

Learning English through video gaming

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Abstract

Interest in using video games for the teaching and learning of second languages has been increasing steadily over the past decade. This project adapted commercial video games for use as the core content of an EFL elective course. The paper begins by reviewing the research that supports the use of video games for language learning. Next, it describes how commercial video games were adapted for use in an EFL elective course entitled "Learning English Through Video Gaming." Qualitative data collected during the course in the form of surveys, student written reflections, audio recordings of activities, and collected homework will be analyzed and the implications discussed. Finally, the paper will evaluate the success of the course in achieving its learning outcomes and propose areas of future research.

Introduction

In the past decade, increasing media and academic attention has been paid to the idea of using video games for educational purposes (Fletcher & Tobias, 2006; Marklein, 2011). In fact sociolinguist James P. Gee, expert on how video games fit into theories of learning and literacy, remarked in a 2010 interview that "research into game-based learning is really starting to peak" (The Learning Network, 2010). Gee (2007) and others (Koster, 2005; Prensky, 2006), have argued compellingly that well-designed video games incorporate principles of effective learning, and that educators should harness these principles as well as games themselves in

order to help students learn. Additionally, using games for education has been proposed to stimulate learner motivation (Bowman 1982; Bracey 1992; Driskell & Dwyer 1984; Malone, 1981; Rieber, Smith, & Noah, 1998), improve retention of information (Garris, Ahlers, & Driskell, 2002; Hays & Singer, 1989), and increase learner interest in the subject matter (Greenblat, 1981).

Video games have been used successfully in a wide variety of educational contexts. For example, U.S. navy trainees using a game-based periscope trainer showed more improvement on distance estimation and angle-on-bow (i.e. the angle formed by the target ship and the line-of-sight of the periscope) estimation tasks than a control group using a more traditional simulation that lacked game-like elements (Garris and Ahlers, 2001). Din and Calao (2001) found that kindergarteners who played educational video games for 40 minutes per day for 11 weeks scored higher on reading and spelling assessments than a control group. White (1984) found that high-school physics students who played a video game which required them to maneuver a spaceship according to Newtonian physics principles scored higher on posttests that assessed their knowledge of force and movement principles than a control group which did not play the game.

Despite these apparent successes, however, it is best to be wary when drawing conclusions about the effectiveness of games as instructional tools. Empirical experiments with games, such as those listed above, have been conducted on a diverse range of age groups who were engaged in a wide variety of tasks. As Hays (2005) cautions, "We should not generalize from research on the effectiveness of one game in one learning area for one group of learners to all games in all learning areas for all learners" (p. 53). Rather, Hays suggests that each individual context must be considered separately to determine whether games would be useful to

learners.

In the case of a higher education context, Whitton (2010) makes the argument that video games can be used "to support learning, teaching, and assessment with adult learners" (p. 1) and describes six case studies which support this view. She also provides a pedagogical rationale for using games in higher educational settings which is grounded in theories of constructivist learning. Constructivist learning theory asserts that "learning is problem-solving based on personal discovery, and the learner is intrinsically motivated" (Cooper, 1993, p. 17). Constructivist theory includes within its framework the ideas of active learning (Bruner, 1966), experiential learning (Kolb, 1984), collaborative learning, and problem-based learning. Video games, with their constant presentation of challenges to solve, cycles of interaction and feedback, and multiplayer/virtual community aspects clearly seem to fit into the constructivist paradigm of learning.

In terms of foreign language teaching in a higher education context, some studies using video games have shown promising results. Rankin, Gold, and Gooch (2006) in a pilot study using the massive-multiplayer online game *EverQuest 2*, found that university ESL student participants demonstrated incidental learning of vocabulary appearing in the game and increasing confidence in their English skills, which correlated with increasing numbers of interactions with native speakers using the in-game chat function. Coleman (2002) successfully used a directions-writing task in *Sim Copter* to raise university ESL learners' awareness of the importance of considering the audience when writing. Additionally, Miller and Hegelheimer (2006) used *The Sims* with a group of 18 university ESL learners and showed that, by providing learners with

mandatory supplemental materials, adapting a commercial video game for language learning could result in a statistically significant increase in vocabulary acquisition. Ranalli (2008) in a follow-up study to Miller and Hegelheimer confirmed these results.

