

Assessment Component 1

Chinese for Business Learners' Perceptions on Digital Educational Resources

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Abstract

Digital educational resources are commonly equipped in various language education, so as in Chinese as a foreign language education, especially in the extensive attention on Chinese for Specific Purposes (CSP) by researchers in recent years. This small-scale pilot study focuses on the typical field of Chinese for Business, which aims to explore learners' perceptions on the use of relevant digital educational resources. A mixed methods approach was adopted with questionnaires and semi-structured interviews. The participants were learners who attended the Chinese for Business program at two universities in the United Kingdom and China, while two teachers who were responsible for the courses also accepted questionnaires. The findings revealed that learners have a wide range of digital resources such as websites, apps, and AI tools were the most popular digital resources. Meanwhile, the key insights into the usefulness and limitations of digital tools were perceived by participants with five themes: improvement of language communication and communicative strategy, business-related content knowledge, cognition and metacognition in learning, understanding cross-culture of business, and attitudes toward technology. The challenges and suggestions related to the content of Chinese for Business in digital resources, as well as issues of authenticity, interaction and practicality in the technology. Personalisation and customisation were identified as vital directions for the development of digital educational resources in the future.

Keywords: Chinese for Specific Purposes (CSP); Chinese for Business; digital educational resources

Chapter 1: Introduction

The focus of International Chinese language education has experienced new trends, which are closely related to national policies and the demand for diverse talents. In 2013, an initiative named “The Silk Road Economic Belt and the 21st-century Maritime Silk Road (“The Belt and Road” or “B&R”)” was issued by the Chinese government. This initiative aims to promote communication and cooperation in diverse fields between China and other countries all over the world. Until 2023, there were 150 countries, and over 30 international institutes have established partnerships with China under the B&R in a wide range of areas such as economics, technology, culture, etc. (Chinese Government, 2023). To satisfy the increasing demand for frequent communication, in the field of international Chinese language education, have proposed a new developing direction. In 2015, the

10th Confucius Institute Conference took “Serving the new needs of the Belt and Road by the Chinese Language Promotion Institute, Confucius Institutes” as one of the most essential topics (XinhuaNet, 2015). In 2018, the types of new language talents and training methods have been specified. By implementing “Chinese Plus” programs to set up more economics, skilled, Chinese medicine, and other specialized Chinese language courses to develop more new Chinese language talents (Chinese Government, 2018). So far, the importance of cultivating new Chinese language talents who are not only good at language but also in specific professional areas to serve the B&R has been highlighted by the government. The development of such talent is precisely what Chinese for Specific Purposes (CSP) education focuses on.

Meanwhile, the transformation of educational mode affects the developing direction of CSP. In 2020, The World Economic Forum (WEF) proposed an Education 4.0 framework in the report “*Schools of the Future: Defining New Models of Education for the Fourth Industrial Revolution*”. Education 4.0 focuses on the transformation of education through advanced technology to meet economic development needs in the innovative era. Another report, “*Shaping the Future of Learning: The Role of AI in Education 4.0*” from WEF in April 2024, further highlighted the emergence of AI has also provided opportunities for language education.

The new trends facilitate educational institutes considering how to develop CSP to effectively cultivate new Chinese talents in educational resources and talent standards. For the educational materials, The Center for Language Education and Cooperation of China (CLEC), an organization affiliated with the Chinese Ministry of Education issued significant guides and documents that provide specific direction. The guide *The Development and Application Guide of Digital Resources for International Chinese Language Education* (CLEC, 2021) not only proposes frameworks guiding the construction of resources for general Chinese but also highlights CSP learning resources that should be created to improve learners’ Chinese proficiency in certain professional areas. It also identifies four types of digital educational resources: multimedia materials, digital textbooks, online courses, and applications. In the meantime, another three documents 2021-2025 Action plans in teaching resources, online education, and Chinese language vocational education mentioned the specific strategies for CSP development in traditional and digital specialised textbooks, curriculum

design, teaching methods, and professional teacher training (CLEC, 2021). In short, it shows that the construction of educational resources for CSP is a vital goal, especially in the development of digital resources for the Chinese language promotion institutes.

Except for the contribution in providing specific objectives by publishing documents in digital educational resources of CSP, the talent standards also could help to optimize the content of these resources for references. At the end of 2023, CLEC published a series of CSP learners-related proficiency standards: a general standard of *Chinese Proficiency Standards for Vocational Education*, as well as standards in several specific areas such as tourist guides, preschool Chinese language teachers, technology, and marketers (CLEC, 2023). These standards further provide the specific dimensions and levels to evaluate CSP learners which could inspire the content design of educational resources for different levels and specific professions of CSP. More importantly, these actions contribute to better training and providing appropriate employees to serve society.

Although it seems positive for the future of CSP education because of increasing attention by the government and educators in recent years, it encounters challenges due to insufficient theoretical and practical experience. In the CNKI, the Chinese publication platform, there are only 130 papers discussing the CSP field until August 2024, and several researchers indicated that lack of CSP courses, coursebooks, and teachers (Bai and Han, 2020). There is little research focused on the integration of digital educational resources in CSP, it might be important to understand the status and effectiveness of the digital educational resources in CSP. This pilot research focuses on the typical CSP area, Chinese for Business to explore this topic in depth. Chinese for Business, which is an early specific area of CSP with more practical experience. The findings help to understand the status of use of digital resources in Chinese for Business from learners' perspectives. It also aims to seek to pursue general inspirations to the development of digital educational resources in other Chinese for Specific Purposes fields for reference.

Chapter 2: Literature Review

2.1 Chinese for Specific Purposes (CSP)

2.1.1 Language for Specific Purposes (LSP)

The concept of Language for Specific Purposes (LSP) originated from English for Specific Purposes (ESP). Hutchinson & Waters (1987) indicated that ESP is a language teaching and learning approach designed to meet learners' specific learning needs. They also illustrated that ESP originated in the background of World War II, which raised an increasing number of English as a foreign language learners to learn English aiming especially for working needs in diverse workplaces. The category of ESP includes English for Academic Purposes and English for Occupational Purposes such as English for professional purposes: medical and business, as well as English for vocational purposes (Dudley-Evans and John, 1998). Then, in the late 20th century, different foreign Languages for Specific Purposes (LSPs) also developed such as French for Specific Purposes (Martin, 2010), Technical Japanese (Dowling and Mitchell, 1993) and Chinese for Specific Purposes (Li, 2011) around the Europe and Asia.

2.1.2 Chinese for Specific Purposes (CSP)

Chinese for Specific Purposes (CSP) is the Chinese language used in specific fields, ranges, and fixed places to meet the diverse learning needs of adult learners, which is proposed by ESP (Li, 2011). In fact, the history of the term Chinese for Specific Purposes (CSP) in modern times could go back to the late Qing Dynasty of China in the 19th century. At that moment, the “specific purposes” of CSP involved various fields, such as diplomats, missionaries, civil servants, and militaries at that time. Gianninoto (2013, cited Monnier, 2018) analysed two language pedagogical tools such as J. Doolittle's work Vocabulary and Hand-book of the Chinese Language: Romanized in the Mandarin Dialect (1872), which contains specialised vocabulary in 85 fields. Also, Th. Fr. Wade's Tzŭ-erh chi, which focuses on the administrative and official Chinese language, also provides evidence. In recent years, CSP has contained two aspects, firstly, it is “Professional Chinese” (“专业汉语”), which is a degree educational program at universities, such as the Chinese language with majors in science and engineering Chinese, Medical Chinese, literature and history. Additionally, the second type is “Industrial Chinese” (“行业汉语”), which means Chinese language in specific working

environments such as Chinese for diplomats, business, tourism and administration (Li, 2011). Based on these, Chinese plus vocational skills have become a newly developing area of CSP (Li, 2023).

2.2 Digital Educational Resources in Chinese for Specific Purposes

2.2.1 Types of Digital Educational Resources in Chinese for Specific Purposes

The integration of digital educational resources in International Chinese language education is a hotspot. Guo, et al. (2021) argued that “digital resources” refer to teaching resources that are digitally processed and can be used on the computer or the internet, which includes online courses, audio-visual materials, electronic teaching plans, digitalized materials, etc. Zeng and Lu (2021) pointed out educational materials with diverse digital forms and medium based on computers and mobile devices, which used to facilitate the efficiency of teaching and learning International Chinese language. Based on the Global Chinese Language Communication dynamic database established in 2019 by the "Global Village" International Chinese Education Research Team, Guo, et al., (2021) divided digital resources into three types: digital textbooks, online courses such as MOOC and micro courses, and digital applications such as mobile apps and online platforms. It is estimated that there were 3,679 series of digital textbooks, 485 MOOC courses within 11 MOOC platforms, 4,700 micro-courses, 400 Chinese language websites, and 272 mobile apps until 2021 (Zeng, 2024).

2.2.2 Usefulness and Limitations of Digital Educational Resources in LSP

Some researchers agree with the advantages of technical tools for LSPs education. On the one hand, it refers to the linguistic education advantage. Some scholars agree that the technology can assist in building up the LSP corpus (Aeno–Macia, 2012; Macià & Cervera & Ramos, 2006). Specifically, online resources can provide authentic specialised texts to help learners acquire and analyse professional corpus such as academic texts in English for Academic Purposes (EAP) (Aeno–Macia, 2012). On the other hand, resources show professional education strengths in LSP. Researchers believe that Computer Assisted Language Learning (CALL) materials of LSP involve cross-disciplinary content to improve the efficiency of language education as well as specific subject education (Aeno–Macia, 2012). It means digital materials can display a real working environment to assist learners in improving their communicative ability by using objective language in specific

areas, such as cross-cultural communication training in Business English learning by using online educational games (Guille'n-Nieto, 2009). Besides, the technology-based educational materials of LSP also have common advantages as any other digital-based education, such as their accessibility and flexibility, diversity, shareability, etc. In particular, the distance learning mode helps to broaden the range of LSP learners all over the world and promotes the creation of customised LSP resources because of low costs (Aeno-Macia, 2012).

