Observations on the Pedagogical Effectiveness of Gaming in the EFL Classroom

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Utilizing games as instructional tools in English as a Foreign Language (EFL) classrooms has a proven track record of effective pedagogical benefits on Second Language Acquisition (SLA) learning processes (refer to Gaudart, 1999; Schwienhorst, 2002; Peterson, 2010; Holden and Sykes, 2011). Gaming in the EFL classroom has shown to increase rates of vocabulary retention (Huyen, 2003), provide a more natural context for language than the artificially constructed contexts created by textbooks (Holden and Sykes, 2011), decrease levels of inhibition (Schwienhorst, 2002; Peterson 2010), increase motivation levels (Nemerow, 1996; Svenson 2002), as well as create situations in which students are engaged with learning processes theorized to be vital to SLA such as negotiation of meaning and cooperative language production (Thorne, 2008; Peterson, 2012). Considering the long list of potential pedagogical benefits utilized as the basis for undertaking a formal analysis, this study focuses on observing the pedagogical effectiveness of integrating the card game Golden Week, a game specifically designed for use in the EFL classroom from the game company Tanuki Games, into a first year communicative English course at a Japanese university during the 2018 spring semester.

The Pedagogy of Games in the EFL Classroom

Commercial Games Vs. Games Designed for In-Class Use.

When selecting a game for potential integration into an EFL curriculum, it is important to consider how effective any such game would be at providing instruction in desirable pedagogical categories including, but certainly not limited to, listening comprehension, language production, and vocabulary retention. There are, of course, many candidate games with the potential to effectively instruct EFL students in the aforementioned categories, however the scope of this study will be primarily concerned with the analysis of games designed for effective in-

class use and will exclude games designed exclusively for commercial use.

This study's specific focus on games designed for in-class use is not meant to detract from the host of potential benefits that commercially designed games may have in EFL classrooms. Indeed, a large amount of research has been conducted on the potential pedagogical viability of commercially designed games specifically in the field of Computer Assisted Language Learning (CALL) research where studies on MMORPGs such as World of Warcraft (Bryant, 2006) and 3D simulation/virtual world gaming such as the SIMs (Ranalli, 2008) have heralded numerous positive benefits on language learning processes. Due to the commercial success of such games, it is easy to imagine how the entertaining nature of the games can certainly be engaging for students. With that being said, however, many commercially designed games do not account for the specific needs of L2 instruction with regards to error correction, vocabulary relevance to standard L2 production, or grammar explanations. Many researchers studying the pedagogical effectiveness of integrating commercially designed games into the SLA classroom have therefore created supplementary instructional material and/or classroom procedures to adapt said games into formal curricula.

On the other hand, games designed specifically for in-class use should be able to be integrated into the curriculum for which it was designed without the need to create supplementary materials or modify gameplay in order to elicit the desired pedagogical effect on the students engaged therewith. Furthermore, a game effectively designed for in-class use would ideally engage students in the same entertaining manner for which commercial games are specifically designed. Games that are by nature tedious and uninteresting are no different than regular in-class assignments which draw the unilateral condemnation and opposition from unmotivated students. Due to the level of expertise needed to create videogame software, many independently produced educational games will instead rely on more traditional gaming platforms such as card games and board games. Finally, games designed specifically for the EFL classroom should also universally address certain pedagogical criteria in order to be considered academically viable tools of instruction. Golden Week, the game analyzed in this study from Tanuki Games, is a card game designed specifically for in-class EFL instruction in Japan. The following section will delineate the pedagogical criteria needed in an effective game designed for in-class EFL instruction.

Pedagogical Criteria for Effective In-Class EFL Game Design.

For the purpose of analyzing the effectiveness of the in-class EFL card game Golden Week from Tanuki Games, five pedagogical criteria have been proposed by this study. These criteria have been selected with regard to the positive pedagogical effects of games (commercial or otherwise) found in other peer reviewed research. First, in-class EFL games should decrease levels of inhibition vis-à-vis English language production in students. Second, in-class EFL games should increase motivation levels in students. Third, students should, through the course of normal gameplay, demonstrate negotiation of meaning of unknown vocabulary, grammar structures, or gameplay procedures in English. Fourth, students should demonstrate cooperative language production via linguistic mimicry, peer correction, or suggestion. Fifth, students should demonstrate the ability to successfully reproduce the game's target vocabulary and grammar structures in postgame assessments without the aid of supplementary instructional materials (e.g. vocabulary lists, grammatical explanations and/or examples) issued before gameplay.