However, not all results of research into using games for language learning have been positive. deHaan, Reed, and Kuwada (2010) investigated how interactivity with video games affects vocabulary acquisition and found that students who played an English-language video game remembered far fewer words encountered in the game on both immediate and delayed post-task vocabulary tests compared with students who simply watched the game being played. These results suggest that the cognitive load of playing the game may in some cases interfere with learners' ability to attend to language.

The literature cited above suggests that more research is needed into how video games might be used effectively in classrooms, particularly in a higher education foreign language teaching setting. Adapting commercial games for use in the language classroom is currently the most time-efficient and relatively inexpensive way of incorporating video games in the classroom (Van Eck, 2006). While some previous research has focused on using commercial games outside of the classroom or as one-off classroom activities within a broader more traditional class (Coleman, 2002; Lee & Hoadley, 2007) this paper describes the use of video games as the core content of a university EFL elective class. First, a brief overview of the course goals, participants, and classroom activities will be provided. Next, one classroom activity—the multiplayer competitive activity—will be described in more detail. Data collected from this activity in the form of audio recordings and student reflections will be presented and analyzed. Finally, implications of the data

and the overall success of the course in meeting its objectives will be discussed.

Class Description

The 15-week elective course entitled "Learning English Through Video Gaming" was offered to 3rd and 4th year students at a mid-size Japanese university. The primary goal of the course was to provide learners with fun and novel ways of practicing and improving their English language skills outside of class using video games. A secondary goal was to provide students with the confidence and experience to communicate comfortably about video games with other speakers of English.

Participants

Thirteen 3rd and 4th year students (4 male/9 female) enrolled in the course and agreed to participate in the research project. The participants ranged in age from 20-26 years old. While two of the participants were Chinese international students, the remainder of the participants were Japanese nationals. All of the participants were International Communications (IC) majors, an English major that focuses on enabling students to communicate effectively in English on a variety of global topics. As per IC Department policy, all participants needed to have a minimum TOEIC score of 650 in order to enroll in an elective class.

An initial survey of the participants' video gaming history revealed that they came from a variety of gaming backgrounds. Two students were self-described "hardcore gamers" who played video games nearly every day. On the other hand, one participant claimed to have only played video games a few times in her life. The majority of participants had been avid gamers at some point in their lives, playing

games several times a week, but most currently did not play many games. Previous research (Chen & Johnson, 2004) has shown that significant differences in the effectiveness of using video games for language learning can occur based on learners' familiarity with video games in general. It was hoped that the training learners received in class in how to talk about, select, and use games for language learning purposes would mitigate this effect.

Classroom Activities Using Video Games

Classroom activities incorporating video games for language learning purposes were designed with a number of principles in mind. First, activities were intended to focus learners' attention on language. As mentioned above, previous research by deHaan, Reed, and Kuwada (2010) seems to indicate that the cognitive demands required for playing the game may interfere with the noticing of language during gameplay. To compensate for this, the classroom activities required learners to record their gameplay experiences so that they would have an opportunity to go back later and more carefully review any English that either appeared in the game or, in the case of multiplayer gaming, any English that was used by their partners.

The recording of the activities supported the second principle around which the materials were designed: reflection. Reflection, or "debriefing" as it is sometimes called, is crucial for learners when simulations and games are used in the classroom so that learners can relate their experiences playing the game to the course goals and objectives (Crookall, 1992; Peters & Vissers, 2004).