Nevertheless, with the development of digital materials in LSP education, there are worries about the challenges and limitations of some researchers. Krystalli & Mavropoulou (2020) mentioned the usefulness of mobile-assisted language learning, such as understanding terms, practising pronunciation, and oral skills in French for Specific Purposes (FSP) for learners, while some technical issues and skills, network security problems, and difficulty in online classroom management. The researchers of CSP such as Bai & Han (2020) stated that it lacks appropriate CSP courses, textbooks, and professional teachers for CSP.

2.3 Chinese for Business Education

Chinese for business became popular since the 1980s which is a period that the increasing frequent business communication between China and other countries (Zhang, 2006). Yang and Chen (2008) proposed that Chinese for Business is an area of Chinese for Specific Purposes, which is a particular Chinese language that aims to solve business communication issues based on diverse business scenarios. Researchers indicated the features of Chinese for Business education, for instance, the professional business terms, Chinese cultural knowledge, and linguistic styles such as written and colloquial style, formal and informal style (Zhu, 2023). For the teaching and learning of Chinese for Business, it shows a dynamic change with the transformation of technology. In the early times, the studies focus on the content of Chinese for Business teaching. Ding (2004) conducted action research on traditional face-to-face Chinese for Business writing courses. She mentioned basic forms, common sentences, and writing knowledge of Chinese and Business knowledge was the most important knowledge by learners need. Communicative strategy teaching is also heightened in oral Chinese for Business courses (Zhang, 2011). In the past ten years, some researchers have gradually focused on teaching methods with digital resources of Chinese for Business learning, such as

exploring online self-learning and classroom learning in flipped classrooms (Shen, 2019). Feng and Zhang (2020) applied Massive Open Online Courses (MOOCs) for blended learning of Chinese for Business courses to overcome the space and time limitations in Modern language education.

2.4 Theories

2.4.1 Content and Language Integrated Learning (CLIL)

Content and Language Integrated Learning (CLIL) originated in the 1990s in Europe. It is a foreign language educational approach which focuses on the elements of professional content and foreign language learning (Coyle, Hood, and Marsh, 2010). They proposed a 4Cs framework which aims to strengthen integrating learning in four aspects: content (disciplines themes), communication (language learning and its usage), cognition (the process of learning and thinking), and culture (improving the understanding of cross-culture and awareness of being global citizenship). Some researchers have explored how these elements interact in practice. Setyaningrum et al. (2020) explored the perceptions of teachers on the usefulness and limitations of remote CLIL teaching based on the framework.

2.4.2 Technological Pedagogical Content Knowledge (TPACK)

Technological Pedagogical Content Knowledge (TPACK) is a teacher knowledge framework proposed by Mishra and Koehler (2006). The basic framework of TPACK came from Shulman's Pedagogical Content Knowledge (PCK) framework with two aspects of knowledge: Content knowledge (CK) and Pedagogical knowledge (PK) in 1987. TPACK was proposed on the background of the development of technology, which integrates three components of knowledge: Technology knowledge (TK), Technological content knowledge (TCK), and Technological pedagogical knowledge (TPK). The teacher's knowledge is described and evaluated to serve teaching in the digital era (Koehler et al., 2013). Many researchers integrate TPACK to study how to optimise teaching methods and improve the comprehensive literacy of teachers. (近几年例子) Additionally, parts of the authors also utilise the TPACK for online educational resources. (例子) In the field of LSP education, some researchers focus on the development of materials based on TPACK, such as designing ESP resources for community-based tourism courses (Susanti and

Kurniawati, 2020).

2.4.3 21st Century Skills Framework

The 21st-century skills framework is one of the most influential theoretical frameworks to evaluate talent for changeable social demands. Partnership for 21st Century Skills (P21, 2019) proposed the 7Cs framework with three aspects for the significant competencies for individuals: Learning skills: Critical thinking, Creativity, Collaboration, and Communication; Literacy skills: information, and media literacy, Computing and Information and communication technology (ICT) literacy; Life skills: Flexibility, Leadership, initiative, Cross-cultural understanding, and Career and learning self-reliance.

2.5 Conclusion

In conclusion, the development of ESP, CSP and other languages for specific purposes have similarities and differences. Firstly, the history of ESP and CSP both indicates that social needs facilitate the transformation of the requirements of foreign language talents. The concept of LSP originates from ESP and developed in different foreign language education such as Chinese for Specific Purposes (CSP). Similar to the background of the emergence of ESP during the World War II period, an increasing need for diverse language talents for serving society, CSP also developed quickly after the initiative of China's policy, the Belt and Road, the communication between China and other countries have been increased which raising the demand for the diverse employees. The field of Chinese as a foreign language education identifies a new objective: to cultivate Chinese language talents to serve social needs.

Meanwhile, many languages for specific purposes focus on the application value of language learning rather than being limited in learning about linguistics. For example, English for medical or business purposes and Chinese for traditional Chinese Medicine or business purposes. Learners expect to use the target language in their professions at schools or working environments. Surely, for the "specific purposes", different LSPs have different emphases. For instance, the English for Academic Purposes of ESP is a significant component, but it is not mentioned too much in CSP. It might also be affected by different demands for society and learners. In this study, Chinese for

Specific Purposes (CSP) refers to the Chinese language being used in specific fields, ranges, and fixed places to meet the diverse learning needs of adult learners.

To improve the field of CSP to effectively develop more CSP students, the researchers have started to focus on teaching and learning methods, especially integrating technology and CSP in this digital era. During this period, digital educational resources were increasingly developed to assist learning. The digital educational resources of CSP in this study can be defined as educational materials with diverse digital forms which can be used on computers or other mobile devices. These digital educational resources primarily are what learners actively choose and use, with a small portion involving passive use, aiming to assist their learning of the Chinese language and specific professional knowledge.

In recent years, with political support and a series of documents issued by CLEC, a large number of digital educational resources for International Chinese language education have been developed with various types such as digital textbooks, online courses, websites and apps. In the meantime, some significant documents such as the five-year action plans also mentioned the importance of digital resources construction of CSP. However, there are almost no studies that have specially documented the types and quantities of digital educational resources in CSP. In other words, there exist potential research gaps on this topic. This study firstly aims to understand the status of digital resources of CSP.

Although there are limited studies on digital resources in CSP, the experience of integration of technology and LSP might inspire this study to understand the similarities in the features of digital educational resources between CSP and LSP. The related literature states the effectiveness of digital resources for LSP education, especially for understanding specialised texts of LSP, enhancing linguistic communication for learners, and technological advantages such as flexibility. Meanwhile, some technical issues also existed. This study also aims to figure out the advantages and current issues of the use of digital educational resources in CSP.

In order to explore more in detail, Chinese for Business as one specific area of CSP is selected to be

focused on in this study. Chinese for Business education has developed quickly due to the frequent economic communication among countries. The features of Chinese for Business contain the linguistic styles, business knowledge, Chinese business culture, etc. The Chinese for Business education also attempted to apply advanced technologies to Chinese for Business courses for better learning for learners.

The review of the literature illustrates the importance of exploring the development of digital educational resources in CSP to cultivate more CSP talents who can speak Chinese and master specific professional knowledge to meet the needs of economic development. Although some policies were published to support the establishment of CSP digital educational resources, the effectiveness of these resources has seldom been tested. Moreover, as a subject based on learners' needs, the feedback of learners could provide more suggestions on the construction of the resources. However, it also lacks the studies to understand learners' perspectives on the use of current digital educational resources.

The pilot study aims to take Chinese for Business as a specific field, to understand learners' views on the use of digital educational resources during the learning of Chinese for Business in a small range of learners studying in both the UK and China. The research questions are as follows:

Research Question: How do Chinese for Business learners perceive the usefulness and limitations of current digital educational resources in Business Chinese?

Sub Question 1: What are the features and difficulties of Chinese for Business?

Sub Question 2: What digital educational resources did learners frequently use for the learning of Chinese for Business?

Sub Question 3: What are Chinese for Business learners' perceptions of the usefulness and limitations of digital educational resources?

Sub Question 4: What are Chinese for Business teachers' and learners' perceptions of the challenges and suggestions of digital educational resources in Chinese for Business?

Chapter 3: Research Design and Methodology

3.1 Research Design

3.1.1 Research philosophy

The exploration of “being”, emphasises the essence of existence and the organisation of the real world (Crotty, 1998). In this study, the learners’ experiences and perceptions exist, and the features of digital resources can be subjectively perceived by learners. Under the ontology of relativism which focuses on individuals’ experiences and consciousness (Crotty, 1998). This study explores the existence of Chinese for Business learners’ perceptions based on their unique learning experiences.

Epistemology stresses the cognition process and capacities for valid scientific knowledge (Novikov and Novikov, 2013). In this study, the cognition is that Chinese for Business learners interact with resources and reflect on their experiences to evaluate them. A constructivist epistemology highlights people actively constructing their thoughts through interactions (Cohen, Manion, and Morrison, 2018), guides the research to focus on Chinese for Business learners’ interaction with digital educational resources and reflects on their experiences to evaluate them.

Paradigm highlighted how to interpret reality and define valuable knowledge and approaches under a conceptual framework. (Cohen, Manion and Morrison, 2018). This study needs diverse perspectives to explore how learners understand digital educational resources and provide suggestions for creating targeted resources of CSP. Additionally, situated within the pragmatism paradigm which starts with issues and aims to provide practical solutions in multiple ways (Saunders, Lewis, and Thornhill, 2023), this study aims to explore diverse perspectives to explore how learners understand digital resources and provide suggestions for constructing digital resources of Chinese for Business. Therefore, a more comprehensive inquiring approach of mixed methods will be adopted to integrate qualitative and quantitative data to understand issues (Creswell and Creswell, 2014), especially due to the advantages of complementarity, interpretation, diversity, and triangulation (Saunders, Lewis, and Thornhill, 2023).