Study Goals

The aim of this research is to analyze, in as objective a manner as possible, the pedagogical effectiveness of gaming in the EFL classroom. In order to carry out this objective, Golden Week, an in-class EFL game from the gaming company Tanuki Games, was integrated into the curriculum of a first year communicative English course at a Japanese university during one gaming session in the spring semester of 2018. The results of this gaming session were then weighed against the five proposed criteria listed in the previous section to measure the pedagogical effectiveness of each game. In order to demonstrate either the presence or absence of the aforementioned five pedagogical criteria, both quantitative and qualitative data were gathered by way of in-game observations by the instructor, postgame surveys issued to the students, and assignments designed to assess what vocabulary and grammar structures were retained from gameplay. It is the assumption of this study that the in-class EFL game Golden Week from Tanuki Games demonstrates pedagogical effectiveness in the EFL classroom as stipulated by the proposed five criteria by decreasing inhibition levels during target language production, increasing motivation during class, promoting task based negotiation of meaning, eliciting cooperative language production, and successfully generating the

OBSERVATIONS ON GAMING IN THE EFL CLASSROOM

reproduction of target vocabulary and grammar structures in postgame assessments. Detailed information regarding the methods and results which have led to this conclusion will be presented in the following sections.

METHODS

Participating Course Details

The course in which the in-class EFL card game Golden Week from Tanuki Games was tested is a first year communicative English course at a Japanese university. The gaming session took place during a 15 week semester in the spring of 2018. A total of ten students between the ages of 18-19 participated in the study. The communicative English course all ten students were enrolled in met three times weekly, and the class length was an hour and a half for each session. The students' level of English can be described as beginning intermediate with TOEIC scores ranging between 250-500. None of the students have had any long term experience abroad in English speaking countries or otherwise, and the grand majority of students had just graduated from high school. During a pregame questionnaire, no students indicated that they play games, video/computer or otherwise, in English.

In-Class EFL Card Games Utilized

The company which made the game presented in this study is Tanuki Games and is based in Fukuoka Prefecture, Japan (Tanuki Games, 2016). This company was founded by native English speakers residing in Japan and produces, as of the date of this article, three card games designed for use in the EFL classroom, especially in Japan: Golden Week, Yabai, and So Says Japan. Using their experience of teaching EFL in Japan, the creators have attempted to transform their pedagogical experiences as EFL instructors into entertaining games focused on improving overall English language skills of all who play their games. The card game reviewed in this article is Golden Week. The overall gameplay mechanics, implementation procedures, and a selected list of target vocabulary and grammatical structures latent in the game are evaluated in the following sections. General Overview of Golden Week

The game Golden Week is, as the name would suggest, based on the string of Japanese national holidays known as Golden Week. In this game, students are divided into groups of two people per group. The students must linguistically cooperate with their respective partners in order to plan activities to do on each

of the five days of vacation, mirroring the four national holidays comprising Golden Week (Showa Day, Constitutional Memorial Day, Greenery Day, and Children's Day). These planned activities, provided to the students with activity cards from the master deck, cost a certain amount of time and money, again provided to the students with resource cards from the master deck. Students may negotiate with their partner to trade activity or resource cards. Once an activity card can be "purchased" with an amount of time and money resource cards specific to the activity card being purchased, the student group may officially lay the card out onto the schedule dubbed a "tableau." The first student group to complete their tableau with both day time and night time activities for all five days of vacation is considered the winner. Other special event cards from the master deck allow students to purchase activities for free, cancel other teams' events, steal resource cards, or force opponents to discard cards. Another special function card, the Tarō Urashima card, references the Japanese folktale of the same name and causes the person who draws this card to lose all "worldly possessions" and thus must discard their cards and lose one turn.

Implementation of Golden Week

In the communicative English course, the group of ten students were divided into five groups of two people each. The first thirty minutes of class were used to orient the students to the rules of the game and were provided with specific examples of the functions of all activity cards, resource cards, event cards, as well as the Tarō Urashima card. The next hour of class time was used to run through one session of the game. No class time remained for another gaming session after the orientation session, and hence only one gaming session was completed. After the gameplay was concluded, a postgame survey was administered to the ten students to help measure the impact the game had on the students. The postgame assessment was designed to quantify the acquisition of the target vocabulary and grammatical structures covered during gameplay and was assigned to the students as homework. A detailed description of both the postgame survey and vocabulary/grammar assessment are listed after the sections detailing gameplay and implementation.