Third, since the primary goal of the class was to provide students with another avenue for language learning and practice outside of the classroom, the activities

were also designed to include opportunities for autonomous learning and learner choice. For example, although the first time an activity was introduced in class the learners did the activity together with the teacher using the same game, subsequent homework assignments involving the activity allowed learners to choose which games to play, who (if anyone) to play with, and which aspect of language learning to focus on during the activity.

While keeping the above principles in mind, the six activities described in Table 1 were designed and piloted the semester before the class was administered with a group of paid student assistants to help ensure that learners found the activities both engaging and useful.

Table 1 List of Classroom Video Game Activities	
Activity Name	Brief Description
Video Game Diary	A written description in English of a recorded game session in which the learner includes information such as the game's genre, story, and gameplay features, as well as an account of what the learner did in the game.
Vocabulary Journal	A journal that includes new or interesting language items that learners encounter or use during their gameplay session. Learners record in-depth information about the language items such as the meaning, common collocations, and the kinds of situations in which the language item might be used.
Cooperative Multiplayer Activity	Learners work together to play a game, with one player reading an online English game FAQ/Walkthrough and instructing the other player in how to play. Learners take turns in trying each role. Afterwards, learners listen to a recording of the activity and reflect on their English performance.
Team Multiplayer Activity	Learners negotiate a goal for the gaming session and play the game together in an attempt to complete the goal. Afterwards, learners watch and listen to a recording of the activity and reflect on their English performance.

Competitive Multiplayer Activity	Learners negotiate goals for the gaming session and compete against each other in the game to see who can complete the goal first. Afterwards, learners watch or listen to a recording of the activity and reflect on their English performance.
Video Game Review	After studying the linguistic and stylistic features of both professional and online user reviews, learners research and play a new game and then write their own online user review.

Unfortunately, due to space considerations it is not possible to describe in detail how all of these activities were deployed in the class. Rather this paper will focus on a single activity—the competitive multiplayer activity—and elaborate on how it was utilized in the classroom, how students responded to the activity, and how successful the activity was in achieving the class goals.

Activity Close-up: Competitive Multiplayer Activity

The competitive multiplayer activity was designed to help students reflect on their English oral communication and negotiation skills. In the first class, students were introduced to the activity using the two-player puzzle game *Bust-a-Move*. In this game, bubbles of various colors are suspended from the top of the screen and slowly creep towards the bottom of the screen. At the bottom of the screen, the players control catapults that can fire colored bubbles towards the top of the screen one at a time. Bubbles fired by the catapult will stick to bubbles descending from the top of the screen. If three or more bubbles of the same color are stuck together, they will disappear, along with any other colored bubbles that are suspended beneath them. The goal of the game is to clear all the bubbles from the screen before either the opponent, who plays on a separate screen, does or the bubbles reach the bottom of the screen.

First, the game was demonstrated to the students and the rules of the game were explained. Next, learners were paired with a partner and given about 10 minutes to practice playing the game themselves. Once players were familiar with the game concept, they were each given a Competitive Multiplayer Activity worksheet (Appendix A). The first part of the worksheet requires learners to negotiate a competitive goal for the activity. This goal could be as simple as win a single match against the opponent or could include more complex win conditions such as beat an opponent's high score.

Learners were instructed to negotiate a competitive goal for their game that would be achievable within 5 minutes of playing time. Examples of competitive goals created by the students included beating an opponent within a certain time limit or using only bubbles of a particular color (red, for instance) to win the game.

After negotiating the win conditions, students then played the game several times and tested whether their win conditions were both feasible and fun. They recorded these observations in the second part of the competitive multiplayer activity worksheet and made adjustments to the win conditions accordingly. Once all of the partners were satisfied with their win conditions, the pairs were changed so that learners had the opportunity to explain their goal to and play with a new partner.

At the start of the second day of the activity, students were placed with a new partner and assigned a new multiplayer game to play. The games used for this activity were: *Mario Kart*, a go-cart racing game; *Tetris Attack*, a puzzle game in which colored blocks fall from the top of the screen and players must arrange the blocks in matching vertical and horizontal rows; and *Super Bomberman*, an action game in which players navigate a maze while both collecting power-ups and

planting bombs to destroy opponents.

