Research Article

Designing Tasks through Second Life for CFL Learners in the UK University

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The development of technology has brought some alternative means in education. The enabling role of technology has been widely recognized in second language teaching and learning. Second Life (SL) is an online virtual world and is popular with digital natives. Some language educators apply this application to foreign-language teaching in university courses because of its benefits to students' immersion and focus, imagination, and creativity in language learning. Language learners can immerse themselves in the target language environment to imitate real-world tasks, which promotes the provision of reality-oriented tasks and optimizes task-based language teaching tenets such as learning by doing, authenticity, negotiation of meaning, and exposure to abundant and authentic input. Based on the definition of tasks, the role of SL in foreign-language teaching, and previous pedagogic models and studies on designing tasks with SL, this study proposed two types of SL tasks for Chinese as a foreign-language learner in university settings, along with the rationale behind them. Additionally, challenges in designing tasks in SL were identified. Overall, this study offered valuable insights and guidance for the application of SL in teaching Chinese to speakers of other languages in UK universities.

1. Introduction

Technological development has changed the style of learning for many students. Current university students are the Net Generation or digital natives [1] who are exposed to a wide range of technologies from an early age. Dede [2] argued that the traditional "one-size-fits-all courses of fixed length, content and pedagogy" no longer fulfilled the learning needs and interests of experience-based learners, who valued nonlinear thinking and customized learning in a collaborative setting. 3D virtual world online games such as Second Life (SL) can address the limitations of the traditional classroom and are becoming popular with the Net Generation. It creates a 3D multiuser virtual environment (MUVE) that simulates real-life settings, in which players can create their avatars to interact with other people around the world in SL by text or audio. Thus, it has also gained the attention of some language educators who have introduced it into foreign-language teaching in university courses. Language learners can immerse themselves in the target language environment to

imitate real-world tasks. The features of SL can promote the provision of reality-oriented tasks and optimize task-based language teaching (TBLT) tenets such as learning by doing, authenticity, negotiation of meaning, and exposure to abundant and authentic input [3, 4], thus fostering experiential and immersive learning [5]. Given the language-learning characteristics and needs of the Net Generation of university students, this study attempted to develop two distinct types of tasks using SL for Chinese as a foreign-language (CFL) learners in UK universities.

2. Context

2.1. The Lack of Authentic Context in CFL Education in UK Universities. Different forms of Chinese language courses have emerged in higher education in the UK, primarily due to the perceived increasing significance of mainland China as a global economic and political power, coupled with the recognition of the strategic importance of the Chinese language for the UK's economic and diplomatic relations. However,

these courses are still primarily offered as components or optional modules within degree programs, as well as noncredit courses [6]. Based on a study by Guo [7], CFL courses typically had limited contact hours (2–5 hr per week), making it challenging to teach various language skills effectively. Due to the limited contact hours, CFL students may not have sufficient opportunities for meaningful and purposeful communication in the classroom. Additionally, learners need to learn how to use their language skills appropriately in the context of a specific culture [8]. However, since Chinese is considered a foreign language in the UK, it can be challenging for learners to come into contact with it in their everyday lives. As a result, their main interaction with Chinese is often limited to the classroom environment [7]. Therefore, it is important to stimulate students' interests, cultivate their communicative competence, and encourage them to utilize what they learn in real-life contexts. These are issues that need to be considered in order to enhance language-learning experiences beyond the classroom environment, especially in the case of Chinese being considered a foreign language in the UK.

Numerous studies in second language acquisition research have demonstrated that TBLT is effective in enhancing the communicative competence of CFL learners (e.g., [9]). However, in actual classroom settings, it can be challenging to create an authentic environment that fully immerses learners in language tasks [9]. The absence of authentic contexts for using Chinese not only reduces students' language performance, but also lowers their motivation to learn the language [10]. The use of TBLT in the CFL classroom, therefore, requires consideration of the issue of authentic context creation.

2.2. Students' Learning Characteristics and Technological Advantages of SL. The development of technology has provided a new way of thinking about solving the above problem, as it has changed the style of learning for many students. The current university students are exposed to a wide range of technologies from an early age and enjoy working in groups or teams, learning by doing, and wanting timely and easy access to information [11, 12]. The development of digital technology has not only changed the way students learn but has also inevitably affected the way teachers teach. R. Oxford and J. T. Oxford [13] suggested that to teach these digital natives, teachers needed to evolve traditional pedagogy and designed new techniques with media and methods they were familiar with.