3.1.2 Research Positionality

In this study, my position is identified based on my experience as a Chinese for Business teaching assistant as well as my Chinese as a foreign language teaching experience. Therefore, the experience guides me to continuously reflect on my experience and construct new ideas based on the interaction with the Chinese for Business learners and their teachers. My paradigmatic and philosophy led me to conceive my research design to be more rational and coherent, which could better analyse and discuss the findings (Opie, 2004). As a researcher in this study, I was not a teacher for the Chinese for Business course but a person who was a stranger to the learners. The purpose of this study is to explore learners' perceptions on digital educational resources.

3.1.3 Theoretical Framework

Effective digital educational resources could assist students in learning Chinese for Business. Understanding the strengths and challenges of current digital resources from learners' views might inspire to improve of current resources. The findings may provide suggestions to effectively cultivate more diverse Chinese language talents skilled in both language and business knowledge through digital resources, ultimately meeting the demands of international communication.

In this study, CLIL, TPACK, and 21st-century skills frameworks are significant theoretical framework. Some researchers attempted to integrate these theories into practice, for example in LSP education, especially exploring the use of digital tools recently. For example, Egorova (2020) proposed that it is a promising way to integrate CLIL to implement innovative culture ESP courses with digital tools. The researcher found that digital tools could improve English language skills in listening, speaking, reading, and writing, especially the professional vocabulary of ESP, and these resources also create authentic resources to improve the interest in cultural subject knowledge for ESP learners. Apart from some researchers focus on the elements of content and language of LSP, several researchers also apply the technology-involved educational framework TPACK to improve LSP teaching and learning. Susanti and Kurniawati (2020) attempted to design digital materials based on TPACK to enhance the technology, pedagogy and content knowledge of these resources to support English for Tourism learning of ESP. The practices enrich the application of CLIL and

TPACK in LSP education, which highlights the characteristics of LSP education, not only in language and subject teaching and learning of LSP but also in technological knowledge of features when implementing LSP courses with digital educational resources.

In addition, some researchers also concentrated on the functions of teachers in improving certain significant qualities for students nowadays. Valtonen, et al., (2017) stressed that the 21st-century skills for students such as collaborating, problem-solving, creativity competencies, and ICT literacy should be necessarily improved. In the education process, practitioners' positions and objectives in developing talents have been identified more specifically. They integrated TPACK and 21st-century skilled framework to discuss the relevance of TPACK factors and provide a new instrument to measure pre-service teachers' knowledge to make good use of digital resources for supporting learning practice. Moreover, some research focuses on language talent development. Based on Egorova (2020), Qi (2024) also constructed a new conceptual framework with the language learning framework CLIL and a technology-involved educational framework TPACK to explore the usefulness of digital tools for English courses among young learners. She emphasised that the integration could enhance the comprehensive skills under the 21st-century skills framework. She investigated teachers' perceptions on this topic and concluded the teaching methods of CLIL with digital tools could enhance language skills and students' 7Cs skills, such as communication skills such as collaboration, cognition skills such as critical thinking and creativity, and technological skills such as computing and ICT literacy.

All in all, the above literature shows examples of integration of CLIL, TPACK and 21st-century skills framework to study technology involvement in education, especially in language education and LSP education from diverse perspectives. Nevertheless, there is a methodological gap in the combination of these three frameworks to explore digital educational resources in CSP education. This study took Chinese for Business as a specific field of CSP to understand the characteristics of digital resources supporting learning from learners' perceptions. Firstly, a talent requirements theory of 21st-century skilled framework could provide dimension about what are most important skills for the Chinese for Business talents nowadays. Then, based on these standards and objectives, how the different digital resources assist learners in learning Chinese language and business content

knowledge in Chinese for Business Purposes. Therefore, the foreign language teaching and learning theory CLIL could also offer elements to deeply explain the relationship between the content and language of Chinese for Business. Furthermore, due to the technological features of these digital resources, another knowledge framework with content, language and technology provides more perspectives on this topic. The following part shows the key elements in these theories related to this study.

3.1.4 Analytical Framework

In this study, it is vital to construct an analytical framework to analyse the usefulness and limitations of digital educational resources in specific aspects for Chinese for Business learners. In this study, the three main theories of CLIL, TPACK and 21st-century skills frameworks were integrated to construct an initial analytical framework with five dimensions: Communication, Content, Cognition, Cross-Culture, and Technology. The specific elements of each dimension are as follows (Figure 1: Analytical Framework):

- Communication: language communication, communicative strategy, and collaboration
- Content: business professional knowledge in theory and practice
- Cognition: critical thinking, problem-solving, creativity, and metacognition
- Cross-culture: cross-culture awareness, understanding, and adaption
- Technology: information literacy and Information and communication technology (ICT) literacy

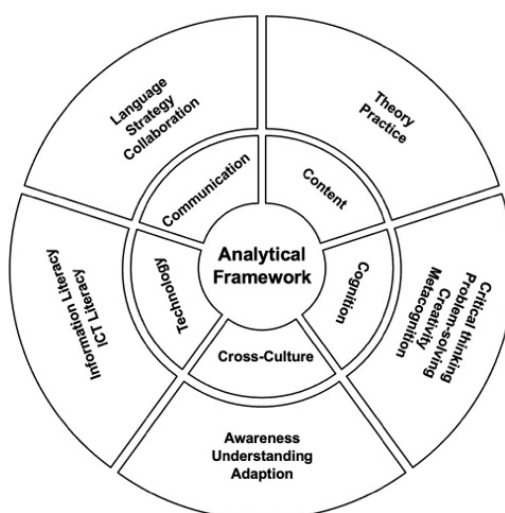


Figure 1. Analytical Framework

3.2 Methodology

3.2.1 Sampling

Convenience sampling and Snowball sampling were used to access potential respondents. It is because of the particularity of the group of Chinese for Business learners who are not common Chinese language learners, but a group of students selected Chinese for Business as a course or major in universities all over the world. The sample size was small and separated compared to general Chinese learners overall. In this study, I was not the in-service teacher for the Chinese for Business course but have been a teaching assistant for the Chinese for Business courses before in China at my previous. Therefore, convenience sampling helped it easier to identify the participants who had been studying the course in my previous work settings in China by a familiar gatekeeper. However, it should be seriously considered the single convenience sampling on the generalizability and representativity of the study (Cohen, Manion and Morrison, 2018).

Additionally, the possible different opinions and affected factors on the issue for the learners studying in the Chinese context and other countries have also been noticed. Therefore, I also sought opportunities to broaden the range of the sample size if possible. I contacted Chinese for Business course in-service teachers in the UK as gatekeepers through email and in person and gained approval for recommendations from the teachers. I sent the gatekeepers emails embedded with an invitation for an online survey and online or face-to-face semi-structured interviews with their students, and then the gatekeepers forwarded the email to their students.

Finally, there were 7 learners (5 female and 2 male) and 2 teachers who accepted the interview (see Table 1 and Table 2). All the learners were between the age of 18-24. The 4 interviewees, LC1, LC2, LC3, and LC4 who studied at a Chinese university came from European and Asian countries while 3 learners LU5, LU6 and LU7 who studied at a UK university were British citizens. Meanwhile, a total of 11 respondents filled out the questionnaires, which included 7 interviewees, and 4 of 11 learners who did not participate in the interview completed the questionnaires. Additionally, 2 teachers of these learner participants TC1 and TU2 who have taught Chinese for Business in China and the UK university for 13 and 20 years respectively, both fill out an online open-ended

questionnaire after collecting the data from students. The interviews were to understand more information about teachers' engagement mentioned by the learners, which might exist more factors that affected learners' use of digital educational resources for Chinese for Business learning.

Table 1. Interviewee demographic information (Learners)

Pseudonym	1: LC1	2: LC2	3: LC3	4: LC4	5: LU5	6: LU6	7: LU7
Gender	Female	Female	Male	Female	Female	Male	Female
Age	18-24	18-24	18-24	18-24	18-24	18-24	18-24
Nationality	Indonesia	Uzbekistan	Russia	Bulgaria	British	British	British
Location of the University	China	China	China	China	UK	UK	UK
Major	Chinese for Business	Chinese for Business	Chinese for Business	Chinese for Business	International Relations	International Relations and Chinese	Chinese Studies
Native Language	Indonesia	Uzbekistan	Russian	Bulgarian	English	English	English
Chinese Learning Duration	1-3 Years	1-3 Years	1-3 Years	1-3 Years	1-3 Years	3-5 Years	3-5 Years
Chinese Proficiency	HSK5	HSK5	Between HSK 3 and HSK 4	Between HSK 4 and HSK 5	Between HSK 3 and HSK 4	HSK5	Between HSK 5 and HSK 6

Table 2. Interviewee demographic information (Teachers)

Pseudonym	1: TC1	2: TU2
Gender	Female	Male
Location	China	UK
Years of Teaching Chinese for Business	13 years	20 years
Main Textbooks	Chinese for Economics and Trade	When in China: A Guide to Chinese Business Culture

3.2.2 Data Collection Methods

Mixed methods research with data collection instruments of questionnaires and semi-structured interviews were conducted in this study. In particular, to mitigate the interruption from other digital resources used in other courses learning, the participants in the questionnaire will be reminded repeatedly in the information sheet and orally in interviews to recall their experience specifically used for their Chinese for Business learning.

Due to the strengths of questionnaires such as cheap, available, efficient, quick, and easy to complete (Cohen, Manion, and Morrison, 2018), the online questionnaires contained a mix of multiple-choice, 5-point Likert scale, and open-ended questions used in this study, which can be used to collect facts or assess participants' attitudes on the digital educational use during learning Chinese for Business. The online questionnaire was set on a Chinese questionnaire design platform, WenJuanXing (WJX), which is accessible and convenient to participants both in the UK and China. The language was shown both in Chinese and English, and the participants could choose any of them for their preference.