Students were given several minutes to play their assigned game and learn the game mechanics and controls. Next learners received a competitive multiplayer activity worksheet and, as they had done in the previous class, negotiated a competitive gameplay goal. For example, the students playing the *Mario Kart* game set a goal of winning the race without using any of the available power-ups. Those playing the *Tetris Attack* game set a goal of winning within a pre-determined amount of time. Once every pair had decided on a goal, the learners were given several minutes to prepare for the next part of the activity, which required them to explain the game and multiplayer competitive goal to a new partner who had not played the game before.

After preparing their descriptions, one partner from each pair moved to a new game. Thus, the pairs were mixed so that in each group only one partner had experience playing the game. The pairs were then given digital audio recorders. The student who had experience playing the game was given the task of explaining how to play the game to the new partner. Once the new partner felt comfortable with the game, the pairs played the game against each other while trying to achieve the competitive gameplay goal that had been determined in the previous part of the activity. Both the explanation of the game and the gameplay itself were recorded using the digital audio recorders.

After about 15 minutes of gameplay, the pairs were instructed to stop playing and given a Competitive Multiplayer Follow-up Questions worksheet (Appendix B). The worksheet asked students to listen to their recording and reflect on their language use during the activity. For example, learners were asked to identify areas in the recording in which communication break-downs occurred and

consider possible reasons for the breakdown.

At the end of class, copies of the audio recordings were collected. For homework, learners were provided with a digital copy of the competitive multiplayer activity worksheets and asked to try the activity again with a game and partner of their choice. They were also asked to answer the following three reflective questions about the day's classroom activities (see Table 2).

Table 2		
Refle	Reflection Questions	
Q1:	What did you do well during today's activity?	
Q2:	What areas of English do you need to improve?	
Q3:	How are you going to improve upon those areas outside of class?	

In the next class, participants shared their answers to the reflective questions with a partner and compared the competitive multiplayer activity worksheets they had completed for homework. Both the answers to the reflective questions and the homework competitive multiplayer activity worksheets were collected at the end of the class.

Competitive Multiplayer Activity Data Analysis

Data in the form of research observations, the competitive multiplayer activity worksheets, the participants' answers to the second day's reflective questions, recordings of the second day's activity, and participant answers to a post-course survey were partially transcribed to form a qualitative dataset that was analyzed for patterns and trends.

An analysis of researcher observations showed that throughout the two days of

the activity learners appeared engaged, enthusiastic, and immersed in the activity. The recordings taken on the second day of the activity seem to corroborate this observation. In every recording, students can be heard laughing as they complete the activity. Furthermore, the recordings show no instances of off-topic conversations, strengthening the view that learners were deeply engaged in the task.

One strong theme that emerged from examining the learner's reflections was their satisfaction with their performance in describing their game and how to play to a new partner. Table 3 shows examples of positive statements that appeared in 8 of the 12 reflections.

Table 3		
Example Respon	Example Responses to Reflection Question 1: What did you do well during today's activity?	
Participant 1:	I think I could summarize my game's important parts and explain it well to my partner.	
Participant 2:	I think I did a good game introduction to my second partner.	
Participant 3	I think I could explain the game well because before I spoke I noted down some information which I wanted to say.	

As the third example sentence shows, students cited the time they took to prepare for the explanation as the primary reason for the success of this part of the activity. Other reasons cited included speaking slowly, using easy to understand words, and using circumlocution and gestures when the speaker did not know the appropriate word to use. The recordings from the activity seem to support the learners' positive self-assessments. In every recording, the game description and explanation of how to play were delivered with confidence and few unnatural hesitations.