The use of computers in education began to be explored in the 1950s, and after 1965, the role of computers in language teaching began to be recognized, and its use in language teaching became a popular topic [14]. In the past few years, the debate on computer use in language education has shifted from "should we use them?" to "how can they improve teaching and learning?" [15]. Zou et al. [16] provided a comprehensive overview of how computers could enhance language teaching, which served as a resource for studying the use of computers in language teaching and learning.

Based on this context, SL is a multimedia platform used for learning beyond entertainment. It offers unique features such as openness and ownership of user-created items, without imposing game rules. Resources and assets created in SL can be preserved, making it a tool for knowledge continuity. SL allows users (called residents) to create virtual environments for various learning contexts, making it different from other games/tools. Its characteristics of creativity, ownership, and preservation of content make it a valuable tool for learning. In addition, SL has some technical advantages over learning management systems (LMSs), such as BlackBoard, WebCT, and Moodle. LMS is a text-based interaction with static image graphics, which can be called a 2D learning environment. However, SL creates a 3D MUVE that simulates real-life settings, and players can create their own avatars to interact with other people around the world in SL by text or audio. SL provides participants with a kind of presence, teleport, and communication that is not possible in a traditional web-based learning environment [17]. Cooke-Plagwitz [18] argued that SL created a collaborative and immersive learning environment for foreign-language learners, in which they could co-build knowledge and practice the language in context. As a result, SL has gained attention from language educators who have incorporated it into university courses for foreign-language teaching. Students can immerse themselves in a target language environment and simulate real-world tasks.

2.3. The Necessity and Feasibility of Utilizing SL for CFL Education in UK Universities. Specifically, the use of SL for CFL education is necessary and feasible in UK universities for two reasons. First, hardware facilities are more likely to meet the basic requirements. British universities usually have dedicated computer labs or computers for public use [19]. Meanwhile, data show that 96% of UK adults use the internet to devote themselves to online activities [20]. Therefore, for CFL classes, teachers can gather them together in a dedicated computer lab, or students can use their own laptops to complete online activities in SL.

Second, in practical terms, there have been attempts to use SL for CFL education, which could help to break down barriers for teachers who want to implement it in their teaching. Although from the literature, SL has not been implemented in Chinese language classes in UK universities, in some countries such as Australia and the USA, researchers have already introduced it into university CFL classes [21, 22]. There are also well-developed, more established, and free CFL teaching resources available on SL. One of the resources is the Chinese School developed by Michigan State University (MSU) on SL. Another is the Chinese Island developed by Monash University in Australia, an island with traditional Chinese architecture, inns, hospitals, railway stations, airports, and more. Some scholars have used Chinese Island to supplement their Chinese teaching and have made relevant teaching multimedia videos available on their websites for free use [23]. These virtual spaces created specifically for CFL classes have greatly saved time for teachers to explore the technology [24]. The related website provides pedagogical ideas and technical guidance for teachers designing activities that are appropriate for their students and can improve communication competence.

It is worth exploring how to fully exploit the functions of SL and use it for teaching in the formal classroom. According to the above mentioned, CFL teachers in UK universities can try to design activities based on existing resources and can set teaching tasks in two well-developed virtual spaces dedicated to CFL.

3. Research Design and Approach

This study delved into the existing literature to explore the application of virtual worlds in language teaching, which has become a significant area of research in the digital era [25]. Nevertheless, despite being a prominent virtual world software, SL has not received extensive attention in the context of CFL education in UK universities. As a result, the aim of this study was to address the critical issue of effective utilization of SL in designing the teaching process. This aligned with one of the primary responsibilities of language teachers, which was to decide on the effective utilization of technology as part of the language-learning environment [26].

Based on the existing literature, this study examined the language-learning characteristics and needs of the Net Generation of university students. It elucidated the technical features and benefits of SL in language teaching, and provided a comprehensive understanding of TBLT, including its definition, types, and associated teaching methods. This study also highlighted the importance of SL in CFL education in UK universities and the substantial impact of combining SL with TBLT on CFL education. Drawing on these findings, this study presented two case studies that involve two different tasks, namely a decision-making task and a problem-solving task, in order to effectively address the research question of how to incorporate SL into CFL teaching in UK universities. Lastly, this study also acknowledged the challenges associated with utilizing SL.

