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ACTION RESEARCH

CONTEXTUAL EFL LEARNING IN A 3D VIRTUAL ENVIRONMENT

Yu-Ju Lan, National Taiwan Normal University

The purposes of the current study are to develop virtually immersive EFL learning contexts for EFL learners in Taiwan to pre- and review English materials beyond the regular English class schedule. A 2-iteration action research lasting for one semester was conducted to evaluate the effects of virtual contexts on learners' EFL learning. 132 elementary school students participated in this study. Both qualitative and quantitative data, including observation and English learning performances, were collected and analyzed. The positive results obtained from the study approved that the usage of virtual contexts in EFL learning could (1) provide students with learning opportunities without the time and space limits, (2) provide students with a game-liked scenario for English learning, and (3) enhance learners' EFL performances. The learning mode proposed and experiences gained in the current study not only serve as a practical reference to diverse foreign language educational occasions but also add to the knowledge pool of foreign language learning and teaching in virtual worlds.

Language(s) Learned in Current Study: English

Keywords: Virtual worlds, Contextual language learning, Immersive learning, English as a foreign language (EFL), English Village.

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INTRODUCTION

English has become the lingua franca of the world due to its widespread use in academia, business, commerce, and technology (Lan, Sung, & Chang, 2007; Su, 2006). Additionally, the competency of communication in foreign languages being one of the key competences for lifelong learning, recommended by the European Parliament and the Council (European Parliament and the Council , 2006; Soland, Hamilton, & Stecher, 2013), a number of Asian countries make English instruction mandatory since elementary education to cultivate their citizens' global perspectives and essential competences for the 21st century (Singapore's Ministry of Education, 2010; Taipei City Government's Department of Education, 2000).

In a non-English speaking country such as Taiwan, English proficiency is highly valued as a requisite feature of participating competitively in the international community (Lan, Sung, & Chang, 2009). The Ministry of Education of Taiwan initiated curricular and instructional reforms in 2000 (Ministry of Education, 2001). The teaching of English as a foreign language (EFL) is one of the highlights of the reforms made by advancing the EFL teaching on regular school schedule from junior high to elementary school. Over more than 10 years, the outcomes of the execution of the reforms have not been satisfying, according to the official report of the International English Language Testing System which shows that the English abilities of Taiwanese students were far beneath proficiencies of students in many other Asian countries (Central News Agency, 2011; Chen, 2007). Traditionally, Taiwanese students often learn and practice English out of context in which most of the learning activities are carried out via a static and

passive way in the traditional classrooms rather than via executing language tasks in real world (Lan, Wei, & Chiu, 2014). Teaching by such de-contextual approach tends to fail in developing EFL learners' pragmatic competency. Sequentially, EFL learners are usually frightened while trying to use English in real world. To improve Taiwanese EFL education, context-based EFL teaching and learning is emphasized because of the increasing numbers of teachers or scholars who believe that an authentic environment is a pivotal component necessary for the acquisition of language (Lan, 2014).

According to sociocultural theory of second language acquisition (SLA), a meaningful language must be learned in conjunction with society, culture and personally relevant life experiences (Eun & Lim, 2009). The social context and interaction actually mediate language learning and thus play an important role in the SLA process (Ellis, 2008). Furthermore, the contextual and non-linguistic cues existing in the environment make language input in a low stress situation possible, and thus make it easy to be comprehended and retained by a foreign language (FL) learner (Ray, 2012; Upal, Gonce, Tweney, & Slone, 2007). Not only beneficial to vocabulary acquisition (e.g., Levy & Kennedy, 2005), context-based language learning also enhances FL learners' pragmatic competencies (Llanes & Muñoz, 2009; Serrano, Llanes, & Tragant, 2011). Because linguistic knowledge is not the unique index of communicative competence, the ability to use the linguistic knowledge appropriately in a given sociocultural context is also important (Jung, 2005). Therefore, in addition to the descriptively linguistic knowledge, the ability to use the linguistic knowledge appropriately in a given sociocultural context is also important and should be taken into account while assessing a FL learners' language ability (Jung, 2005; Lukmani, 2012). Under the belief in the benefits of contextual learning in L2, creating authentic contexts for L2 learning is strongly suggested by several commonly referred foreign language teaching/learning guidelines, such as The Common European Framework of Reference for Languages (Council of Europe, 2001) and the proficiency guidelines developed by the American Council on the Teaching of Foreign Languages (American Council on the Teaching of Foreign Languages, 2012).