Target Vocabulary and Grammatical Structures Latent in Golden Week

The nature of the gameplay mechanics of Golden Week requires students to engage in task based communication procedures involving asking and informing

their partner of what they want to do during Golden Week (activity cards), how much time and money they have (resource cards), and whether or not there are any special circumstances surrounding their plans (event cards). With these gameplay mechanics in mind, the vocabulary and grammatical structures which are specifically trained by Golden Week revolve around the three types of cards (activity, resource, and event) and the future tense to be able to inquire about and relay specific plans for the upcoming Golden Week holidays. Although Golden Week provides the students with a large amount of the necessary vocabulary needed to formulate sentences, the instructor during this gaming session acted as a facilitator to help students structure specific sentences, and to correct students when grammatical errors were made during gameplay. Some specific examples of vocabulary detailed by the aforementioned card types are as follows.

Activity cards not only provide the students with the English names of the national holidays included in Golden Week (Showa Day, Constitutional Memorial Day, Greenery Day, and Children's Day), locations (e.g. café, countryside), and specific activities (e.g. chores, fireworks), but the activity cards also provide students with the specific verb to accompany each activity (e.g. celebrate Showa Day, go to a café, visit family in the countryside, do chores, and go watch fireworks). By providing students with the complete verb phrase, students were able to connect verb phrases with the future tense to complete full sentences with the time of day, "I will celebrate Showa Day during the day." Before a student group was allowed to officially play a card in their tableau, the students were required to complete an appropriate sentence matching the information reflected in the cards being played. Furthermore, when discussing plans with their partners, such interrogative structures as, "What do you want to do during the day/night?" became a task based procedure to confirm what activity cards each teammate was holding. Some of the aforementioned sentence structures relating to the target vocabulary and grammatical structures detailed in the activity cards were generated spontaneously by the students without specific instruction. However, when students were unable to generate the necessary sentence, or if errors were made in sentence production, the instructor facilitated the necessary vocabulary and/or corrections. No supplementary instructional materials were made by the instructor to accompany the activity cards. In addition to the vocabulary and grammatical structures provided by the activity cards, trading resource cards provided a whole new set of target vocabulary and grammatical structures.

Before being able to officially play an activity card on the tableau, each player must purchase the activity with an amount of time and money specific to the activity being played. Certain activity cards, such as the "go shopping" activity card, require a large amount of Japanese yen, whereas other cards, such as the "relax" activity card, require no money but a large stretch of time. If a player does not have enough resources to play a specific activity card, the player may trade with their partner to acquire the necessary amount of both time and money in order to officially play the card on their tableau. The resource trading procedure therefore became a task based procedure utilizing interrogative structures such as, "How much time do you have?" and "Do you have three thousand yen?" Task based declarative phrases reflecting need and desire were also common: "I need two hours," and, "I want ten thousand yen." Some of the aforementioned sentence structures relating to the target vocabulary and grammatical structures detailed in the resource cards were generated spontaneously by the students without specific instruction. However, when students were unable to generate the necessary sentence, or if errors were made in sentence production, the instructor facilitated the necessary vocabulary and/or corrections. No supplementary instructional materials were made by the instructor to accompany the resource cards. In addition to the vocabulary and grammatical structures provided by the resource cards, the event cards provided a whole new set of target vocabulary and grammatical structures.

Outside of the activity and resource cards, special event cards allow players to purchase activity cards without cost, interfere with other players' tableaus, steal resource cards, or force other players to discard resource/activity cards. Students are introduced to specific vocabulary such as "rainy day," and, "fortune." Depending on the event card and its specific function in the game, certain grammatical structures follow. Firstly, due to the students' inexperience with playing games in English, the explanations of these special event cards and their respective effect on gameplay were quite difficult to comprehend, so the students frequently engaged in negotiation of meaning procedures to be able to comprehend the effect any given event card had on gameplay: "What does this card mean?" or by simply observing how others use the same event cards which they themselves have drawn. Secondly, certain grammatical structures specific to

the effect that the event card has on gameplay ensue. The "rainy day" event card allows a player to cancel a planned activity on the tableau of an opposing team, whereby certain future tense structures arise: "It will rain on the day you will go on a day trip," or, "You cannot go shopping, because it will rain." The "fortune" event card, on the other hand, allows a player to play one activity card on their tableau without using any resource cards. Such instances of playing the fortune event card generated explanatory sentence structures: "I do not have to pay to go to the café, because I found five thousand yen on the ground," or, "my girlfriend /boyfriend treated me to lunch at the café." Some of the aforementioned sentence structures relating to the target vocabulary and grammatical structures detailed in the event cards were generated spontaneously by the students without specific instruction. However, when students were unable to generate the necessary sentence, or if errors were made in sentence production, the instructor facilitated the necessary vocabulary and/or corrections. No supplementary instructional materials were made by the instructor to accompany the event cards.