The above can be considered as the framework design and research appoach (research integration) for this study.

4. Literature Review

4.1. Task: Definition and Features. Owing to its pivotal role in the development of communicative competence, TBLT has received attention since the early 1980s. Many studies have been conducted on TBLT [27–32]. Despite extensive discussions and debates in the literature, a consensus on the definition of tasks has not been reached. For instance, Prabhu [33] defined a task as an activity in which learners arrived at an outcome from given information through some teacher-regulated process of thought. Willis [34] argued that "tasks are always activities where the target language is used by the learner for a communicative purpose (goal) to achieve an outcome" (p. 23). In Willis' definition, language is considered to achieve an outcome through the interchange of meanings. It is a purposeful and goal-oriented activity that requires active involvement from learners. Samuda and Bygate [35] defined a task as "a holistic activity which engages language use to achieve some nonlinguistic outcome while meeting a linguistic challenge, with the overall aim of promoting language learning, through process or product or

both" (p. 69). All definitions share the idea that the task directs students' attention primarily to the meaning rather than the form of the language. The main emphasis is to give the language learners communicative competence. Bygate et al. [36] advocated the concept of a task as "an activity that requires learners to use the target language with an emphasis on meaning, to attain an objective" (p. 11), which is also our core definition.

Furthermore, some studies have identified key features of a task, including its nature as a work plan or activity, with a primary focus on meaning and real-world language use. Tasks may involve any of the four language skills and engage cognitive processes, ultimately leading to a clearly defined communicative outcome [27]. In relation to this study, we highlighted the following task features:

(1) have a resemblance to real-world activities
(2) goal-oriented learning is implemented
(3) meaning takes precedence over form
(4) use of authentic contexts

4.2. Task Type and Pedagogic Paradigm. Based on the study of communicative language use, the type of task varies in teaching (see [34, 37, 38]). Although tasks are classified in distinct ways, each maintains some of the key characteristics identified above. Here, we only described and illustrated the type of tasks we used in this study, namely, decision-making tasks and problem-solving tasks. During a problem-solving task, the teacher presents a problem or information beforehand, and students work collaboratively to find a solution. Typically, there is one correct solution to the problem. According to Willis [34], when learners were presented with problem-solving tasks, they were required to employ their intellectual and reasoning abilities. Despite the challenges they may face, these tasks could be highly enjoyable and fulfilling to accomplish. In the case of decision-making tasks, students are given a problem with multiple alternative solutions, and they are required to choose one through negotiation of meaning and discussion with their partners [39]. In designing these two types of tasks, we took into consideration their unique characteristics as well as the general features of tasks that were discussed earlier.

With respect to the pedagogical paradigm, Willis [34] proposed a procedure consisting of three components: *pre-task ⟶ task cycle ⟶ language focus* sequence. Specifically, the pretask introduces the topic and task, focusing on the input of the target vocabulary and phrases related to the topic. The task cycle includes the task, planning, and reporting stages, which aim to provide language learners with a holistic understanding of how language is used and allow them to experience the process of language use. Post-task is mainly about correcting and practicing the language forms. In this study, teaching tasks were designed based on the aforementioned paradigm.

4.3. The Role of SL in Teaching a Foreign Language. The use of SL in foreign-language teaching has proven to be effective in supporting learners in their language-learning journey. Lan [40] proposed that SL was a MUVE with a unique

feature that enhances the attainment of language education goals. SL offers a web-based virtual reality experience where users can engage in social interactions with others through avatars using visual, text, or audio modes. This allows for the practice of simulations in a specially designed environment, providing a tangible experience instead of just imagining or writing scenarios on paper [41]. Moreover, Grant and Huang [42] highlighted how SL could address certain challenges associated with traditional classroom-based, textbook-centered, and teacher-focused approaches to teaching Chinese at the university level. SL can overcome limitations in pedagogy and logistics, offering learners opportunities for active and meaningful communication in a realistic context. According to Stevick [43], successful language education relies less on textbooks and linguistic analyses and more on people. For language learning to progress, actual learner interaction, active involvement, and purposefulness are essential [44]. Therefore, SL provides a context for students to actively explore knowledge, rather than passively receive knowledge, and accelerates the learning process for learners. Additionally, SL plays a crucial role in boosting students' motivation for language learning, especially among the Net Generation, and it facilitates the sustained maintenance of motivation for L2 learners [3, 18, 45, 46]. These affordances have caught the attention of many foreign-language educators to introduce SL to teaching.