From this ideological frame of the references mentioned above, 12 elementary schools in Taipei City are selected and supported by the Taipei City Government to establish authentic, immersive learning environment, called the English Village, which aims at providing children with an active and pragmatic EFL learning opportunity (Lan et al., 2014). The themes and topics of each English Village are designed based on the consideration following specific pedagogical purposes of their own schools. For example, they may cover the learning contexts as broadly as possible or highlighting schools' specific characteristics. Topically, each English Village is not only used by the students of the owner elementary school, but also visited by the students from all the elementary schools located nearby due to the limited government budget that could not support every school to own an English Village. In order to guarantee that all the students in Taipei City should visit one English Village once before they graduate from school, both the usage efficiency of each English Village and the visiting records become one of the criterions for evaluating schools' achievement.

3 obvious problems have been encountered since the Villages have been established: (1) the lack of opportunity for students to preview the skills needed in experiencing the Village before visiting the setting or to review what they have learned or experienced in the setting (Lan et al., 2014); (2) the difficulties in providing students with flexible approaches to accessing the resources in the English Village, especially those from the schools without their own Villages (Lan et al., 2014); and (3) the lack of flexibility in changing the pre-programed physical contexts to create an adaptable platform for diverse learning needs (Liu, 2010). To deal with the existing obstacles, a 3D multi-user virtual environment (MUVE), such as Second Life (SL), seems to be a potential solution to the above-mentioned problems.

An MUVE has been a frequently discussed topic in FL research and education because of its capabilities of permitting researchers to construct and design the contexts according to the educational purposes (Oblinger & Oblinger, 2005) and of allowing FL learners to carry out social interactions in an authentically immersive environment by using their avatars (Cooke-Plagwitz, 2008; Sadler

Nurmukhamedov, 2008). Plenty of literatures support the use of an MUVE in language learning because of its potential of providing FL learners with the needed language contexts without any spacial or temporal barrier as well as the potential of enhancing FL learners' language competences (Lan, Kan, Hsiao, Yang, & Chang, 2013; Lan, 2014; Peterson, 2011; Ryu, 2013). For example, Lan and her colleagues (Lan et al., 2013; Lan, 2014) found that the rich interaction happening in SL, both inter-avatar and avatar-object interaction, improved the oral communication performance of learners of Chinese as a foreign/second language from different countries. Liang (2012) explored how contextual supports in SL facilitated EFL learners' creation and transformation of a language, and consequently improved their foreign language play. Unlike the afore two researches, Lee (2013) explored the effects of speaking activities in SL on self-expression of elementary school learners with different levels of shyness and approved the benefits of SL to students' self-expression scores.

Although numerous positive evidences have been obtained from the relevant researches on MUVEs for FL learning, few of them focused on the potential of using virtual contexts in an MUVE for enhancing contextual learning by EFL elementary school students to complement the insufficient learning opportunities in regular EFL classes. This study therefore aimed at answering the following two questions: (1) how can an MUVE be constructed to be an acceptable and effective context for EFL learning? And (2) is the virtual context in an MUVE able to improve elementary school students' EFL performance? A 2-iteration action research was conducted to answer the above-mentioned research questions. The following sections briefly present the purposes, the actions, the periodic results, and the reflection. Finally, the limitations and conclusions are provided along with the suggestions for future studies.

METHODOLOGIES

A 2-iteraton action research was conducted to answer the research questions. In Iteration 1, the field observation focusing on both students' behaviors and the problems encountered during the study, and teachers' comments were collected to be the reference for refining the virtual contexts in an MUVE. In Iteration 2, an English performance test was administered to evaluate students' improvement after using the virtual contexts for English learning.

Participants

132 students from an elementary school in Taipei City, from the fourth to the sixth grades, participated in this study. According to the curricular and instructional reforms announced by the Taipei City Government's Department of Education (2000), elementary school students need to acquire 320 words and 99 basic sentences after they graduate. All the participants were EFL beginners.

Instruments

English Learning Materials

A total of 2 units were designed in the study. A native English speaker in the physical English Village taught one unit for each iteration. The unit topics were "ring toss" and "table manners." Each unit consists of vocabulary, and sentences and conversation. Appendix A shows the learning contents of unit 2 "Ordering food and table manners."

English Village

3 traditional classrooms in the participating school were reconstructed as an English Village, including 3 authentic learning contexts: a restaurant, the check-in counter and the security check zone at an airport, and a cultural room. The first two contexts are similar to those in the real world, while the third one is a mixture of different Taiwanese cultural topics, such as Taiwanese food, drama and theater (puppet show and shadow show), and Chinese tea. Figure 1 shows the photos of the cultural room and the restaurant

taken from the English Village.



Figure 1. Photos taken in the English Village: (a) playing ring toss (Iteration 1) and (b) ordering food in a restaurant (Iteration 2).

