questions, and solving problems in the process of reading articles.

For another, students who have difficulty in applying English reading strategy could overcome such problems by improving their mastery of 21st century skills, especially learning and innovation skills. For example, taking advantage of innovative thinking through the image association method as well as developing their ability to guess the word according to the context to help their memorization effectively and increase learning interest in many aspects.

Although the study has found a significant correlation between 21st century skills and English reading strategies of English majors at Chengdu University, there is room to improve:

Firstly, the sample is insufficient.

Secondly, the gender ratio in this study is imbalanced.

Thirdly, the questionnaires should be given out multiple times to exclude accidental situations.

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Appendix I Questionnaire I

Dear students,
This questionnaire consists of two parts: personal information and multiple-choice.
Please fill in your personal information and answer, thank you for your cooperation! This study will be strictly confidential.

Basic Information:
Student number:
Grade:
Gender:

21st Century Skills Questionnaire

This is a 21st century skills scale. Please choose according to the actual situation. The degree of agreement is as follows: Strongly disagree, Disagree, Generally agree, Agree and Strongly agree.

1. I am willing to learn new things and new skills.
Strongly disagree
Disagree
Generally agree
Agree
Strongly agree
2. I can set goals for my study and carry them out.
Strongly disagree
Disagree
Generally agree
Agree
Strongly agree
3. I can develop theories or explanations about key issues in my study. (e.g., a proper learning method/system)
Strongly disagree
Disagree
Generally agree

Agree
Strongly agree

4. I can combine different ideas to form new ideas.
Strongly disagree
Disagree
Generally agree
Agree
Strongly agree

5. I question and explore authoritative opinions.
Strongly disagree
Disagree
Generally agree
Agree
Strongly agree

6. I can generate many new ideas when I meet open-ended problems.
Strongly disagree
Disagree
Generally agree
Agree
Strongly agree

7. When I need to collect information, I can independently collect the information I need through various channels and paths.
Strongly disagree
Disagree
Generally agree
Agree
Strongly agree

8. I can use and summarize the information I have collected correctly.
Strongly disagree
Disagree
Generally agree
Agree

Strongly agree

9. I always look at books, audio and video resources.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

10. I know the meaning of the smart logo on TV shows.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

11. I can use digital media tools such as Office, SPSS and mind mapping to summarize and integrate my information.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

12. I am aware of the changes in the world and innovative technologies.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

13. In the process of teamwork, I can actively participate in discussions and sharing.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

14. In the process of team cooperation, as a leader, I can make each member of the team get a reasonable division of work; As a team member, I can do my best to complete my own tasks and help other team members improve their overall work.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

15. I will study the characteristics of occupations to determine the most suitable one for me.

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

16. I will try my best to participate in activities that are beneficial to my personal and future career development. (e.g. internships, courses, seminars, training, etc.)

Strongly disagree

Disagree

Generally agree

Agree

Strongly agree

Appendix II Questionnaire II

Dear students,

This questionnaire consists of two parts: personal information and multiple-choice.

Please fill in your personal information and answer, thank you for your cooperation! This study will be strictly confidential.

Basic Information:

Student number:

Grade:

Gender:

English Reading Strategies Using Questionnaire

This is a scale for the use of English reading strategies. Please choose according to the actual situation. The frequency of choices is in descending order: never, occasionally, sometimes, usually and always

1. When I read English materials, I have a clear purpose, such as to learn or to obtain information related to the content of the textbook.

never

occasionally

sometimes

usually

always

2. When I read English materials, I will consider whether the content of the passage matches my reading purpose.

never

occasionally

sometimes

usually

always

3. When I read English materials, I usually preview the full text to get an idea of its structure and general idea.

never

Once in a while

sometimes

usually

always

4. When reading English materials, I would decide what to read carefully and what to skip or ignore.

never
occasionally
sometimes
usually
always

5. When reading English materials, I use the knowledge I already have (such as knowledge related to the topic or grammar) to help me understand the content of the text.

never
occasionally
sometimes
usually
always

6. When I read English, I use tables, graphs and illustrations in articles to enhance my comprehension.

never
occasionally
sometimes
usually
always

7. When reading English, I use contextual clues to help me understand what I am reading better.

never
occasionally
sometimes
usually
always

8. When reading English materials, I recognise important information by printing features such as bold and italics.

never
occasionally
sometimes
usually
always

9. When I read English materials, I check my understanding of a passage with new information.

never
occasionally
sometimes
usually
always

10. When reading English materials, I try to guess the drift of what I read.

never
occasionally
sometimes

usually
always

11. When reading English materials, I would check if my guesses or predictions about the content of the passage are correct.

never
occasionally
sometimes
usually
always

12. When reading English, I analyze and judge the information provided by the text with a critical eye, rather than passively accepting the text.

The information.
never
occasionally
sometimes
usually
always

13. When I read English materials, I read slowly and carefully to make sure I understand what I am reading.

never
Once in a while
sometimes
usually
always

14. When I read English materials, I adjust my speed according to what I read.

never
occasionally
sometimes
usually
always

15. When reading English materials, I sometimes stop to think about what I'm reading.

never
occasionally
sometimes
usually
always

16. When I read English materials, I picture the information in my mind so that I can remember what I have read.

never
Once in a while
sometimes
usually
always

17. When reading English materials, I reread the more difficult parts of the passage to improve my understanding.

never
occasionally
sometimes
usually
always

18. When I read English materials, If I come across new words and phrases, I will try to guess their meaning.

never
occasionally
sometimes
usually
always

19. When I get distracted while reading English materials, I try to concentrate again.

never
occasionally
sometimes
usually
always

20. When I read English materials, I make notes of keywords or sentences to help me understand what I am reading.

never
occasionally
sometimes
usually
always

21. When I read English materials, I underline or circle the main information in a passage so that I can remember it.

never
occasionally
sometimes
usually
always

22. When reading English materials, I read aloud to help me understand what I am reading when the content becomes difficult to understand.

never
Once in a while
sometimes
usually
always

23. When reading English materials, I turn to relevant reference books (such as dictionaries) to help me understand what I am reading.

never
occasionally
sometimes
usually
always

24. When reading English materials, I retell articles in my own words to better understand what I read.

never
occasionally
sometimes
usually
always

25. When I read English materials, I read the context back and forth in order to grasp the relationship between the ideas and the general ideas in the context.

never
occasionally
sometimes
usually
always

26. As I read English materials, I ask myself questions and hope to get answers to these questions from the articles I read.

never
occasionally
sometimes
usually
always

27. When reading English materials, I translate what I read into Chinese word for word.

never
occasionally
sometimes
usually
always

28. When I read English materials, I sometimes think about the information in English and sometimes in Chinese.

never
occasionally
sometimes
usually