4.4. Previous Studies on TBLT in the CFL Context.

Some studies [41, 47] on TBLT were found in Spanish contexts with SL, which provided a good reference for design principles to improve students' communicative skills. Henderson et al. [48] studied a CFL lesson conducted in a computer lab through SL at an Australian university. They immersed students in the SL environment and completed a decision-making task. Henderson et al. [48] found that to complete this type of task, learners needed to share ideas and negotiate meanings, as well as collaborate with their peers. They also pointed out that, when students completed tasks in a realistic virtual world created by SL, as opposed to a traditional classroom setting, they not only reviewed and reinforced knowledge from the textbook, but also enhanced their vocabulary and grammar skills through these tasks. Moreover, the study found a marked enhancement in students' pre- and postevaluations of self-efficacy and attributed this to the inclusion of the lessons in SL, which facilitated experiential learning opportunities for students. Therefore, introducing tasks in SL allows students to use the language in a meaningful and purposeful way in a "real life" instead of manipulating the form of language.

Likewise, Lan et al. [49] designed a problem-solving task in SL. Eight university-level CFL beginners used SL to complete the task of buying the right color and type of clothing as needed. Prior to working on the problem-solving task, the teacher conducted a 2 hr activity to practice the language skills that the students would need during the task. To complete the task successfully, learners were required to use various techniques, such as discussion, negotiation, collaboration, and strategies. They also mentioned that problem-solving tasks were carefully designed to closely mirror real-world situations

that learners were likely to encounter in their everyday lives, which allowed them to apply their language skills in a meaningful and practical manner. SL creates a realistic scenario for students to solve these complex problems that may not be easy to achieve in real classrooms [50].

In short, the above statement implies that there is significant potential for developing task design using SL as a tool for supporting CFL learners in UK universities.

5. Combining TBLT and SL in Teaching

5.1. Combining TBLT and SL in Teaching: Rationale and Benefits.

Based on the above discussion, this section further explained the rationale for designing tasks through SL for CFL university students in the UK. Students of the Net Generation prefer learning in groups or teams and learning by doing. This is also following the common pattern of teaching in UK universities. However, because of the low-contact time in CFL classes, students also have little exposure to Chinese in their daily lives; therefore, it is particularly important to provide them with opportunities to collaborate and interact with each other in a meaningful and purposeful way in the classroom. Learners must apply their language skills appropriately in a specific cultural context [8].

On the other hand, the tasks offer many opportunities for students to interact, which caters to the way students learn in groups or teams. According to Krashen [51] and Long [52], meaningful interaction was particularly relevant for learners to acquire the target language. Therefore, the adoption of tasks can help students generate more meaningful and purposeful communication. Studies have shown that task-based learning can enhance motivation, performance, and oral expression for CFL learners [9, 53, 54]. The adoption of a task-based approach is therefore appropriate for the learning methods of British university students and contributes to their language and cognitive development.

Byrnes [55] similarly mentioned the importance of the elaborate teaching context for L2 learners to acquire the target language through the execution of language tasks. However, as mentioned earlier, providing a genuine environment does not seem easy to achieve in the classroom. Typically, learners resort to discussion and exchange of ideas to perform tasks in conventional classrooms [10] instead of accomplishing genuine tasks. Donato and Brooks [56] maintained that limited practice in face-to-face classrooms was not productive in acquiring the use of L2. Transferring tasks to a virtual reality platform such as SL could solve this problem. In addition to the aforementioned advantages that SL demonstrates in the field of foreign-language learning, such as facilitating students' language-learning progress and heightening motivation, researches show that the features of SL can enhance the implementation of reality-oriented tasks and optimize the principles of TBLT, such as learning by doing, authenticity, negotiation of meaning, and exposure to abundant and authentic input [3, 4], thus fostering experiential and immersive learning [5]. The task-based approach can be effectively integrated with SL to promote student-centered and authentic learning in CFL courses for UK university students.

Figure 1: Screenshot of the SL Chinese classroom.

Figure 2: Screenshot of SL farmers' market.

Figure 3: Screenshot of SL stall owner.

The following section illustrated how to design TBLT in SL, showcasing the potential for creating a dynamic and engaging language-learning experience for UK university students.