Another theme that was repeated in the reflections was the learners' dissatisfaction with their use of English during actual gameplay, as the example comments in Table 4 show:

Table 4 Response Responses to Reflection Question 2: What areas of English do you need to improve?	
Participant 2:	However, while playing the game, I found that I was having trouble speaking.
Participant 3:	While video gaming, I couldn't find appropriate words and couldn't tell my partner what I wanted to say.
Participant 4:	I couldn't talk a lot about what was happening on the monitor during play.

Many students blamed this perceived poor performance on their language abilities. Poor fluency was cited by six of the participants as the main cause of the problem. Three students believed their grammar skills were not up to the task while another three students thought they needed to improve their vocabulary in order to do the task effectively (some students cited more than one reason). However, one learner suggested that playing the game itself resulted in reduced English use:

Participant 1: One of the problems was that all of my attention was drawn by the game.

I couldn't organize the grammar correctly.

Once again, the recordings of the session seemed to corroborate the students' perceptions. When comparing the recordings of the students while describing the game with the recordings of the students while actually playing, some striking differences become apparent (see Table 5).

Table 5 Partial Transcription of Participant 1's Recorded Speech	
During game description task:	so (.) this is a puzzle game (2) ahh (1) what you have to do in the game (.) is to make three same-colored blocks stick together (.) you can't move up and down (.) only left and right (1) Annnnd (1) so if you make three same-colored blocks together (.) you can erased (1) And then (.) uh (.) the blocks are moving up from the bottom automatically
While playing:	Eh (.) too quick
Transcription key: (.) = Slight pause (#) = Pause for # of s word = Emphasized	

As can be seen, the number of words spoken per turn by the participant decreased dramatically once the pair actually starts playing. Furthermore, while the participant uses well-formed sentences during the description, during actual gameplay only short phrases are used. Similar results were found in all of the recordings. Possible reasons for this finding as well as implications will be considered in the "Discussion" section of the paper.

How did learners feel about the competitive multiplayer activity? A survey conducted at the end of the class discovered that the competitive multiplayer activity was considered by all participants to be the least useful activity done during the semester. Participants felt the competitive multiplayer activity was too similar to the team multiplayer activity, which followed an almost identical format but in which the learners worked with each other rather than against each other to complete a negotiated goal. Participants felt that the coordination required to complete the team multiplayer activity required more negotiation in English than the competitive multiplayer activity. Indeed, one feature of all of the audio

recordings of the multiplayer competitive activity are long stretches of silence during gameplay, punctuated only occasionally by exclamations or laughter. Interaction in English did occur before, in between, and after games, but it would seem that negotiation, one area the activity was intended to help learners improve, occurred rarely during actual gameplay, if at all. Even when negotiation did occur, the interaction was extremely limited as Table 6 demonstrates:

Table 6 Example of Negotiation During the Multiplayer Competitive Activity	
Participant 2:	yeah, so I think level five is still too difficult for you (1) maybe we can try (.) level 3?
Participant 5:	yeah
Participant 2:	but we still have one more game (1) or do you want to choose level three? (2) okay to play this one?
Participant 5:	yeah
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Transcription Key:

(.) = Slight pause

(#) = Pause for # of seconds

word = Emphasized

As can be seen from Table 6, the negotiation in this case was extremely simple and one-sided. Participant 2 realizes the difficulty level of the game is too high for Participant 5 and suggests changing the level. Participant 5 responds with a simple affirmative one-word answer. Participant 2 then points out that the they are in the middle of a match and the next round is about to begin. Participant 2 asks if Participant 5 wants to change the level, implying stopping the current match. When no response is given, Participant 2 then asks if Participant 5 wants to finish the current match, to which Participant 5 once again responds with a simple

one-word affirmative answer.

Discussion

Despite the lack of negotiation during gameplay, the data presented above shows that the competitive multiplayer activity was a qualified success. One of the goals of the course was to provide students with the confidence and experience necessary to talk about games with other English speakers. The practice participants' received in communicating in English how to play a game to someone who had never played the game along with their perceived success at the task seems to move learners forward towards this goal. Another goal of the activity was to encourage reflective learning. After listening to recordings of themselves, learners identified areas of English that they felt needed improvement. Furthermore, it seems the activity prompted three of the participants to realize the importance of recording and listening to themselves speaking English in order to improve their language skills, as the answers to the final reflection question "How are you going to improve these areas outside of class?" show in Table 7.