Virtual Contexts

The virtual contexts used for this study were similar to the real contexts existing in the English Village: a ring toss booth in the night market for Iteration 1 and a restaurant for Iteration 2. They are developed in the SL by the author. Figure 2 shows the screenshots of the virtual contexts corresponding to those in Figure 1.

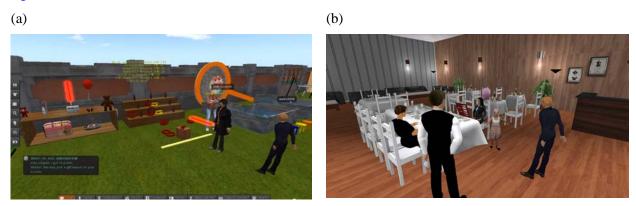


Figure 2. Screenshots of the virtual contexts: (a) playing ring toss at a night market (Iteration 1) and (b) ordering food in a restaurant (Iteration 2).

Performance Test

The performance test was designed by the author and used in Iteration 2. It consists of two categories of items, including vocabulary (13 items) and sentences and conversation (17 items). A total of 30 items were included in the performance test, one item scoring 1 point. Some examples of the test items are as follows:

Vocabulary: What is this? (a) Peg (b) Ring (c) A bottle of water

Sentences and Conversation: How do I play ring toss? (a) Stand on it. (b) Jump on it. (c) Stand behind the line. Toss the rings over those bottles.

Iteration Procedure and Reflection

The current study lasted for one semester, from September 2013 to January 2014. As mentioned in the INTRODUCTION section, because of the lack of opportunities of accessing the learning contexts for students before they visit the physical English Village, around half of the available learning time for each Village visiting was used for vocabulary and sentence teaching in a way that was the same as what is usually done in a traditional classroom. In a word, although students were in the English Village, which is an authentic context developed with the aims for students to carry out student-centered language tasks, much time were used for delivering teacher-centered activities which actually can be done in their traditional classrooms. In order to overcome the problems of wasting time in practice by rote, it is expected that the participants should be ready to carry out the language tasks in the authentic contexts before they go to the English Village. To reach the above-mentioned goal, some virtual contexts that are similar to those in the English Village were developed via an iterated execution-reflection-refining procedure in this study.

Iteration 1: Development and Refinement of the Virtual Contexts

Procedure

Some virtual contexts were developed in SL and used in the first iteration. For developing those contexts that satisfy students' learning needs and teachers' teaching goals, careful discussions between the author and the English teachers and the directors of the participating school were regularly conducted. After the virtual contexts were ready, one learning unit was implemented as a before-while-after-reflection (BWAR) model in 4 weeks. The model is briefly described below.

In the first week (before visiting the English Village), the participants pre-viewed the learning materials in the virtual contexts for 30 minutes. Through their avatars, all the participants interacted with the objects and NPC (non-player character) to (1) learn the vocabulary and sentences; and (2) go through the learning scenarios, which are the same as those in the English Village. In the second week (while visiting the English Village), the participants went to the English Village to carry out the student-centered language tasks for 80 minutes by applying what they have learned in the virtual worlds. Additionally, a native English speaker led all the activities. In the third week (after visiting the English Village), they went back to the virtual contexts to review what they have learned in that unit for 30 minutes. In the fourth week (reflection), we focused on what had been observed in both the first and the third weeks to identify what specific functions or characteristics should be kept or revised to make the virtual contexts a better environment for elementary school students to learn English. Additionally, the author also discussed with the teachers and the directors of the participating school to confirm the revision focuses during the process of the BWAR model. Figure 3 shows the procedure of Iteration 1.

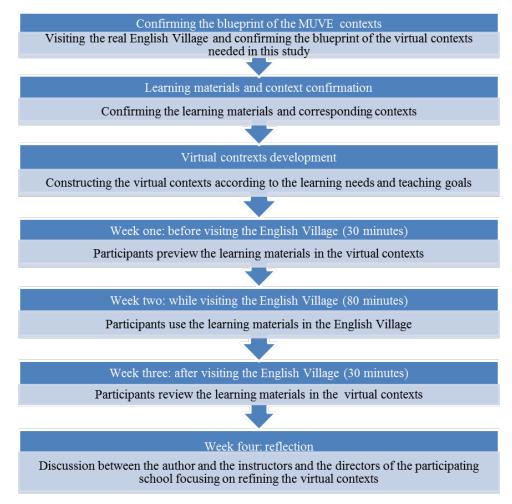


Figure 3. Iteration 1 procedure.