There are four sections of the questionnaire, section 1 contains personal information to identify their gender, age, and nationality. To expand the potential factors possibilities, the linguistic and educational background, their Chinese language proficiency and learning duration, and Business working experience also were set to collect learners' additional information. Section 2 aims to figure out the specific learning experience through certain frequently used types of digital resources during the Chinese for Business learning and their self-evaluation of technology proficiency. Section 4 used a 5-point Likert Scale, which can be used to measure the levels of agreement of participants' attitudes, beliefs and features toward an issue (Thomas, 2021). 1 represented "Strongly Disagree" while 5 means "Strongly Agree". The questionnaire in this pilot study was not only used to explore learners' attitudes toward the use of digital educational resources in Chinese for Business in a small range of participants but also to reflect the content and process of the survey and revise the questions for a larger wide range of participants for the thesis to improve the validity and reliability. The open-ended questions in section 4 are used to provide opportunities for participants to express their

opinions about the challenges and suggestions for the development of digital resources in Chinese for Business.

In addition, semi-structured interviews for learners were conducted which can provide more rich and detailed information to explore the opinions in depth (Flick, 2023). In this study, the students who were willing to participate in the interviews would be asked to fill out the questionnaires first so that the interviewing questions would be specialised selected based on their respondents. Besides, face-to-face and online interviews at Ding Talk and Zoom were both for the participants to choose from. The former choice is for Chinese for Business learners in the UK and online interviews are for the learners who currently studying in China were conducted together. Because of the different Chinese language proficiency of participants, they were allowed to choose Chinese, English or a mixed language to freely express themselves. Each interview lasts for 30-40 minutes and contains two sections: Section 1 is about personal information, and Section 2 deeply explores the experience in the use of digital educational resources in Chinese for Business learning. The questions were guidelines and would be adjusted according to the instant feedback from the participants. Moreover, another two online interviews were conducted for the two teachers respectively to understand their attitudes and requirements for students by using digital resources during the teaching of Chinese for Business courses.

3.2.3 Data Analysis

Qualitative data from interviews provided detailed views by participants. The online and face-to-face interviews have been recorded and transcribed into texts. The data were analysed by Thematic Analysis (TA), which is a data analysis method to identify, analyse, and report themes within data (Braun and Clarke, 2022). On the one hand, thematic analysis has no limitation to the data collection method and theoretical framework. This study was conducted based on the CLIL, TPACK, and 21st-century skills frameworks with questionnaires and interview tools, so the process is much more flexible. On the other hand, the discussion with thematic analysis could enrich the description and be in-depth to the results (Braun and Clarke, 2022). The six steps of TA include Familiarizing the data and checking the accuracy of texts, generating initial codes with keywords based on some

obvious results, creating themes, reviewing themes, defining and naming themes and finally forming a report (Braun and Clarke, 2022).

Due to the limited quantitative data from questionnaires with only 11 participants, it should be carefully dealt with the quantitative data with a small size sampling. Descriptive statistics emphasises using diagrams to describe and compare variables' data, which were used to analyse the data of questionnaires (Saunders, Lewis, and Thornhill, 2023). During the analysis process, to be more objective, describe data features with tables with specific numbers rather than percentages. Except for understanding the current use of common digital tools by participants in a smaller size of participants, the results of questionnaires in the pilot study also aim to revise and optimize the content and logic for the study in a wider CSP group.

3.2.4 Ethical Consideration

The ethical considerations in this study were mainly followed based on the British Educational Research Association [BERA] (2024) After getting approval from the Ethics Committee, the data collection procedure was started and formally recruited potential participants. The participants were informed about the anonymity and confidentiality and being free to quit the investigation. The participants were asked to read carefully and sign the informed consent.

There were three important possible ethical issues mainly considered in this study. Firstly, the cross-cultural issues, which, because of diverse backgrounds learners. For example, some participants would be worried about the difficulty in understanding questions after reviewing the prepared guidelines for interviews. Moreover, it was a potential non-voluntarily risk for the participants because the position of gatekeepers in this study was teachers while participants were their students, which might put pressure on learners to voluntarily participate in the survey. Thus, some mitigation strategies were conducted, such as informing multiple language choices and their freedom to stop or ask questions before starting and creating kind and casual atmospheres as much as possible. In addition, it was the online Interviewing ethical issues. The participants lived in the UK or China, and parts of the interviews were conducted online, so the technological support and data

transmission process and data protection were conveyed (James and Busher, 2009), while another two of the participants had face-to-face interviews in the UK, ethically, releasing their pressure for the interviews and being respectful to them were being focused when I conducting the surveys.

Chapter 4: Findings and Data Analysis

4.1 Chinese for Business Learners' Unique Background and Learning Motivation

The participants of the questionnaires and interviews had unique, diverse backgrounds with different learning motivations. Most of the respondents were bachelor's students. The students in the UK took Chinese for Business as a compulsory or elective course, while all the participants studied in China majored in Chinese for Business. Firstly, policies from the government and universities encouraged some participants to learn the Chinese language or attend Chinese for Business courses. LC1 mentioned, "I am an Indonesian, and I studied the Chinese language in Taiwan during high school, there was a policy that if I passed the HSK 5, I could go to the third grade of a Chinese university, and the major of Chinese for Business is my only choice then. Luckily, I found I liked this major, and I am a little regretful that missing the two years of study of this major, so I found the knowledge of Chinese for Business was difficult." LU6 said "On the one hand, the policy of our university encourages us to choose a foreign language as a second major so that the requirements for grade standards could be reduced. I think learning the Chinese language would have potential in the future and could help to develop my career. LC4 also made her decision because of a scholarship from her country, "if I don't have a scholarship, I won't choose to come to China to study."

Additionally, for the question about learning motivation in the questionnaire for Chinese for Business, the response of "for individual interests" is the lowest, while "To enhance self-competitiveness and increase career possibilities", "To understand diverse cultures" and "To improve Chinese language skills to communicate with Chinese clients, colleagues and partners in workplaces" has similar rates. LC3 chose Chinese for Business because of his great interest in Chinese culture. He said, "I plan to graduate quickly and find a job as a translator." LU7, who just finished her master's study, and has learned the Chinese language in Italy, the UK, Taiwan, and mainland China before, also agrees with the career development by learning Chinese for business.

Although her current job is not related to her major, she still tries to seek career opportunities in the Chinese language. Whether studying Chinese in the UK or China, career development is a significant learning motivation.

It is noticed that 4 of 6 responses to questionnaires from learners in China have more focus on “To learn business knowledge in Chinese contexts while only 2 of 5 participants studied in the UK chose this option. LC2 and LC4 both studied China, and they also have Chinese for Business related working experience. LC2 said, “The safe environment of China is the most important reason for my parents, and recently, I have been doing some trade work between China and my country, so the content of Chinese for Business courses helped me a lot for my own business. LC4 have similar reasons. She came to China because of a scholarship from her country, and then the experience in China provided her with opportunities to do business in China recently. All of the interviewees learned in the UK expect to increase their career possibilities for the future. Several of the participants in China had rich business-related working experience. They urgently expected the Business knowledge and Chinese language knowledge of Chinese for Business courses to effectively help them during their authentic working environment. However, although LU5 and LU6 had a two-week internship in Shanghai before, their learning needs were relatively not so urgent, culture and career development were their focuses.

4.2 Chinese for Business Learners’ Use of Digital Educational Resources

The participants were asked about their frequent use of digital educational resources in their Chinese for Business learning in section 2 of the questionnaires as well as interviews. The responses from the participants toward this question were analysed into four main types: Accompanying digital educational resources of official textbooks, Online courses, Websites and Apps, and AI tools. Table 3 shows the responses to questionnaires on the use of specific digital educational resources by these 11 Chinese for Business learners. The following part shows the specific usage scenarios of different digital resources by participants’ learning experience.

Table 3. Online questionnaire results: 11 participants' frequent use of digital educational resources in Chinese for Business learning

Types	Specific Digital Educational Resources	Responses
Accompanying digital educational resources of official textbooks	PowerPoint	10
	Picture	6
	Videos accompanying textbooks or E-books	6
	Audio recordings accompanying textbooks or E-books	4
	Podcast	3
	E-books	4
	None/Other	0
Online courses, Websites, Apps	Public Chinese for Business courses (E.g., MOOCs, Micro classes)	0
	Private Chinese for Business Live classes (E.g., One-to-one paid live classes with private tutor in language platforms such as iTalk, Preply)	0
	Comprehensive Chinese Learning websites (E.g., "Chinese Language + Vocational Education Service" in "Chinese Plus")	0
	Mobile Apps (E.g., Electronic dictionaries, "Duolingo", "Chinese for Business")	7
	Virtual classroom tools (E.g., Zoom, Teams, Classin, DingTalk)	2
	AI tools (E.g., ChatGPT, Chinese AI tools: ERNIE Bot)	3
	None	4
	Other	2
Social media	WhatsApp	2
	WeChat	9
	Google	5
	Baidu	7
	YouTube	6
	Bilibili	2
	International Tik-Tok	2
	Chinese Tik-Tok	2
	Facebook	1
	Xiaohongshu	6
	X (Twitter)	1
	Weibo	1
	Instagram	5
	Reddit	1
	None/Other	0

Accompanying digital educational resources in official textbooks

For the accompanying digital educational resources of official textbooks, the participants of questionnaires and interviews were asked similar questions. PowerPoint is most frequently used, while the responses of pictures, accompanying videos, audio recordings and e-books in the questionnaire have average percentages. Some interviewees gave some examples. For the learners in China, LC1 and LC2 mentioned that the PowerPoint of Chinese for Business courses sent by their teachers were very helpful. LC1 also listed the PowerPoint not only for the teacher-lead class but also how to use it for their assignments after the class. “I also like using the website ‘Canva’, which is a design platform to help me design my PowerPoint for the presentation assignments.” LU5 added the relationships between official textbooks and digital resources. She proposed that traditional textbooks could help me to understand knowledge more systematically while digital resources could help me learn a specific point. However, LC3 held opposing ideas about PowerPoint, “I don’t know why we have such a lot of PowerPoint that is too boring and too difficult to understand.” He added, “They are not related to my major, and I hope there would be more cases not just asking us to surf the websites.”