1	Table 7 Answers to the question "How are you going to improve these areas outside of class?" which mention self-recording	
Participant 3:	To improve these areas, I'd like to speak English more outside of class. I am a conversation partner of an exchange student from America and we eat lunch together every Friday. So from now on, if he doesn't mind, I'd like to record our conversation to reflect on my English. I will listen to my English and find mistakes that are important to improve. So I'd like to try to do that and learn natural English.	
Participant 6:	By going to the English practice area or doing multiplayer gameplay outside of class (not only for assignment) with friends and recording the conversation to listen to my speaking. Then if I hear something wrong with the grammar, I can ask teachers.	

Participant 7:	The best way is to talk with native speakers as much as I can, I think. I should go to the English practice area and train my conversation skill. I must record my conversation and reflect on it.
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However, the reflections also revealed some problems with the activity. One problem is that learners seem to have received a negatively distorted view of their performance during the activity through comparing their spoken English performance during the description task, in which they had time to prepare what they would say, with their spoken English performance during gameplay, which required spontaneous English production while simultaneously attending to the game. Attention is an important part of second language acquisition (Gass, 1997; Tomlin & Villa, 1994), and because the activity required learners to split their attention between the game and producing utterances in a second language, it should be expected that their performance would dip when they are not able to fully concentrate on language production. However, only one of the participants recognized that dividing attention between the game and language production was likely leading to reduced English performance. The remaining students blamed their language abilities for the discrepancy in performance.

This seems to suggest that before engaging in reflections about English performance during language activities using video games, learners should be made explicitly aware of the fact that the concentration required to attend to playing a game can interfere with not only language acquisition, as demonstrated by deHaan, Reed, & Kuwada (2010), but language production as well. Additionally, strategies for dealing with this decreased production, such as circumlocution, should be discussed both before the activity is begun and during the reflection at

the end of the activity.

Another problem area identified in the data was that, despite negotiation being one of the areas the competitive multiplayer activity was designed to improve, the recordings show few occurrences of negotiation during actual gameplay. One likely reason for this is that, as discussed above, it seems difficult for learners to attend to the game and produce language at the same time. Another reason is that the competitive nature of the activity actually discouraged negotiation. As several learners pointed out in their post-course surveys, in other activities learners worked towards a common goal and therefore needed to communicate in order to jointly reach that goal. In the competitive activity, however, win conditions did not normally require communication between the players in order to be achieved and therefore little negotiation occurred during gameplay.

Still, despite these shortcomings in the activity, overall it seems to have been a positive experience for the students. In their competitive multiplayer activity homework worksheets, nine participants mentioned how fun or enjoyable the activity was. Although in the post-course survey students rated the competitive multiplayer activity as the least useful of the classroom activities, data collected during the activity indicates that learners still enjoyed the activity and were able to use it identify areas in which they needed to improve their English skills

Evaluation of the Course

This research project explored the use of commercial video games as the content of a university-level elective EFL course. Overall, participants seemed to find the course both entertaining and effective in improving their English skills. A post-course survey found that although only six of the participants believed it was

possible to use video games to improve their English at the start of the course, by the end of the course every participant felt that video games could be useful tools for improving their English skills. All participants also felt the class was both fun and useful. Additionally, 12 of the 13 participants wrote that they planned to continue to use video games to supplement their other English language learning activities.