Results, Reflection and Refinement

Based on the observation on students' learning behaviors in the virtual contexts and the discussions between the author and the instructors and the directors of the participating school, it was found that almost all the participants loved to learn English in the virtual contexts. They viewed the learning approach as an online game thus being eager to involve themselves in the activities. Besides, to move and control avatars in the virtual contexts were not a problem for them. However, because of some unexpected problems encountered during the learning process, some of the students could not go through the learning scenarios in the first unit. The overall situations of learning process in the virtual contexts and the problems encountered along with some examples of students' comments are as listed in Table 1.

In addition to what has been described in Table 1, it was also found that most of the students were excited when they got the presents (virtual objects), such as a teddy bear or a motorboat in Figure 2(a). Only very few of them complained about the regular presents they got and wished to earn some cooler ones. Two of them said "Uhh I already have two of this!" and "Can I have something cool?" Since very few students complained about the present issue and it did not hinder the learning activity going, the present enrichment will be not dealt with in this study. Most of the efforts in the following iteration focused on dealing with the problems listed in Table 2 to make the contexts in SL a more appropriate learning context for elementary school students.

Table 1. Overall Situations, Problems Encountered, and Examples of Students' Comments in Iteration 1

Overall situation and problems encountered	Examples of students' comments			
1. Students were eager to play the game of ring toss.	"Hey! I saw you! I'm just behind you!" (showing excitement and curiosity) "This is so beautiful! Who created this?" "Who is it (an account name on the Rank Board)? I also want my name to be on the chart."			
2. It was easy for the students learning to move their avatars and interact with the NPC and the 3D objects.	"It's way too easy! I have played a similar one." "(When the screen was locked by the instructor for teaching them how to operate in the virtual contexts) Teacher, could we have our own screen back? I know how to do it already." "Hey see! I know how to fly." "Hey I am here! Follow me! Let me show you some interesting places. You can click 'run,' it will be faster!"			
3. Many students squeezed at the stand of ring toss. Waiting too long lowered students' patience and also hindered them from successfully going through the whole process.	"Teacher, there are too many people, can you create some more ring toss stands for me?" "Too many people here." "Who is 5230? You blocked my way." "I'm not able to click the boss because they all stand in front of me." "Hey it should be my turn!! When can I play it?" "Teacher, I kept clicking it but it's stuck! When can I play it?"			
4. Too many students clicked the 3D objects simultaneously, causing the names of the objects clicked uneasy to be identified and difficult for the participants to hear and learn.	"I clicked it several times but I just cannot hear anything!" "I have clicked and waited for a long time! But no response!"			
5. Some students were disappointed when learning the dialogue because they did not know the correct answers to the questions asked by the NPC.	"I don't want to do it. I don't know which answer to select anyway." "What am I supposed to do?" "Teacher, could you tell me which one is the correct answer?" "Teacher, could you do it for me?" "This is too difficult for me. My English is poor."			

Preliminary Summary

In the first iteration, by designing and implementing the virtual contexts, some specific functions were identified and added to the general virtual contexts in SL to make the MUVE more satisfying for elementary school students to conduct self-directed learning. Firstly, individuality is the essential function that should be satisfied if more than one person simultaneously logs in and interact with the virtual contexts. The "individuality" includes both the interactive objects and the private verbal channel, which allows multiple learners simultaneously click one object and hear its verbal name from the personalized channel without interference. Secondly, the scheme of demonstration is essential for elementary school students to do self-directed learning in an MUVE, e.g. the preview and review activities in the current study. After the problems described above are solved, the MUVE has the potential to become an attractive

environment for elementary school students to learn English.

Iteration 2: Effects Evaluation of the Virtual Contexts on Elementary School Students' English Performance

The purposes of Iteration 2 were (1) to confirm the appropriateness of the refined virtual contexts in SL and (2) to evaluate the effects of the virtual contexts on elementary school students' English performance. After refining the functions of the virtual contexts in SL, a new virtual context (a western restaurant) was constructed and used in Iteration 2. The new virtual context consists of all the functions confirmed and refined in the previous iteration. Both qualitative and quantitative data were collected and analyzed in this iteration to reach the iteration goal.

Procedure

The participants learned one unit in this iteration. In addition to the process of BWAR model used in Iteration 1, both pre- and posttest of an English performance test were administered. Students' learning behaviors were also observed while students took part in learning activities in the virtual context. Figure 4 shows the procedure of Iteration 2.