Online courses

Surprisingly, when asking about the learning experience of online courses such as public Chinese for Business courses such as MOOCs and Micro classes, which were popular types of digital resources created by educators. The survey respondents and interviewees indicated that they did not know or were not interested in any public Chinese for Business online courses. One of the participants, LU5, attended a one-to-one online Chinese for Business class on a private tutorial platform for a period. When asked about the efficiency of online courses, she said, “Online classes didn’t work for me because the Chinese language is a ‘tonal’ language which requires a lot of listening input. However, online courses sometimes lack interaction and are mostly passive listening. I want to do anything, but you are not interrupting.”

Most participants have learned Chinese for over three years therefore, they have gone through the coronavirus pandemic in the past several years. During that time, most participants attended online

Chinese for Business. Refers to the virtual classroom tools, some students held different attitudes. LC1 used the “Google Classroom” in Taiwan, and she thought it was good. LC2 used Ding Talk, Tencent Meeting and Yuketang. “I was serious at the beginning, but eventually, I lost interest, so I would close the camera and mic to sleep or do my own thing because I felt exhausted and bored. The main reason for the change is the lack of interaction. I prefer a mix of online and in-person classes.” LU6 and LU7 mentioned they used Zoom. LU6 indicated, “It is ok for me but useless for the introverted students. The group of students should be trained so that they can be adapted to the teaching method.” LU7 were satisfied with the online courses in Zoom in general because you can record the class and review.

Websites and Apps

In the survey, participants were asked about using comprehensive Chinese language learning websites such as “Chinese Plus”. Neither responses to questionnaires nor interviews, all the participants indicate that they are not familiar with the websites or use other comprehensive learning websites. Moreover, participants also use search engine spots such as Google and Chinese search spots Baidu. Baidu is very popular for participants studying in China, while Google is used more for UK students. LC7 used both. she found the search results on these two websites sometimes were different therefore, comparing and selecting information is necessary. Furthermore, the video sites were also used by participants, such as YouTube, and TikTok. LC2 who is doing her own business, proposed that the Chinese TikTok is helpful for her Chinese for Business study. “I learned most of Chinese for Business from Chinese TikTok. There are a lot of related videos, for example, some explanations of difficult business terms such as Free on Board (FOB), the steps of using a wholesale marketplace 1688-Alibaba, and even watching factory live-action videos directly.”

For mobile learning apps, diverse apps are mentioned for different learning purposes. 3 of 7 responses to questionnaires introducing the Pleco, which is a Chinese e-dictionary. Besides, A free mobile app for learning languages named Duolingo is also very popular. LC1 said, “I used Duolingo, but some content needs to pay for the additional service so I just chose the free knowledge.” LC3 used the app “Laoshi - Chinese Flashcards” every day. He said, “I really enjoy it, and it is quite

helpful for me to learn Chinese. It includes vocabulary practice and provides textbooks and e-books. I can also find some business-related books on the app.” LC4 would like to use a digital music service platform Spotify to listen to podcasts, she mentioned, “Sometimes I will use podcasts when I find a topic that attracts me.” For unexpected answers from the collected data from questionnaires and interviews, software such as the flashcards app Anki, Quizlet, and some news sites such as BBC News and South China Morning were also mentioned. LU6 and LU7 always read the news online, especially the Chinese articles on BBC News. However, these apps are mentioned only for general Chinese learning while only several apps show a specific area for Chinese for Business knowledge such as e-dictionary. Additionally, when the interviewees were asked if they knew the apps specialised for Chinese for Business learning, most of the responses were negative.

Most participants in questionnaires and interviews used social media during their learning of Chinese for Business. The most popular platform is WeChat for both learners in China and the UK. 9 of 11 participants in the questionnaire ticked WeChat. Except for communicating with teachers and students, LC2 especially chatted or called her business working partners via WeChat. Interviewees were also asked their preference for using social media to learn Chinese for Business in detail. LU6 Xiaohongshu is another social media being frequently used by participants, especially learners in China. In questionnaires, there are 4 of 6 learners located in China who like to use it. Interviewee LC1 frequently mentioned “Xiaohongshu”. She said, “I enjoy using it. I can search for diverse information, and watch videos, and these can help to understand and adapt to the Chinese culture for my living convenience.”

AI tools

The participants were also asked about the use of AI tools. 3 of the 11 responses in the questionnaires choose the ChatGPT. Interviewees present their experiences using AI tools to learn Chinese for Business in detail. AI tools like ChatGPT are frequently used, while some participants also mentioned the Chinese AI platform Kimi Chatbot. LC1 occasionally used ChatGPT. I think the answers it provided sometimes were not what I wanted. I think Baidu is enough to find out my aimed answers.” LC2 frequently use ChatGPT and Kimi. She also proposed that it is necessary to

sift answers through ChatGPT. She thought that Kimi is much more helpful than ChatGPT, especially for Chinese language learning, while ChatGPT helps in the English part. LC4 gave more specific examples when using ChatGPT for Chinese language learning. “For instance, I met some difficult sentences in Chinese. I can recognise all the Chinese characters, but I can’t understand the meanings of the whole sentences. Especially it is quite helpful for understanding the Chinese idiom.” LU7 shared more learning experiences with AI tools integrating into Chinese for Business learning. “ChatGPT helped me separate the knowledge of Chinese for Business. I can better understand the Chinese language part and Business knowledge.” However, not all the participants used AI tools. LC3 said, “I did not use AI because I just like to use the tools that I am accustomed to.” LU6 always get good grades on the Chinese for Business course, he said, “I never use AI in any courses, including the Chinese for Business course, although my classmates like using it. For one thing, we don’t have AI tools during the exam, and the university also is strict with the AI repetition rates for our assignments. For another, I don’t think the results of AI are my work, so it is not helpful to improve myself. It would waste time on my precious university career.”

4.3 Chinese for Business Learners’ Perceptions of Digital Educational Resources

The semi-structured interviews and section 3 of the questionnaires focus on the learners’ perceptions and attitudes of digital educational resources during their learning Chinese for Business in the aspects of communication, content, cognition, cross-culture, and technology based on the analytical framework designed for this study. Table 4 shows the responses and percentage of the Likert scales of the results of quantitative data of questionnaires. Due to the small sample size, the percentage could not several special results were objectively described and highlighted. The opinions of interviewees will be analysed in detail, and usual or any other noticed data will be explained further.

Table 4. Online questionnaire results: 11 participants' perceptions on digital educational resources in Chinese for Business

	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
19	Help to learn Chinese for Business vocabulary	0 (0%)	0 (0%)	2 (18.18%)	8 (72.73%)	1 (9.09%)
20	Help improve listening and speaking skills in Chinese in real business or academic contexts	0 (0%)	0 (0%)	5 (45.45%)	5 (45.45%)	1 (9.09%)
21	Reading materials provided through digital resources helps understand business-related reading texts in Chinese	0 (0%)	0 (0%)	2 (18.18%)	9 (81.82%)	0 (0%)
22	Help improve writing ability to coherently organize and clearly express ideas in Chinese in workplaces	0 (0%)	0 (0%)	7 (63.64%)	4 (36.36%)	0 (0%)
23	Help improve verbal communication strategies in business	0 (0%)	0 (0%)	4 (36.36%)	7 (63.64%)	0 (0%)
24	Facilitate non-verbal communication strategies in commercial contexts	1 (9.09%)	0 (0%)	4 (36.36%)	5 (45.45%)	1 (9.09%)
25	Useful for collaborating with others when participating in commercial projects	0 (0%)	1 (9.09%)	5 (45.45%)	5 (45.45%)	0 (0%)
26	Deepen understanding of theoretical business concepts	1 (9.09%)	2 (18.18%)	4 (36.36%)	4 (36.36%)	0 (0%)
27	Help apply practical business knowledge in real-world vocational or academic studies.	0 (0%)	3 (27.27%)	6 (54.55%)	1 (9.09%)	1 (9.09%)
28	Help think critically while observing or involving in commercial activities, and develop problem-solving abilities	0 (0%)	1 (9.09%)	5 (45.45%)	5 (45.45%)	0 (0%)
29	Encourage me to reflect on my self-learning process and strategies	1 (9.09%)	1 (9.09%)	4 (36.36%)	4 (36.36%)	1 (9.09%)
30	Helps me be aware, understand and adapt to cross-cultural diversity in business contexts.	0 (0%)	1 (9.09%)	5 (45.45%)	4 (36.36%)	1 (9.09%)
31	Provide interactive and engaging learning experiences and increase motivation and interest in learning Chinese and Business knowledge	0 (0%)	0 (0%)	6 (54.55%)	4 (36.36%)	1 (9.09%)
32	Using Chinese for Business digital educational resources enhances my ability to effectively and ethically locate, evaluate, and use information.	1 (9.09%)	1 (9.09%)	5 (45.45%)	4 (36.36%)	0 (0%)
33	Improves ability to apply and create digital resources through technologies and multiple media.	1 (9.09%)	1 (9.09%)	5 (45.45%)	4 (36.36%)	0 (0%)

Improvement of Language Communication and Communicative Strategy

Questions 19-22 of questionnaires were asked participants' attitudes about the effectiveness of digital educational resources for Chinese language skills in Chinese for Business. It contains specialised business vocabulary in Chinese, listening and speaking skills, and reading and writing skills in business contexts. For the vocabulary, 8 of 11 participants of the questionnaire agreed that digital tools helped learn business vocabulary. LC1 thought the vocabulary part was difficult. LC1 thought digital tools such as translation apps and ChatGPT sometimes help to translate words into English. LC2 also use E-dictionary but she did not think specialised vocabulary is the most difficult part because "I know the English meaning, so I just need to know how to express it in Chinese." LU6 who seldom uses technology, proposed that not all the vocabulary can be understood by digital tools so when comes across some difficult words, "I prefer to ask teachers in person."