5.2. Two Task Designs through SL for University CFL Learners. According to Richards et al. [57], the application of different types of tasks in language teaching could serve a purpose for classroom activities, rather than just for practicing the language, and could therefore render language teaching more communicative. In this section, we designed two different types of tasks via SL: a decision-making task and a problem-solving task. Clark [47] stated that SL could be used to teach a single or complete course in addition to supporting blended language teaching. Therefore, these two tasks would be conducted in the computer lab, and we would provide a clear rationale for the design.

5.2.1. Decision-Making Task. The first is a decision-making task. In the pretask phase, the class assembles in the Chinese classroom (Figure 1) at SL Chinese Island, and the teacher announces the task and introduces the target language elements that may be needed. The students' task is to go to the SL farmers' market (Figure 2) to buy the ingredients needed to make dumpling stuffing. They are asked to buy two kinds of meat and two kinds of vegetables suitable for making dumpling stuffing, and the total cost of all the ingredients should not exceed 50 RMB.

Going to the farmers' market to purchase ingredients for making dumpling stuffing is an authentic real-world task with a clear aim or goal. This task provides students with a defined objective, allowing them to know what they need to achieve by the end of it [58]. This task is indeed goal-oriented. Meanwhile, immersion in a "real farmer's market"

may deepen their cognition and experience [59]. Learners should be warmed up and prepared before entering a new task to ensure smooth transition, as emphasized by Richards and Rodgers [58]. Therefore, the teacher plays a crucial role in carefully organizing the lesson; including clarifying the task and revisiting linguistic elements relevant to the task, in order to adequately prepare the students for tasks.

The task-cycle phase includes task execution and task reporting. This task may have several different solutions, and the quantities of each ingredient purchased can be adjusted according to the task requirements, allowing for flexibility in ingredient amounts. In order to successfully complete the task, students are required to interact with the non-player character who acts as the stall owner (Figure 3). They need to engage in conversation with the stall owner, inquire about the prices of the ingredients needed for making dumpling stuffing, and then negotiate with the stall owner to obtain the ingredients at a discounted or cheaper price. After that, students need to focus on a consultative discussion to decide on the ingredients to purchase so that the total price does not exceed the specified amount. After completing their assigned tasks as needed, they will need to return to the SL Chinese classroom. It is up to the students to report back to the teacher on their purchased ingredients. The teacher needs to monitor and observe the language used by the students during the whole process.

As mentioned above, in decision-making tasks, students are assigned with a problem, usually with several alternative solutions [39]. In this task, students have ample opportunities for verbal interaction as they need to discuss and decide on the combination of vegetables and meat suitable for making dumpling stuffing. They must make decisions that align with the task requirement of purchasing two vegetables and two meat items within the budget of 50 RMB.

Students are encouraged to express their ideas and engage in communication and interaction with their peers. On the one hand, this aligns with Vygotsky's sociocultural theory, which suggests that cognitive development, including language development, is influenced by social interaction. Through internalizing the language used by others or themselves during interactions, learners gain mastery over their own cognitive processes. When students and their peers collaborate in their zone of proximal development, internalization of language and cognitive processes can occur [60]. As revealed in Peterson's [61, 62] study, adopting decision-making tasks in SL could

FIGURE 4: Screenshot of SL Chinese restaurant.

facilitate deep cognitive processing and enable a student-centred approach to learning. Thus, cognitive and language development can be promoted through communication and interaction in the completion of this task.

On the other hand, it provides an opportunity for students to scaffold their learning through task-related interaction and communication. Skilled speakers can serve as scaffolds for less experienced learners, as individuals in a conversation may possess differing levels of language proficiency [58]. According to Henderson et al. [48], participating in a decision-making task allowed students to not only review and consolidate knowledge from the textbook, but also expand their vocabulary and grammar through active engagement. As learners interact with more proficient speakers, they can rely on them as scaffolds to complete the task initially. However, over time, learners gradually assume greater responsibility and accountability in the cooperative learning process, taking on more active roles in completing the mission [63, 64]. Their sense of confidence may increase with increased opportunities for experiential learning. As demonstrated by Henderson et al. [48], their study showed a significant increase in students' self-efficacy before and after engaging in a decision-making task. Similarly, the introduction of SL can also serve as a booster in promoting self-efficacy among students. Therefore, communication and interaction through the task not only promote cognitive and language development but also scaffold the students, thus increasing engagement and self-efficacy.