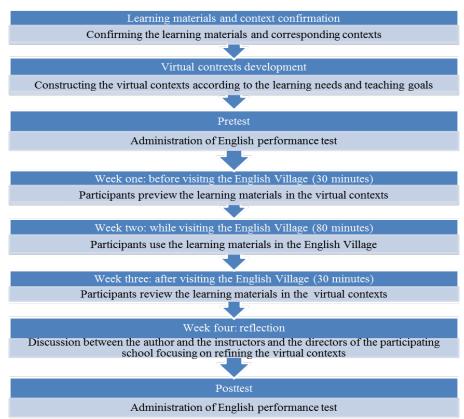


Figure 4. Iteration 2 procedure.

Furthermore, the preview and review activities in the virtual context were a little different from those in Iteration 1. Since the duplicated 3D objects were added to the virtual context, all the students were able to learn the food's names on the menu before practicing the dialogue with the NPC. Additionally, they could also listen to the demonstration provided by the NPC before doing the avatar-NPC interaction to answer the questions asked by the NPC. Figures 5 and 6 show the duplication of 3D objects and the dialogue demonstrated by 3 NPCs, respectively.

Results, Reflection and Refinement

Results of Observation

The overall learning process in the virtual contexts in Iteration 2 was improved and went fluently. The problems identified in the first unit were almost solved (see Table 2). Students were able to learn the vocabulary and the dialogue without interference because of the duplication of the learning contexts and the development of the private audio channel. In general, students were excited to own one copy of the virtual objects to interact with and learn the materials. For example, it was found that sometimes they were so excited that more than two students were emulative to sit on the same chair even though there were enough chairs for them to choose (see the right hand side of Figure 5). They were so surprised about the reality of the virtual menu that they thought that they might receive real food after ordering. Some examples of students' comments were as follows:

"I wanna grab the seat! I want to be the first."

"It's me! I'm the first to sit on the chair!"

"Should I click every item?"

"Can I click the items on the menu to order food? It looks real! Will I get the food after I order?"

"Don't stand on my way!" (The students loved to fight for the remaining seats and ended up sitting upon each other. They seemed to be playing the game of "The Big Wind Blows" when they tried to choose one seat to sit down.)

Table 2. The Solving Strategies for Dealing with the Identified Problems

The problems encountered	Adopted strategies
The insufficiency of 3D objects for students to practice and interact with	To replicate the contexts, allowing every student to practice the dialogue and play the game simultaneously without having to wait (see Figure 5).
Confusing and confounding audio information caused by the simultaneous clicks on the 3D objects	To add a private audio channel in the virtual contexts for each student, allowing them to hear only the name of the 3D objects he/she clicked without being affected by others.
The lack of dialogue demonstration	To add a set of demonstration NPCs. Students can listen to the demonstration before being asked to do an avatar-NPC interaction in which they have to choose the correct answers for successfully completing the dialogue (see Figure 6).

Besides, the NPC demonstration also helped them learn and go through the learning process. They found it cool when they heard their foreign teacher's voice in the virtual context. For example, when the NPC spoke with their English teacher's voice, students shouted out with joy and surprise, "It's our foreign teacher's voice!" Furthermore, the audio channel used by the demonstration NPC was the public one. That is, when one student clicks the demo NPCs, all the students nearby can hear the demonstration. They did not need to wait in line to click by themselves. Additionally, the channel is different from those used by the other two activities, which were vocabulary and sentence learning or practicing dialogue with the NPC. The latter two used the private channels by which students only hear the corresponding names or sentences of the 3D objects clicked by them without being affected by any noise produced by others' learning action.



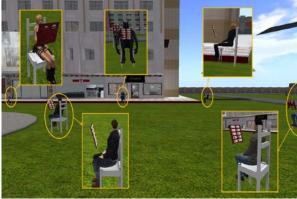


Figure 5. The duplication of the 3D objects: left, ring toss; and right, ordering food.



Figure 6. A demonstration of the dialogue between the NPCs in the restaurant.

Results of the Performance Test

The scores of the pre- and posttest of the English performance test are analyzed via a paired t-test (see Table 3). It was found that the participants made significant improvement in the total score after learning in the virtual contexts (t = -2.379, p < .05). Regarding the different item categories, the participants made significant improvement in the category of sentences and conversation (t = -3.242, p < .01). In contrast, the improvement in vocabulary was not significant although they got higher scores in this category at the posttest.