As for the Chinese language skills such as listening, speaking, reading, and writing in business contexts, the results of questionnaires in questions 20-22. All 11 participants held "Neutral", "Agree", or "Strongly Agree" attitudes on the assistance for language listening and speaking skills through digital tools for Chinese for Business. It is obvious that there are 9 of 11 participants agree with the usefulness of digital resources for reading materials such as financial news, commercial contracts, advertisements, and business e-mail. Meanwhile, 7 of 11 participants choose "Neutral". The interviewees also explain the reasons specifically. For the reading part, some of them held positive ideas. LC3 said that digital vocabulary apps such as "Laoshi" could especially improve reading through the textbooks and E-books on the app. Besides, LU5, LU6 and LU7 would like to read BBC news to do reading practices. For the writing practice, LC3 prefers to ask his Chinese friends to revise his writing assignment. Similarly, LU6 improved his writing skills in Chinese for Business in face-to-face teacher-led classes. "I like the practices in authentic class where my teacher asks me to write a 300 to 400 article within 30 minutes every week without any instruments. For example, we were asked to write an article in Chinese to compare the differences in business negotiations between China and Western countries."

The participants were also asked about the efficiency of technological learning tools in verbal

communication strategies from questions 23-25, such as using polite words, asking for advice, and understanding the implications of non-verbal communication strategies in commercial contexts. For the verbal communication strategy, 11 participants chose the options “Neutral” or “Agree”, while 1 participant selected “Strongly disagree”. LC2 practised her communicative strategies by communicating with Chinese businessmen during her trading work, not relying on digital tools. For the usefulness of digital material for individual collaboration skills, LC4 said “I did not have too much teamwork experience during the learning of Chinese for Business.”

Business-Related Content knowledge

Participants were asked about the effectiveness of digital tools in improving their understanding of theoretical business concepts such as economic policies and economic theories in questions 26 and 27 in questionnaires as well as interviews. Three respondents chose “Strongly disagree” and “Disagree”. LC4 think the difficult part of Chinese for Business was the explanation and analysis of professional knowledge such as marketing, innovation and international trading in Chinese language contexts. The resources should facilitate understanding the business content first and then focus on the Chinese language part. She explained further, “For example, if we can learn the Business course in English first and then consider learning the same content based on Chinese books, it would be more effective for me.” LC3 is accustomed to asking professional questions to his Chinese friends rather than using technological tools. In the meantime, several interviewees held opposite ideas. LC1 suggested the PowerPoint that the teacher provided, and the search websites of Baidu could help her gain theoretical knowledge of the business.

Cognition and Metacognition in Learning

Questions 28-29 were designed to understand their feedback in cognition and metacognition. Specifically, the aspects of critical thinking, problem-solving, self-reflection, self-learning, etc. For critical thinking, LU6 said, “it is not obvious that digital resources used in the course help a lot in critical thinking skills because the process of improvement of critical thinking should take more time, but we only have one semester of Chinese for Business courses.” As for other cognitive parts, LU6 added, “The process of using digital tools guided me to find appropriate learning methods and

better to know myself and finally found effective problem-solving strategies for myself. For instance, I am aware that writing an article would be better to help me express my views than speaking. “LU5 took business culture learning as an example to discuss the usefulness of digital materials for self-study, “I would not search for a cultural issue online because it is not necessary to search for it online but experiencing it in person and further use digital tools to understand deeply if necessary.”

Understanding Cross-culture of Business

When asking participants for their views on the understanding of cross-culture through digital resources, it shows some similarities between learners in China and the UK on this issue. LC1, LC2, LC3, and LC4 are studying in China. LC1 understood diverse cultures, including business culture in Chinese social media, Xiaohongshu, and Instagram. LC2 and LC4, engaging in international trade between China and their countries, both believe it is most effective to learn culture in real life, such as by talking with Chinese people. LC3 used some online videos such as YouTube and meanwhile chatted with Chinese friends offline to learn about culture. LU5, LU6, and LU7 are the UK learners who only had short-term visits to China. LU5 and LU7 thought the culture is the most difficult part of Chinese for Business compared to general Chinese. LU5 said, “It could sometimes ChatGPT could be an explainer, but it is necessarily better to be in person.” LU7 indicated, “I mostly use traditional methods such as reading business-related books or articles for learning business culture rather than using digital resources.” LU6 had similar views and shared his experience, “My understanding of the business culture has been improved during my visit to China. I have been to Shenzhen for a short-term activity, which is a part of my practice for the Chinese for Business course. We had opportunities to communicate with the economist in China on their perceptions of economics and business in China, which deepened my understanding of culture.” Briefly, participants in China and the UK coherently agree that it would be more effective to understand and adapt to cross-culture in business in real language contexts rather than relying on digital resources.

Attitudes Toward Technology

Questions 31-33 of the questionnaires were used to understand the degrees of usefulness of technology integration during the learning. All 11 responses show participants held neutral and

above attitudes on the digital resources providing interactive engaging learning during the Chinese for Business study, while several participants “Strongly disagree” or “Disagree” the learning process with technological materials enhances their skills in locating, evaluating, using and creating information. Meanwhile, most interviewing participants have positive opinions of technology while several learners remain neutral and provide more perspectives. LC4 comments on her attitude toward technology. “I like talking with others rather than using too many digital tools. It seems like I am a very traditional person.” “There are no massive issues because of the existence of ChatGPT!” LC6 said, “I did not rely on too many digital tools because I will easily forget what I need to do when I take my smartphone.” LU6 held similar ideas. Moreover, participants were asked to rate their proficiency on a scale from 1 (Unfamiliar) to 10 (Highly skilled) in using digital tools during the Chinese for Business learning. Most participants of the questionnaire gave themselves scores over 7 and above, while two respondents chose 5. In the interview, some participants showed a great interest in using certain technology. LU5 said, “There are no massive issues because of ChatGPT!”

4.4 Challenges and Suggestions

Open-ended Questions 34 and 35 were used to ask about the challenges and limitations faced when using digital educational resources in Chinese for Business learning. Some participants mentioned language and content issues. LU6 explained, “The economics of China have increasingly developed in the past several decades. However, the content of some digital materials for Chinese for Business courses, such as textbooks, was too outdated. The content of digital educational resources should be renewed to adapt to the current situations for the learners.” Some responses mentioned the lack of authenticity of digital resources, one of the answers mentioned that “Sometimes it’s hard to know what Chinese people say and what methods they actually use when doing business. A lack of real experience makes it hard when using purely digital resources.” LC2 also have similar opinions, “I want to go to the factory in person and practice how to negotiate in business contexts, the digital resources are not enough.” Likewise, the lack of interaction and the individual unacceptance of technology are also stated by participants.

Another answer from the questionnaire is knowing and recognising which are the best digital

educational resources or the ones more suitable to me. LU7 added, “There are too many resources online, sometimes I don’t know which one is the most suitable for me. It is easy to create digital resources but difficult to find appropriate materials specialised for every Chinese for Business learner’s diverse needs. I suggested that is also my expect in the development of digital educational resources of Chinese for Business in the future.” LC4 said, “It might know what you want and create them which is more helpful and practical for the learning such as ChatGPT.”

4.5 Teachers’ Perceptions of Teaching Chinese for Business

Teachers of these Chinese for Business learners also were asked some questions through an online questionnaire. TC1 and TU2 both have rich teaching experience in Chinese for Business courses. They have diverse focuses on the difficulties during teaching. TC1 worked for a Chinese university for 13 years. She proposed the application of abstract Chinese vocabulary is one of the most difficulties when teaching Chinese for Business. TU2 has taught Chinese for Business for 20 years in the UK, “There are several issues when teaching Chinese for Business. Firstly, it is hard to meet learners’ diverse needs. Secondly, the topic and content of Chinese for Business are too extensive. Thirdly, business knowledge in different contexts, such as Chinese business or cases in the UK or other Western countries should be considered. The fourth point is about the business culture.”

The practitioners were asked about the textbooks used and their features, especially the use of accompanying digital resources. In TC1’s class, the textbook Chinese for Economics and Trades has been used. She commented, “The series textbooks have advantages that contain listening, speaking, reading, and writing, it comprehensively helps learners to review Chinese grammar. However, the content is relatively traditional, and with a large number of specialised vocabularies.” “There are no official accompanying digital resources of the textbooks, so I always designed them by myself such as PowerPoints, micro lessons online, and the selected videos from the Chinese video site Bilibili. TU2 used the textbook When in China: A Guide to Chinese Business Culture since 2015. “This textbook focuses on business culture, which contains Chinese Business etiquette, common preferences and taboos, relationships, business negotiation styles, demographics, policies and culture. The book makes it easy to compare the culture between China and other countries and

is popular among students. “There are no accompanying digital resources such as videos and audio of the textbooks. Sometimes, I will use Word to present texts on the left, and some notes such as some vocabulary, sentences, and discussion topics on the right part. Furthermore, I would also add more information with the latest materials. For example, when mentioning population issues, I would present new data from the census. “

Teachers were also asked whether they would recommend certain digital resources related to Chinese for Business before starting the courses. TC1 said, “I used to recommend some websites before the class and during the process of courses, I also continually introduce some digital resources such as videos in Bilibili and listening in Xuexi Qiangguo. TU2 also suggested some digital materials to his students. “I would like to introduce the BBC Chinese financial websites to students, especially the Chinese websites of the Financial Times and their bilingual journalisms.” For the assignment, TC1 said, “Sometimes, I used to assign work online for students through the Ding Talk, and students could download the videos for previewing and upload the pictures or recordings of the assignments. TU2 focused on the writing, “My students need to write articles with course-related topics in Chinese individually every week. Students would also be asked to do presentations about business topics, while some students used some videos. “

The two experienced teachers provide some suggestions on the resource construction of Chinese for Business. TC1 said, “My recommendation is to share digital educational resources among universities. Besides, applying AI tools to create more digital resources in vocabulary learning and grammatical interpretation of Chinese for Business courses. TU2 also There are various resources about Chinese for Business in the textbooks. The challenges are: 1) It is difficult to design the textbooks at a beginning to intermediate level. The current online resources are most suited for advanced-level Chinese for Business courses but lack the resources for beginner and intermediate proficiency Chinese learners. 2) The teaching methods can be explored such as case methods to learn business in business schools. 3) Students are expected to have more internship opportunities.