In the task-cycle phase, it is essential for all participants to be actively engaged as they are required to report back to the teacher in the SL Chinese classroom on their progress in completing the task. Students are positioned at the center of the task, with the teacher serving as an observer and facilitator. The teacher can intervene at appropriate times to provide students with a richer and more accurate language they may struggle to express, as well as to encourage them to produce more sophisticated language output, as highlighted by Van den Branden [65].

In the post-task stage, the focus shifts to language forms, with corrections provided for any language errors that may have occurred in students' dialogs. Additionally, practice exercises are conducted to reinforce vocabulary and sentence patterns related to grocery shopping. It is important to note that while the emphasis is on developing students' communicative competence, linguistic accuracy is not overlooked. As suggested by Jauregi et al. [41], when designing tasks in

SL, attention should be given not only to the meaning of language, but also to the form of language in order to enhance students' overall language proficiency. Details of the specific teaching plan can be found in Appendix 1.

5.2.2. Problem-Solving Task. The second is a problem-solving task. In the pretask phase, students arrive at the SL restaurant (Figure 4) and are seated at tables. The teacher then declares the task, where each student takes on the role of a visitor to the Chinese Island with specific dietary requirements. The vocabularies and phrases related to ordering food and dietary needs are reviewed at this stage. The task-circle phase begins with each student describing their dietary requirements to the other visitors, while the others guess the role they are playing, such as vegetarianism or Islam. The visitors at each table then discuss and decide what to order for different dietary needs based on the ingredient list for each dish (Figure 5) provided by SL Chinese Island. Afterward, everyone needs to order food in Chinese from a waiter avatar controlled by the teacher in order to complete the task. The teacher needs to check that the dishes ordered at each table match the particular role the student is playing, to determine if they have successfully completed the problem-solving task. In the post-task phase, the teacher addresses any language issues that arise in students' communication and provides further practice by expanding on the specific language forms used in the task.

This task requires a synthesis of language skills and various abilities. To successfully solve the problem, students need to read and understand the ingredient list of the dish, actively listen to their peers as they describe their dietary needs, effectively communicate their own dietary needs to others, and confidently place an order with the waiter. Completing the task, therefore, involves the skills of listening, speaking, and reading. This is similar to the complex problems encountered in the real world. As Lan et al. [49] stated, this type of task could strengthen learners' ability to apply language to solve real problems. In reality, language usage is complex, requiring the successful integration of three or all four language skills [66]. Additionally, Willis [34] highlighted that completing such tasks may also tap into learners' intellectual and reasoning abilities. Despite the challenges, students often found these tasks enjoyable and fulfilling. For example, judging if it is appropriate to consume the dish based on the ingredients on the menu, this process relies on intelligence and reasoning abilities. The problem-solving nature of these tasks enables students to integrate different language skills and diverse abilities, thus preparing them to use language effectively in real-world situations.

Integrating problem-solving tasks into realistic scenarios, such as setting the scene in a Chinese restaurant with a menu featuring authentic Chinese cuisine ingredients, can greatly enhance students' motivation. This approach not only exposes students to rich language input, including descriptions of flavors and ingredients of the dishes on the menu (Figure 5), but also prompts them to use language appropriately in context. This realistic scenario, therefore, allows students to solve practical problems in a meaningful and purposeful way that easily motivates and engages them. As found in the aforementioned
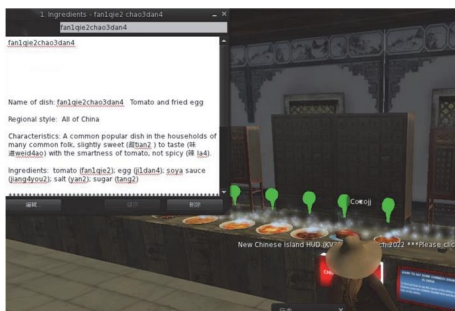
FIGURE 5: Screenshot of SL menu description.

study, through problem-solving tasks completed in SL, Chinese learners' learning motivation is improved [40, 67]. "Authentic learner interaction, motivated engagement and purposefulness are important in making progress in language learning" [44, p. 114]. This is extremely important for CFL learners at universities, especially if their CFL course does not count for credit.