Table 3. *Pre- and Post-test Scores of the English Performance Test (N=132)*

Item categories	Pre-test		Posttest		t-test	Sig.
	Mean	SD	Mean	SD		
Vocabulary	8.94	4.09	9.13	4.40	634	.527
Sentences and conversation	11.87	3.84	12.70	4.34	-3.242	.002**
Total	20.81	7.11	21.83	8.14	-2.379	.019*

Notes *p < .05 **p < .01 ***p < .001

LIMITATIONS AND CONCLUSION

Plenty of literature evidences approve the contextual effects on second language learning and teaching (Firth & Wagner, 2007), especially the pragmatic competence of linguistic skills (Lukmani, 2012; Upal et al., 2007). The highlight in the context in which an L2 takes place made by Council of Europe (2001) also enhances the awareness of the contextual and interactional dimensions of language use. To provide L2 learners with authentic contexts, English Villages are built in some elementary schools in Taipei. However, because of the small numbers of Villages, several problems have been encountered since the opening of the Villages. In order to solve the problems encountered in running the English Villages and improve their usage efficiency, an MUVE was used to develop the virtual contexts that are similar to the English Village in the participating school.

According to the results obtained from the current study, controlling avatars in the MUVE is totally not a problem for those digital natives. It was not long for them to be proficient at playing around in the virtual contexts. The finding echoes the argument of Prensky (2001a), who stated that today's students grow up with new technologies, such as 3C products and digital games. Their learning approaches and thinking patterns are different from ours. Educating the digital natives via those approaches that meet their growing experiences, such as digital games, thus, should be an issue valued by all the educators and researchers (Prensky, 2001b; 2003).

However, although numerous researches on game-based role playing for language learning also support the effects of digital games on EFL learners' performances (Liang, 2012; Peterson, 2011; Thorne, Black, & Sykes, 2009), few focused on the design of 3D virtual contexts that support elementary school students to conduct self-directing learning to complement regular EEL classes like what was done by the participants in this study. It was found that it is hardly enough to create contexts similar to those in the real world to expect learning to happen. Specific functions should be provided to guarantee the learning opportunity for each individual. "Individuality," "adaptability," and "scaffolding" are the three functions that should be included in the virtually contextual learning environments based on the findings of this study. "Individuality" provides individual EFL learner with private learning resources, such as private audio channels and interactive objects. "Adaptability" is a kind of capability that is flexible to meet diverse pedagogical needs. "Scaffolding" helps learners be ready before being asked to produce language output, and consequently lowers EFL learners' anxiety and frustration.

In addition to the three functions mentioned above, awarded feedback is also an interesting issue to be investigated. Although it is not further discussed in the current study, feedback is always an important issue in the research on online game (Connolly, Stansfield, & Hainey, 2011; Dellarocas, 2003). Therefore, further investigation on how to design appropriate online feedback to inspire elementary school students to continuously involve themselves into self-directed playing and learning English in the virtual contexts is highly recommended in future research.

Additionally, regarding the learning performance, it is found that the virtually authentic contexts significantly benefited EFL learners' performances, especially in syntactic and conversation abilities. The results echo the arguments of sociocultural SLA that the contexts in which an L2 happens positively affect L2 learners' target language abilities (Lan et al., 2013; Serrano, Llanes, & Tragant, 2011; Upal et al., 2007). Furthermore, the results are also of great value and are worthy of further research because they may be a potential solution to the problems encountered by most of Taiwanese students in English learning (Central News Agency, 2011; Chen, 2007). "De-contextual" and "examination-oriented" learning and teaching approaches hinder Taiwanese students' acquisition of English and to use the target language in daily life even though they learn the target language since very young. Based on the positive results obtained from the current study, it is highly recommended that more schools should include the learning activities in the virtual contexts proposed in this study in their regular EFL curriculum to provide EFL learners with the additional opportunities of using what they have learned in the traditional classes in social interaction.

In summary, learning EFL in MUVEs is a potential solution to the problems encountered in today's EFL education in Taiwan. It is able to improve elementary school students' EFL performance as well as to provide them with authentic contexts for conducting game-liked learning activities that meet their growing experiences if some specific functions are provided in such a virtual environment. However, this study is only the first step. Only one group of 132 students from one elementary school participated in this study. Participants from different schools are needed in the future to strengthen its external validity to expand its application to other EFL settings. Furthermore, the lack of the control group in the current study also weakens its internal validity to decide the causal relationships between the outcome and the virtual contexts. Thus, there is still a need to expand the current study to obtain more solid evidence for approving the application of MUVEs in EFL learning in the future.

APPENDIX A. Unit 2: Ordering Food and Table Manners

Vocabulary

Glass: Cup:

a glass of milk a glass of juice a cup of coffee a can of coke

a cup of yogurt a bun

a sandwich a hamburger
a piece of cake a piece of bacon
a slice of cheese a slice of pizza
a plate of pasta a plate of fries
a pancake a waffle

a table a chair
a fork a knife
a napkin a spoon
a plate a bowl

tablecloth

Sentences

a glass of milk I would like a glass of milk, please. a cup of coffee I would like a cup of coffee, please. a glass of juice I would like a glass of juice, please. a can of coke I would like a can of coke, please. a sandwich I would like a sandwich, please. a plate of pasta I would like a plate of pasta, please. a pancake I would like a pancake, please. I would like a bun, please. a bun I would like a hamburger, please. a hamburger a slice of pizza I would like a slice of pizza, please.