Chapter 5: Discussion

This study aims to understand the Chinese for Business learners' perceptions on the usefulness and limitations of current digital educational resources they frequently use. A mixed method with questionnaires and semi-structured views was conducted to explore this topic comprehensively and deeply. An initial analytical framework was constructed based on the CLIL, TPACK, and 21st-century skills framework. Five related elements of communication, content, cognition, cross-culture, and technology were combined to understand the use of digital educational resources during the Chinese for Business learning in general. Participants were Chinese for Business learners who are studying in universities in China and the UK. Meanwhile, two of their teachers of Chinese for Business courses also accepted an open-ended survey by questionnaires.

Sub Question 1: What are the features and difficulties of Chinese for Business?

Compared to General Chinese, Chinese for Business has three main features and difficulties for learners: the diverse learning needs of learners, professional business content knowledge based on the Chinese language, and business culture in different contexts. Firstly, different backgrounds affected participants' learning needs of Chinese for Business, which matches the opinions in earlier studies about the definition and content of CSP and ESP that both focused on the learners' "specific purposes" (Li, 2011; Hutchinson & Waters, 1987). Secondly, in previous research, Chinese for Business education focused more on the improvement of listening and speaking skills and the transformation of teaching methods with technologies. Recently, business content knowledge based on the Chinese language has been discussed. Many participants pointed out that understanding business knowledge in the Chinese language was a difficult part, sometimes, using certain digital tools was helpful. Thirdly, several learners studying in China and the UK mentioned that Business culture was also the speciality and difficulty of Chinese for Business learning. The business cultural knowledge part was also stressed as a difficulty by teachers in the UK.

Sub Question 2: What digital educational resources did learners frequently use for the learning of Chinese for Business?

Websites and apps were commonly used by learners, while official accompanying digital resources of Chinese for Business textbooks and online courses were ignored both by learners and practitioners. The findings seem different from the results of the literature review in that there is a rapid increase in a variety of digital resources under political support. It might come from two reasons. For one thing, some learners are accustomed to using certain digital tools already rather than accepting or learning new technology. For another, the most popular resources are active choices for learners while the teacher's requirements for the assignment or teachers' use of digital resources could also affect their cognition and passive choices of the materials. In addition, some unexpected resources are frequently used by participants, such as the news app for listening and reading practice and the recruitment websites during their learning to understand the status of their career development. Furthermore, generative AI tools have gradually played an important role in teaching and learning Chinese for Business.

Sub Question 3: What are Chinese for Business learners' perceptions of the usefulness and limitations of digital educational resources?

The usefulness and limitations of digital educational resources are shown in the five aspects: communication, content, cognition, cross-culture, and technology based on the theoretical frameworks of CLIL, TPACK, and 21st-century skills frameworks.

Firstly, the current digital resources could help Chinese for Business learners enhance their linguistic skills, communicative strategy and collaboration skills. For the language part of digital resources of Chinese for Business, specialised vocabulary in Chinese is sometimes a difficult part for learners (Zhu, 2023), and it is also stressed by the teacher interviewee. On the one hand, the findings revealed that not only the business terms but also Chinese idioms are challenging for learners. On the other, single words are not too difficult to understand because of the assistance of digital tools such as translation apps or vocabulary apps, but the word is involved in a complex sentence. For language

competence in listening, speaking, reading, and writing, the usefulness of digital resources such as news apps for reading skills for learners is much more obvious. The learner participants in the UK and China have been recommended the news apps by their teachers, but UK students sometimes read bilingual articles and learners in China are used to reading articles in a single Chinese language. In addition, the effectiveness of digital tools is not obvious for the writing part among these participants, and some students prefer the traditional way while others enjoy using certain tools such as AI, which have comprehensive functions to answer diverse questions. As for the improvement of communicative strategy and collaboration, face-to-face communication might be more helpful.

Secondly, the perceptions of the usefulness of business-related content knowledge in digital materials might depend on whether these resources majorly could meet their practical needs. In this study, learners have diverse backgrounds with varied learning objectives. The learners who are working in the business-related industry gave clearer answers about the usefulness of the resources compared to those who do not have work experience. For example, they will be more active in searching for content-related materials because they understand what types of professional knowledge could be used in his or her authentic business contexts. In previous studies, the definitions of ESP and CSP both highlighted the features of the subjects that focused on learners' needs (Li, 2011; Hutchinson and Waters, 1987). The findings provided more evidence about the importance of understanding the learners' needs when designing the business content of digital resources. Meanwhile, the teacher interviewee also proposed the difficulty of teaching Chinese for Business is to meet all the learners' demands.

Then, the usefulness of cognition and metacognition related to the duration of learning Chinese for Business. The UK learners who took Chinese for Business as an elective course that does not have a long learning period perceive less on this part. The students studying Chinese for Business as a bachelor major might have more opportunities to practice the skills in cognition and metacognition such as critical thinking and creativity.

As for the cross-culture part of the usefulness of digital educational resources, the findings seem unexpected in that most of the participants believed face-to-face communication would be more

effective in understanding and adapting to the cultural part of Chinese for Business learning than using digital tools. By coincidence, business culture also is a difficult teaching part of the feedback from teachers. It is different from the results in the literature review on the helpfulness of digital educational resources in learning cross-culture communication of LSP (Guillé'n-Nieto, 2009). Additionally, in terms of the expressions of cultural knowledge and cross-cultural knowledge in Chinese for Business based on the analytical framework of the study, the findings also have provided some inspiration. Yang and Chen (2008) pointed out that Chinese business culture is one of the most important elements. However, when investigating the learners and teachers who stayed in China or the UK, different contexts in both countries affect their opinions and even their choices in digital resources. For example, UK learners are used to reading bilingual articles on the BBC news app while the Chinese news app Xuexi QiangGuo sometimes being used by learners in China. Another piece of evidence shows the hesitation of teachers in the UK to conduct case teaching methods to introduce business culture in international cross-cultural contexts. Hence, careful consideration of culture and cross-culture is necessary. Although cross-cultural knowledge acquisition by digital tools shows limitations in this study, it might encourage educators to focus more on the issue in future.

Lastly, the attitudes toward technology lead to different effectiveness of learners' choice and use of digital resources in learning Chinese for Business. Some participants with extroverted personalities did not like to use digital tools because they preferred to talk with others to learn languages, while some others were afraid to rely on too many digital tools that did not contribute to their authentic skills. In addition, their proficiency in using technology also affects their perceptions of using digital resources in any courses, including Chinese for Business. Several participants who are interested and skilled in technology would be more open to using diverse digital educational resources. To be more specific, they might be more actively searching for or creating useful information by digital tools when learning Chinese for Business.

Sub Question 4: What are Chinese for Business teachers' and learners' perceptions of the challenges and suggestions of digital educational resources in Chinese for Business?

Learners and teachers both were asked about the challenges and suggestions for the development of digital educational resources for Chinese for Business. For challenges in the content of Chinese for Business: many digital materials are outdated, contain extensive topics of Chinese for Business, and lack digital resources specifically designed for beginner to intermediate Chinese proficiency learners. Meanwhile, participants noted issues such as a lack of authenticity, interaction and practicality in the digital resources. Both groups highlighted the importance of personalisation and customisation to better address the various needs of Chinese for Business learners' needs. Moreover, from teachers' perspective, digital resources can be improved by resource sharing and transformation of teaching methods such as using AI tools or case teaching.

Chapter 6: Recommendation

This study was conducted using a mixed method with questionnaires and interviews to explore the Chinese for Business learners' perceptions of digital educational resources. The interviews were conducted among the learners in the UK and China, which could inspire future studies to explore deeply. However, the sample size of the questionnaire is too small. Therefore, the quantitative data could not illustrate the features of the data or any obvious trends because the group of Chinese for Business learners in the UK was limited, while the conditions in China were the opposite. The process of the study should be improved in many aspects, for example, questions and options design, more ethical consideration, and communication skills with participants. This pilot study is a precious opportunity to understand the status of using digital educational resources for learners, which provides some evidence about the importance of this topic and understanding more issues about Chinese for Business education. The results of the study can also drive me to consider narrowing down the topic of Chinese for Specific Purposes to understand the authentic classroom that integrates advanced technology and explore deeply individual experience.

References

Arnó-Macià, E. (2012) The role of technology in teaching languages for specific purposes courses. *The modern language journal*, 96, pp.89-104. Available at: DOI: 10.1111/j.1540-4781.2012.01299.x 0026-7902/11/89–104

Bai, Y. and Han, H. (2020) ‘Teaching Status Analysis of Chinese for Specific Purposes in Confucius Institute under the Background of the “Belt and Road” Initiative’, *Modern Chinese*, 2020(11), pp. 98-103. Available at: <https://kns.cnki.net/kcms/detail/detail.aspx?dbcode=CJFN&dbname=CJFN&filename=YWLY202011016&uniplatform=NZKPT&language=CHS>

British Educational Research Association [BERA] (2024) *Ethical Guidelines for Educational Research*, fifth edition, London. Available at: <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-fifth-edition-2024#:~:text=The%20fifth%20edition%20of%20BERA's,in%20any%20and%20all%20contexts>

Braun, V. and Clarke, V. (2022) *Thematic analysis A practical guide*. London: Sage Publications Ltd.

Dowling, C., and Mitchell, A. (1993) Reading in a specific purpose foreign language course: A case study of technical Japanese. *The Modern Language Journal*.