Postgame Survey

After the gaming session was concluded, a postgame survey designed to gauge student reaction to Golden Week was carried out. The postgame survey consisted of seven Likert scale questions and two open ended questions. The seven Likert scale questions utilized a scale from 1 to 5 to gauge students' attitudes towards the game, where 1 means strongly disagree, 2 means somewhat disagree, 3 means no opinion, 4 means somewhat agree, and 5 means strongly agree. Both the seven Likert scale questions and two open ended questions were originally posed in Japanese to avoid question misinterpretation by the students, however these questions have been translated into English for this study. The answers to the open ended questions were originally written in Japanese but have also been translated into English for the purpose of analysis in this study. The results of the postgame survey are discussed in the results section of this article. Golden Week Postgame Likert Scale Questions

Students were instructed to answer each question by rating the following seven statements on a scale from 1 to 5 where 1 means strongly disagree and 5 means strongly agree.

- 1. This card game is entertaining.
- 2. This card game has the potential to improve my English language skills.

OBSERVATIONS ON GAMING IN THE EFL CLASSROOM

- 3. This card game is easy to understand.
- 4. The time it takes to play this card game is appropriate.
- 5. If given the opportunity, I would like to play this card game again.
- 6. I would like to play this card game outside of the classroom environment.
- 7. I would recommend this card game to a friend.

Golden Week Postgame Open Ended Questions

Students were instructed to answer the following questions in Japanese. The students were not required to answer these open ended questions and were instructed to answer them only if they had something they wished to communicate regarding the game *Golden Week*.

- 1. What did you like in particular about this card game?
- 2. What could be done to improve upon this card game?

Postgame Vocabulary/Grammar Assessment

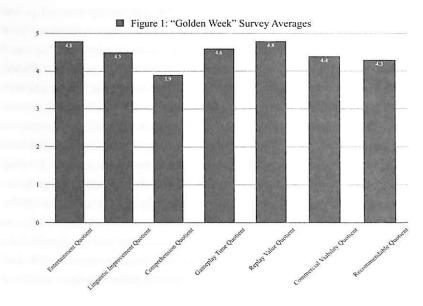
After the postgame survey was concluded, the postgame vocabulary and grammar assessment worksheet was assigned to the ten students in Communicative English as homework. The postgame vocabulary and grammar assessment worksheet were designed to be a linguistically productive writing assessment, whereby students were asked to construct their own schedules for a five day Golden Week holiday. For each day of vacation during Golden Week, students were required to plan two activities (one for the day, one for the evening) or one activity that would take all day long to complete. Furthermore, students were asked to comment on how much money and time each activity would take and to provide as much additional information as possible including, but not limited to, with whom they would carry out the activity, where the activity would take place, and how they would likely get to that location. No example sentences were provided by the instructor. By encouraging students to linguistically produce a written account of their own Golden Week plans, it can easily be assessed how much vocabulary and how many of the grammatical structures introduced during gameplay are able to be actively recalled in the students' writing assignments. Furthermore, vocabulary and grammatical structures that are linguistically similar to the vocabulary and grammatical structures introduced by Golden Week, yet remain independent of the instructional gaming session may also be identified for analysis. The results of the postgame vocabulary and grammar assessment as well as some specific examples of student writing displaying active linguistic recall and independent language production are detailed in the results section of this article.

RESULTS

Golden Week Postgame Survey Results

Likert Scale Questions

The results of the seven Likert scale questions, as detailed in the methods section of this article, are illustrated in Figure 1. As can be seen in Figure 1, the students' attitudes towards *Golden Week* are highly positive. The average score on the Likert scale of 1 to 5 utilized for the survey where 1 is the lowest and 5 is the highest, the average score for all the quotients combined was 4.5. The two highest quotients are the entertainment quotient (4.8) and replay value quotient (4.8) indicating that not only did the students find the game highly entertaining, but that they would also like to play the game in class again. The lowest quotient was the game comprehension quotient (3.9). Due to the fact that the students only had one gaming session, and that the rules and gameplay were conducted entirely in English, it is understandable that the students would have some level of difficulty understanding the rules of the game. Even when taking the English only rule explanation and gameplay into consideration, the comprehension quotient still leans more towards the students agreeing that *Golden Week* is easy to understand. Although it remains outside the scope of this study to confirm, it is highly



OBSERVATIONS ON GAMING IN THE EFL CLASSROOM

feasible that the comprehension quotient would rapidly rise with multiple gaming sessions conducted throughout a longer study period.