Dialogue

Waiter: Welcome to NTNU restaurant!Child: Excuse me waiter, I want to order.Waiter: Great. What do you want to drink?

Child: I want a can of coke and a glass of water, please.

Waiter: And what do you want to eat

Child: I would like a hamburger and I also want a plate of pasta for my mom, please.

Waiter: Sure, I will be right back!

Mother: First, what do you have to do?

Child: Place the napkin on my lap.

Mother: That's right. And what do you say before you leave the table?

Child: Excuse me.

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ABOUT THE AUTHOR

Yu-Ju Lan is currently an Associate Professor of Department of Applied Chinese Language and Culture at National Taiwan Normal University. Her research interests include technology enhanced foreign language learning, online synchronous teacher training, language learning in virtual worlds, and mobile learning.

E-mail: yujulan@gmail.com

REFERENCES

American Council on the Teaching of Foreign Languages (2012). *ACTFL proficiency guidelines 2012*. USA: ACTFL, INC. September 24, 2013, retrieved from http://www.actfl.org/sites/default/files/pdfs/public/ACTFLProficiencyGuidelines2012 FINAL.pdf

Central News Agency (2011). Taiwan ranked 25th in the global English proficiency ranking of 44 countries which was far behind Japan and Korea. Retrieved from http://www.cna.com.tw/postwrite/P5/80405.aspx

Chen, Y. Z. (2007, August 22). In the English skills ranking, Taiwan was ranked fourth to last and was

only better than China, Bangladesh, and Saudi Arabia. *Dajiyuan*. Retrieved from http://tw.epochtimes.com/b5/7/8/22/n1809674.htm

Connolly, T. M., Stansfield, M., & Hainey, T. (2011). An alternate reality game for language learning: ARGuing for multilingual motivation. *Computers & Education*, *57*(1), 1389–1415.

Cooke-Plagwitz, J. (2008). New directions in CALL: An objective introduction to Second Life. *CALICO Journal*, 25(3), 547–557.

Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment.* Cambridge. Cambridge University Press. October 16, 2012, Retrieved from http://www.coe.int/t/dg4/linguistic/source/framework_en.pdf

Dellarocas, C. (2003). The digitization of word of mouth: Promise and challenges of online feedback mechanisms. *Management Science*, 49(10), 1407–1424.

Ellis, R. (2008). *The study of second language acquisition* (2nd. ed.). New York, NY: Oxford University press.

Eun, B., & Lim, H. (2009). A sociocultural view of language learning: The importance of meaning-based instruction. *TESL Canada Journal*, 27(1), 13–26.

European Parliament and the Council (2006). *Recommendation of the European Parliament and the Council of 18 December 2006 on key competences for lifelong learning*. Official Journal of the European Union, L394. Retrieved from <a href="http://eur-parliament/but/http://eur-parli

lex.europa.eu/LexUriServ/site/en/oj/2006/1_394/1_39420061230en00100018.pdf

Firth, A., & Wagner, J. (2007). Second/foreign language learning as a social accomplishment: Elaborations on a reconceptualized SLA. *The Modern Language Journal*, *91* (s1), 800–819.

Jung, J. (2005). Issues in acquisitional pragmatics. *Columbia University Working Papers in TESOL and Applied Linguistics*, 2(3). 1–34. Retrieved 21 October, 2014 from http://journals.tc-library.org/index.php/tesol/article/view/21

Lan, Y. J. (2014). Does Second Life improve Mandarin learning by overseas Chinese students? *Language Learning & Technology*, 18(2), 36–56. Retrieved from http://llt.msu.edu/issues/june2014/action2.pdf

Lan, Y. J., Sung, Y. T., & Chang, K. E. (2007). A mobile-device-supported peer-assisted learning system for collaborative early EFL reading. *Language Learning & Technology*, 11(3), 130–151. Retrieved from http://ir.lib.ntnu.edu.tw/ir/retrieve/21086/metadata 0111004 01 029.pdf

Lan, Y.-J., Kan, Y.-H., Hsiao, I. Y. T., Yang, S. J. H., & Chang, K.-E. (2013). Designing interaction tasks in Second Life for Chinese as a foreign language learners: A preliminary exploration. *Australasian Journal of Educational Technology*, 29(2), 184–202.