Center for Language Education and Cooperation [CLEC] (2023) *Chinese Proficiency Standards for Vocational Education*. Available at: <http://www.chinese.cn/uploads/file/20230504-1683190322599983.pdf>

Center for Language Education and Cooperation [CLEC] (2023) *Chinese Language Proficiency Standard for International Tour Guide and other 3 Vocational Chinese Proficiency Standards Released*. Available at: <http://www.chinese.cn/page/#/pcpage/article?id=1675&page=2>

Center for Language Education and Cooperation [CLEC] (2021). “Chinese Language Plus Vocational Skills” Teaching Resource Development Action Plan (2021-2025). Available at: <http://www.chinese.cn/uploads/file/20220125-1643092271440453.pdf>

Center for Language Education and Cooperation [CLEL] (2021). *The Development and Application Guide of Digital Resources for International Chinese Language Education*. Available at: <http://www.chinese.cn/uploads/file/20220125-1643092029188364.pdf>

Center for Language Education and Cooperation of China [CLEC] (2021). *Teaching Resource Development for International Chinese Language Education Action Plan (2021-2025)*. Available at: <http://www.chinese.cn/uploads/file/20220125-1643092124627370.pdf>

Center for Language Education and Cooperation of China [CLEC] (2021). *Online International Chinese Language Education Action Plan (2021-2025)*. Available at: <http://www.chinese.cn/uploads/file/20220125-1643092124627370.pdf>

[e.cn/uploads/file/20220125-1643092187647420.pdf](https://www.yidaily.cn/uploads/file/20220125-1643092187647420.pdf)

Chinese Government (2023). *What is “The Belt and Road”?* Available at: <https://www.yidaily.cn/z/221226-1/index.shtml>

Chinese Government (2023). *Full text of Xi Jinping's keynote speech at 3rd Belt and Road Forum for Int'l Cooperation*. Available at: https://english.www.gov.cn/news/202310/18/content_WS652fc328c6d0868f4e8e064e.html

Cohen, L., Manion, L., and Morrison, K. (2018) *Research Methods in Education*. 8th edition. London: Routledge.

Coyle, D., Hood, P. and Marsh, D. (2010) *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press.

Creswell, J.W. and Creswell, J.D. (2017) *Research design: Qualitative, quantitative, and mixed methods approaches*. London: Sage Publications.

Crotty, M.J. (1998) *The foundations of social research: Meaning and perspective in the research process*. London: Sage Publications Ltd.

Ding, A. (2004). The action research in Business Chinese Writing, *Journal of Yunnan Normal University*, 2(5), pp. 34-38, Available at: DOI: 10.16802/j.cnki.ynsddw.2004.05.008

Dowling, C. and Anita M. (1993) Reading in a specific purpose foreign language course: A case study of technical Japanese. *The Modern Language Journal*, 77(4), pp. 433-444. Available at: <https://www.jstor.org/stable/329669>

Dudley-Evans, T. and St John, M.J. (1998) *Developments in English for specific purposes*. Cambridge: Cambridge University Press.

Egorova, E. (2022) INNOVATIVE TEACHING METHODS IN A CULTURE INTEGRATED ENGLISH LANGUAGE COURSE. *Journal of Teaching English for Specific and Academic Purposes*. 22, pp. 643-654, Available at: <https://doi.org/10.22190/JTESAP2104643E>

Feng, C. and Zhang, Q. (2020) The application of hybrid teaching methods based on MOOCs, *Journal of Shandong Institute of Petroleum and Chemical Technology*, 34(3), pp. 68-73, Available at: Doi: 10.3969 / j.issn.1673-5935.2020.03.016

Flick, U. (2023) *An introduction to qualitative research*. Seventh edition. London: SAGE.

Guo, J., Wu, Y., Gu, L., Zhou, L., Nong, F., Ma, J; Cui, J., and Dong, X. (2021) ‘Current Situation and Prospect of International Chinese Education Digital Resources Construction’, *Journal of International Chinese Teaching*, 2021(04), pp. 86-96. Available at: <https://www.jict.org.cn/>

www.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2022&filename=HJXY202104009&uniplatform=OVERSEA&v=IAvM6tWci5VY7S395wWVJOCScF11sdqYCjQuTGtwB6I8gzhuqzSBdgf_zPaBay0

Hutchinson, T. and Waters, A. (1987) *English for specific purposes*. Cambridge University Press.

James, N. and Busher, H (2009) *Online interviewing*. London: Sage Publications Ltd.

Koehler, M. J., Mishra, P., & Cain, W. (2013) What is technological pedagogical content knowledge (TPACK)? *Journal of Education*, 193(3), pp. 13-19.

Krystalli, P. and Mavropoulou, E. (2020) French for Special Purposes and Mobile Assisted Language Learning (MALL): Learners' Perspectives. INTED2020 Proceedings, pp. 4738-4743. Available at: ISBN: 978-84-09-17939-8

Li, Q. (2011) 'Teaching Chinese for Specific Purposes and Its Textbook Compilation', *Applied Linguistics*, 2011(03), pp. 110-117. Available at: <https://doi/10.16499/j.cnki.1003-5397.2011.03.016>

LI, Y. (2023) "Chinese Plus": An Analysis of the New Developments and Issues of Chinese Language Teaching for Specific Purposes', *International Chinese Language Education*, 8 (03), pp. 16-23, 75. Available at: <https://www.cnki.net/KCMS/detail/detail.aspx?dbcode=CJFD&dbname=CJFDLAST2023&filename=GZZY202303002&uniplatform=OVERSEA&v=RCjAXqbHEH8AN0DaasJFg9gsWqajpGrB8AnYXNrVYAAtZOnrmKdutpn9W8r0VGH49>

Martin, E. (2010) *Designing and Implementing a French-for-Specific-Purposes (FSP) Program: Lessons Learned from ESP*, *Global Business Languages*, 5(3), pp. 16-33. Available at: <https://docs.lib.purdue.edu/gbl/vol5/iss1/3>

Macià, E.A., Cervera, A.S. and Ramos, C.R. (2006) *Information Technology in languages for specific purposes: issues and prospects*. Vol. 7. New York: Springer Science & Business Media.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), pp. 1017-1054.

Monnier, N. (2018) *Languages for Specific Purposes in History*, Cambridge: Cambridge Scholars Publishing.

Novikov, A.M. and Novikov, D.A. (2013) *Research Methodology: From Philosophy of Science to Research Design*. 1st edition. London: CRC Press.

Opie, C. (2004) *Doing educational research: a guide to first-time researchers*. London: SAGE.

Partnership for 21st-century skills [P21] (2009) *P21 Framework Definitions*. Available at: <https://files.eric.ed.gov/fulltext/ED519462.pdf>

Qi, Y.W., (2024) Unlocking the Potential: Integrating Clil with Digital Tools among Young Learners, *International Journal of Academic Research in Progressive Education and Development*, 13(3). pp. 673-689. Available at: DOI:10.6007/IJARPED/v13-i3/21511

Saunders, M., Lewis, P. and Thornhill, A. (2023) *Research methods for business students*. 9th edition. London: Pearson education.

Setyaningrum, R.W., Setiawan, S., Anam, S., Retnaningdyah. P. (2020) English Department, Faculty of Languages and Arts State University of Surabaya, Indonesia, Content and Language Integrated Learning (CLIL) in science class during COVID-19 Outbreak: A Narrative Inquiry, 9(1), pp. 35-46.

Shen, S. Y. (2019) Exploring the construction of the class teaching mode of “three steps and ten processes in the flipped Classroom: Taking Business Chinese flipped learning as an example, *language teaching and linguistic studies*, 2019(6), pp.21-30.

Susanti, Y. P. and Kurniawati, L. A. (2020) Designing Technology-Enhanced English for Specific Purposes For Community-Based Tourism Practitioners by using TPACK. *Indonesian EFL Research and Practices*, 1(1), pp. 55-69.

Thomas, G. (2021) *How to do your case study*. Third edition. London: SAGE.

Valtonen, T., Sointu, E., Kukkonen, J., Kontkanen, S., Lambert, M. C., and Mäkitalo-Siegl, K. (2017). TPACK updated to measure pre-service teachers' twenty-first century skills. *Australasian Journal of Educational Technology*, 33(3). pp. 15-31.

Valtonen, Teemu, et al. "TPACK updated to measure pre-service teachers' twenty-first century skills." *Australasian Journal of Educational Technology* 33.3 (2017).

World Economic Forum [WEF] (2020). *Schools of the Future: Defining New Models of Education for the Fourth Industrial Revolution*. Available at: https://www3.weforum.org/docs/WEF_Schools_of_the_Future_Report_2019.pdf

World Economic Forum [WEF] (2024). *Shaping the Future of Learning: The Role of AI in Education 4.0*. Available at: https://www3.weforum.org/docs/WEF_Shaping_the_Future_of_Learning_2024.pdf

Xinhua Net (2015). *The 10th Global Confucius Institute Conference Has Concluded*. Available at: http://www.xinhuanet.com/politics/2015-12/08/c_128509076.htm

Yang, D., and Chen, Z. (2008) *Journal of Liaoning University of Technology (Social Science Edition)*, 10(3), pp.53-56+142.

Zhang, L. (2006) Business Chinese Teaching Needs Analysis. *Language Teaching and Linguistic Studies*, 2006 (3). pp. 55-60.

Zhang, L. (2011) On the Teaching Approach of Communicative Strategy: A Case Study on the Course of Speech Communication of Business Chinese, *Language Teaching and Linguistic Studies*, 2011(02), pp. 9-15. Available at: CNKI: SUN: YYJX.0.2011-02-004

Zeng, J. and Lu F. (2021) ‘The concept, classification, and System of International Chinese Digital Teaching Resources’, *Journal of Yunnan Normal University*, 19(3), pp. 28-37. Available at: <https://DOI:10.16802/j.cnki.ynsddw.2021.03.005>

Zhu, L. H. (2003) The features and teaching, *Journal of College of Chinese Language and Culture of Jinan University*, 2003(3), pp.55-60, Available at: DOI:10.16131/j.cnki.cn441669/g4.2003.03.009