Open Ended Questions

The two open ended questions posed to the ten students in Communicative English in the postgame survey come in two varieties: satisfaction based responses and improvement based responses. The following subsections detail both satisfaction based responses and improvement based responses from students. All responses from students have been translated into English from Japanese for the purpose of analysis in this study.

Satisfaction Based Responses:

- 1. I like how I can learn grammar while playing a game that feels like a real game.
- 2. I like how I can learn English vocabulary, and how the game makes the atmosphere of the class more fun.
- 3. I like how I can learn English in a fun way.
- 4. I like how the game improves how well you can think in English.
- 5. I like how you can learn the English names of Japanese holidays.
- 6. I liked how I was exposed to a lot of English vocabulary that I wasn't familiar with.
- 7. Because you absolutely have to engage in conversation with your partner, your conversation skills will improve very naturally, and you can make friends at the same time.
- 8. I like how I can learn a lot of informal English words, because the game uses a lot of words that aren't necessarily formal like the kind of English vocabulary you normally learn in class.

Improvement Based Responses:

- 1. I think the amount of time it takes for one person to take a turn is too long.
- 2. You can do away with the Tarō Urashima card.
- 3. I think that because the rules are complicated, we should be able to make up our own rules to play the game.
- 4. I think this game would be even more fun if the amount of people playing it increased.

Analysis: Even in the open ended questions, the ratio of positive responses

OBSERVATIONS ON GAMING IN THE EFL CLASSROOM

were many situational circumstances conducive to said vocabulary such as trips to Kyoto, going to parks, and participation in festivals. On a more successful note, eight out of ten students were able to correctly reproduce the future tense grammar drilled during gameplay on a consistent basis by using the modal "will (numbers 2, 3, 4, and 5)," or the present continuous modal "going to (number 1)" and "planning to (number 3)," or simply the present continuous case, "I'm attending/I'm going (number 6)." The two students who did not consistently reproduce standard future tense sentence constructions used either present tense, "My friends come to my house," or past tense, "I went to Osaka with my friends." Indeed, the high rate of successful reproduction of the future verb tense is particularly encouraging for two reasons; one, due to the fact that Japanese (the L1 of all students participating in this study) does not require the grammatical use of future tense constructions nearly as often as the English language, many Japanese EFL students mistakenly utilize other verb tenses (often the present tense) instead of the future tense; two, with an understanding of the basic grammatical structures appropriate to making a personal plan for the Golden Week holidays, students may simply insert additional vocabulary into the learned structure to accurately produce more personalized linguistic utterances. Many examples of this individualized linguistic production is evident in the following excerpts.

Independently Produced Vocabulary and Grammar:

- 1. We drink alcohol to (at a) bar.
- 2. I'll buy plesents (presents) for my pealants (parents).
- 3. I'll go camping on the mountain. I'll make a curry and rice. I also do BBQ.
- 4. I will go to the Marukame Castle and NEW REOMA WORLD (New Reoma World). I will buy souvenirs after I play (enjoy myself) there.
- 5. I will try to (do) *spring cleaning* in my room and *chilling out* (chill out) there.
- 6. I'll go hang out with my GF (girlfriend) for drive (and go on a drive).
- 7. I'm packing my stuff and coming back to Himeji.

 We are supposed to have a fancy dinner as a farewell party.
- 8. Finally, I enjoy food stand-hop (food stand hopping) and don't forget

outweighs calls for gameplay improvement indicating a very positive reception of Golden Week in the communicative English course. Some of the improvement based responses, namely number 1 and 3, are arguably related to the relatively low game comprehension quotient from the survey section featuring the Likert scale questions. Similarly, these specific calls for improvement may be solved by more gaming sessions in a longer study period, whereby the students' knowledge of the game would increase and thus decrease the time each student takes for their turn.