Lan, Y.J., Sung, Y.T., & Chang, K.E. (2009). Let us read together: Development and evaluation of a computer assisted reciprocal early English reading system. *Computers & Education*, 53(4), 1188–1198.

Lan, Y. J., Wei, H. H., & Chiu, Y. L. (2014). Virtual English village: A task-based English learning platform in Second Life. *Proceedings of the 22nd International Conference on Computers in Education* (ICCE 2014), 625–629. Japan: Asia-Pacific Society for Computers in Education.

Lee, S. (2013). Can speaking activities of residents in a virtual world make difference to their self-expression? *Educational Technology & Society*, 16(1), 254–262.

Levy, M., & Kennedy, C. (2005). Learning Italian via mobile SMS. In A. Kukulska-Hulme & J. Traxler (Eds.), *Mobile Learning- A handbook for educators and trainers* (pp. 76–83). New York: Taylor & Francis Inc.

Liang, M.Y. (2012). Foreign ludicity in online role-playing games. *Computer-Assisted Language Learning*, 25(5), 455–473.

Liu, G. Y. (2010). *Research: English Village not so influential as playing house*. Retrieved from http://www.cna.com.tw/news/FirstNews/201001060033-1.aspx

Llanes, À. & Muñoz, C. (2009). A short stay abroad: Does it make a difference? System, 37(3), 353-365

Lukmani, Y. (2012). Current research in language assessment and its implication for language teaching. Language and Language Teaching, 1(1), 5–11.

Ministry of Education. (2001) *General guidelines of grades 1-9 curriculum for elementary and junior high school education*. Retrieved from http://www.fhjh.tp.edu.tw/eng_www/G1-9%20curriculum.doc

Oblinger, D., & Oblinger, J. (2005). Educating the net generation. Boulder, CO: Educause.

Peterson, M. (2011). Towards a Research Agenda for the Use of Three-Dimensional Virtual Worlds in Language Learning. *CALICO Journal*, 29(1), 67–80.

Prensky, M. (2001a). Digital natives digital immigrants. Horizon, 9 (5). Retrieved from http://www.marcprensky.com/writing/Prensky%20-

%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

Prensky, M. (2001b). Do they really think differently? *Horizon*, 9 (6). Retrieved from http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part2.pdf

Prensky, M. (2003). Digital game-based learning. ACM Computers in Entertainment, 1(1), 1–4

Ray, S. (2012). Using language in the community for enhancing communication skills. Language and Language Teaching, 1(1), 12-17.

Ryu, D. (2013). Play to learn, learn to play: Language learning through gaming culture. *ReCALL*, 25(2), 286–301.

Sadler, R. & Nurmukhamedov, U. (2008, March). Second Life and task-based learning. Paper presented at *CALICO annual conference*, San Francisco, CA.

Serrano, R., Llanes, À., & Tragant, E. (2011). Analyzing the effect of context of second language learning. *System*, *39*, 133–143.

Singapore's Ministry of Education (2010). English language syllabus 2010: Primary & secondary (express/normal [academid]). Retrieved from http://www.moe.gov.sg/education/syllabuses/english-language-and-literature/files/english-primary-secondary-express-normal-academic.pdf

Soland, J., Hamilton, L. S., & Stecher, B. M. (2013). Measuring 21st century competencies-Guidance for Educators. Asia Society Global Cities Education Network. Retrieved from http://asiasociety.org/files/gcen-measuring21cskills.pdf

Su, Y. C. (2006). EFL teachers' perceptions of English language policy at the elementary level in Taiwan. *Educational Studies*, *32*(3), 265–283.

Taipei City Government's Department of Education (2000). Curriculum guidelines of elementary English language teaching and learning. Retrieved from

 $http://www.google.com.tw/url?sa=t\&rct=j\&q=\&esrc=s\&frm=1\&source=web\&cd=2\&ved=0CDYQFjAB\&url=http%3A%2F%2Fwiki.estmue.tp.edu.tw%2Fimages%2F3%2F3e%2F%25E8%258B%25B1%25E6%2596%2587.doc&ei=5_i9UKWeAe7smAX1ioC4Bw&usg=AFQjCNFH892OVzBhiIfHrboQlUkRt8afiQ&sig2=Zc6kUlloAnTwKrGDE_Q8pw$

Thorne, S. I., Black, R. W., & Sykes, J. M. (2009). Second language use, socialization, and learning in internet interest communities and online gaming. *The Modern Language Journal*, *93*(s1), 802–821.

Upal, M. A., Gonce, L. O., Tweney, R. D., & Slone, D. J. (2007). Contexualizing counterintuitiveness: How context affects comprehension and memorability of counterintuitive concepts. *Cognitive Science*, *31*, 415–439.