As learners engage in the task, they have the opportunity to negotiate meaning by assigning roles and sharing information. This process can promote the development of students' communicative competence. Learning opportunities for comprehensible input and adjusted output are given through negotiation of meaning [58]. According to the interactional view, language develops as a consequence of creating meaning through dialogic interaction [58]. In this problem-solving task, learners can develop their communicative competence through activities such as comprehending checks, asking for clarification, and repetition when expressing dietary needs, guessing roles, and selecting appropriate dishes based on the ingredient menu. "As learners engage in communication, their output is 'stretched' and they acquire new linguistic resources" [58, p. 181]. Thus, students are not passive recipients of language knowledge in this process, but rather act as "risk takers" who are expected to create and explicate information that they lack adequate language resources and prior expertise [58]. Thus, the process of repeated negotiation of meaning promotes the development of students' communicative competence. As previously mentioned in the findings of the study, through problem-solving tasks completed in SL, Chinese learners' spoken communication ability is improved [40, 67]. The specific teaching plan can be referred to in Appendix 2.

5.3. Challenges of Designing Tasks in SL. First, implementing tasks in CFL classes based on those completed in SL requires a substantial investment of time and effort from the teacher. Even though there are well-developed teaching resources available, such as Chinese Island, designing tasks that are suitable for classroom use with these resources still requires a significant amount of time. Additionally, getting familiar with the technology itself can also be time-consuming [68]. Apart from being proficient in using the technology and exploring the features of the SL platform, it is crucial to ensure that the tasks are designed with consideration for students' actual proficiency level in the CFL classroom.

Second, it is a technical challenge. Inevitably, technical issues arise when applying SL to complete a task. This requires that students are trained in the relevant technical aspects when introducing SL into the classroom, so they are familiar with the platform and are comfortable with the platform environment [68]. It is also important to provide technical support to students during the execution of their tasks and seek assistance from the university's IT department if needed.

The third is the lack of paralanguage in SL, which can hinder language learning. While nonverbal cues, including certain gestures, can be expressed in SL, there are limited sublanguages that facilitate communication [69]. For instance, avatar facial expressions, eye contact, and body language may not be as comprehensive in SL, which poses challenges for students and makes it difficult for teachers to identify communication obstacles. As a result, alternative strategies such as private instant messaging or seeking direct help in a real-life computer lab may be necessary to ensure smooth communication in SL.

6. Conclusion

Due to the generally low-contact time in CFL classes in UK universities, students lack opportunities to use the language purposefully and meaningfully in the classroom. Given the learning styles and preferences of UK university students, who enjoy learning in groups or teams and learning by doing, SL creates a collaborative learning and immersion environment for L2 learners. This study has accordingly designed two tasks in SL for formal Chinese classes in UK universities: a decision-making task and a problem-solving task.

The decision-making task at the SL farmers' market is an authentic real-world activity that promotes goal-oriented learning. Students are tasked with buying ingredients that meet specific requirements, which encourages them to articulate their views, interact with others, and communicate effectively. This task facilitates cognitive and language development, providing a scaffold for students' learning, and increasing their engagement and self-efficacy. In this task, students take center stage, while the teacher acts as an observer and facilitator. The task not only focuses on the meaning of language, but also on its form, providing a well-rounded language-learning experience.

The problem-solving task at SL's restaurant replicates a real-world scenario, presenting students with a complex challenge to overcome. This task requires the integration of various language skills and abilities, preparing students to effectively use language in real-life situations. Engaging in authentic tasks in realistic scenarios can enhance student motivation by making the learning experience more meaningful. Furthermore, this task promotes effective communication skills as students are required to negotiate meaning with their peers while working on the task. Additionally, it encourages students to take risks and adopt an active role in their learning process.

However, there are several challenges associated with task-based teaching in SL. First, it requires a significant investment of time and effort from the teacher. Second, there are technical challenges to consider. Lastly, there is a lack of a specific sublanguage on the SL platform that facilitates language learning. Therefore, when implementing SL teaching in the university CFL classroom, these issues need to be carefully considered, and appropriate solutions should be developed accordingly. It is worth mentioning that in this study, no demo sessions were conducted to evaluate the impact on students. Further research could benefit from conducting such sessions to gain insights into the potential effects on students.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Authors' Contributions

Jiantao Li wrote the main manuscript text and Qingjia Kou created the concept and design. Both authors reviewed the manuscript.

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Supplementary Materials

Appendix 1 and Appendix 2 offered a detailed and comprehensive overview of the teaching process for the two tasks conducted in SL. (*Supplementary Materials*)

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