However, a follow-up survey conducted three months after the course had finished found that only one former participant had used video games for English study purposes since the end of the class. Yet the answers to this follow-up survey reveal that learners were still extremely enthusiastic about using games for language learning. Unfortunately, time spent hunting for post-college jobs and a lack of access to English video games prevented them from using games for language learning. Some example answers from the follow-up survey are shown below:

	Table 8 Example Answers to Follow-up Survey Question: Since class has ended, have you used video games to study English?	
Participant 4:	No, because I was busy during summer vacation, so it was difficult to make time to play video games. But I think studying English through playing video game is a fantastic idea! Therefore I want to try again. I have an iPod touch and a Nintendo 3DS. Will you recommend some games for these devices?	
Participant 2:	I didn't use English games to study English since the end of the class because I was busy at my part time job and job hunting. However, I think I will start to play English games again when I get a bit more free time.	
Participant 8:	I don't have opportunity to play video game, let alone English video games. My brother has some video games, but he doesn't live with me. That's why if I want to play video games, I can't.	

Based on the answers to these post-course surveys, it can be concluded that the course was successful in achieving its primary goal of providing learners with an enjoyable method of practicing English on their own time. However, the answers also demonstrate that despite using video games to learn English being perceived as both useful and enjoyable, external factors such as a lack of time or gaming equipment can prevent learners from using commercial games to support their language learning outside of class.

Areas for Future Research

Because this research was exploratory in nature, it is difficult to generalize from the results. However, the research does indicate several paths for future research into using video games for language learning. One area that could be explored in more detail is the interaction between participants during multiplayer games played for the purposes of studying English. Examining transcripts of these interactions from either a discourse analysis or conversational analysis theoretical viewpoint could potentially reveal insights into areas in which learners need more instructional support.

Another potentially fruitful area of research would be tracking over time the vocabulary words that learners chose to study while playing video games. Although some research in vocabulary acquisition using video games has been done (Rankin, Gold, & Gooch, 2006; deHaan, Reed, & Kuwada, 2010), to date no formal longitudinal study has examined the words learners are attempting to learn from games.

Finally, given that one student continued to use video games for language learning after the course ended while the others did not, a case study examining how and why some learners choose to use video games for language learning might be in order. Of particular interest would be, through multiple case studies, discovering how these learners use games for language study in their free time to supplement their regular studies.

Conclusion

Interest in using games for education, particularly language learning, is continuing to increase. Yet a great deal remains unknown about how to use games effectively for learning, both within the classroom and outside of it. This research study explored how games might be used as the content of an elective university-level EFL course. The data collected shows that learners engaged in the class enthusiastically and found it useful to their English studies. Although further research is needed, this study seems to indicate that classroom activities using video games which are informed by both the latest research into using games for education as well as second language acquisition theory can promote a variety of positive outcomes such as encouraging reflective learning and independent learning outside of class.

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Appendix A – Multiplayer Competitive Activity Worksheet

Your Name:

Multiplayer – Competitive Play Activity Worksheet

204274446
Your Partner's Name:
Game Played:
Part 1: Pre-game planning
Your Gameplay Goal:
Part 2: Post-game reflection
With your partner, watch the recording of your gameplay and discuss the following questions in English. $ \\$
Did you achieve your goal? Yes No
What strategies or tricks did you use in the game that were successful?
What strategies or tricks did you use in the game that were unsuccessful?
What advice would you give to other players who wish to play this game competitively?

Appendix B - Competitive Multiplayer Follow-up Questions Worksheet

Competitive Multiplayer Follow-up Questions

Your Name:
Partner's Name:
Directions: Listen to the recording you made with your partner and answer the following questions.
1. How many times did you speak during the recording? How many times did your partner speak?
2. What is the longest amount of time you spoke for? What is the longest amount of time your partner spoke for?
3. Did your partner always understand what you were trying to say? If not, why didn't they understand? For example, was your pronunciation difficult to understand? Ask them if you're not sure!
4. Were there any words or phrases that you wanted to say but didn't know how to say them in English? Write them in Japanese and write their closest English equivalent (use your dictionary).
5. Are there any sentences that you said that you're not sure if the grammar is correct? Go ahead and write them here. See if your partner can help you decide if they are correct or not. If both of you are having trouble deciding, you can ask the teacher!