Golden Week Postgame Vocabulary and Grammar Assessment Results

The following sections present a selection of excerpts from the vocabulary and grammar assessment worksheets administered as homework after the gaming session. The excerpts have been divided into two categories: one, excerpts that display reproductions of vocabulary and/or grammar used during gameplay; two, excerpts that display the production of vocabulary and/or grammar independent of those used during gameplay. All excerpts feature the original, uncorrected English as produced by the students. To ensure unambiguous readings of all excerpts, the assumed meaning is written in parentheses next to the mistaken vocabulary and/or grammatical structure.

Reproduced Vocabulary and Grammatical Structures

Reproduced Vocabulary and Grammar:

- 1. I'm going to (go) shopping with my friend.
- 2. I will spend all day long at home. I like to relax at home.
- 3. I'm planning to go to Izushi by myself because these days, I want to eat soba. After that, I will go sightseeing.
- 4. I'll watch a movie on Showa day with alcohole (alcohol) in the morning.
- 5. I will go on a day trip with my family. We want to (go to) Kitune (Kitsune) Shrine, Kurama Temple, and Katsura Imperial Villa.
- 6. I'm attending a job orientation and (then) going to (a) cafe to riwind (unwind).

Analysis: On whole, there were a number examples of students reproducing vocabulary directly from the card game Golden Week. Activity related vocabulary directly from the game such as "cherry blossom viewing," and "fireworks" avoided specific reproduction in the students' writing despite the fact that there

(I won't forget) the memories of Fukuoka.

- I will go to Kyoto and visit temples and shrines with my family or my friends.
- 10. I'm going to go to a rock concert. I'm going to go to a live music club and go there by train.

Analysis: When compared to the sampling of reproduced vocabulary and grammar excerpts, it is immediately apparent that there is a much wider degree of variation, specifically in the vocabulary being used. One particularly appealing trend in the independently produced vocabulary utilized in the postgame assessment is that the vocabulary relating to planned activities is highly specific to the activities being planned: "I will go to (a tourist site) and buy souvenirs (number 4)" and "I will go to Kyoto and visit temples and shrines (number 9)." As was mentioned in the previous section, two out of the ten students mistakenly used the present tense instead of the future tense drilled during gameplay: "We drink alcohol... (number 1)" and, "I enjoy... (number 8)." However, not only did the remaining 80% of students successfully reproduce the future tense required during gameplay, but the students were also able to demonstrate the ability to substitute their own personalized activity based vocabulary into the acquired grammatical structures.

The game Golden Week obviously cannot account for the wide variety of activities that occur during the Golden Week holidays in the limited amount of activity cards utilized in the game, but what the game seems particularly successful at is demonstrating a pattern of using activity related vocabulary in the future tense. Not only did the gaming session of Golden Week successfully elicit the reproduction of vocabulary and grammar drilled during gameplay, but it also successfully elicited the production of new linguistic utterances following the pattern of scaffolding personalized activity based vocabulary with future tense verb constructions demonstrated during gameplay. The following sections will delve into the pedagogical effectiveness of the in-class EFL card game Golden Week as defined by the five criteria: decreasing inhibition levels during target language production, increasing motivation during class, promoting task based negotiation of meaning, eliciting cooperative language production, and successfully generating the reproduction of target vocabulary and grammatical structures in postgame assessments.

DICUSSION

OBSERVATIONS ON GAMING IN THE EFL CLASSROOM

Pedagogical Effectiveness of Golden Week

Decline in Inhibition Levels During Target Language Production

It is the conclusion of this research that the in-class EFL card came Golden Week adequately decreases inhibition levels of participating students during target language production. There is a significant amount of research that points to the ability of simulation technology used in CALL contexts in SLA classrooms such as MMORPGs (Bryant, 2006; Peterson 2011), 3D simulated world games (Schroeder, 2002; Toyoda and Harrison, 2002; Peterson, 2006), mobile gaming (Holden and Sykes, 2011) and virtual reality (Schwienhorst, 2002) to reduce levels of inhibition during target language production. These quantifiable decreases in observed levels of inhibition are thought to correlate with the act of simulated presence and co-presence within the simulated structure of the game (Peterson, 2006) through use of avatars or by otherwise interacting within the parameters of the game itself. Golden Week, being a non-computerized card game, does not make use of virtual simulations, however what is simulated within the gameplay are situations revolving around planning a schedule for the Golden Week holidays.

The situational simulations in the game Golden Week are represented by the cards. During a non-simulated language productive activity requiring students to verbally construct a plan for the Golden Week holidays, all linguistic production is left to the student. The emotional balancing act of trying to recall foreign vocabulary, grammar structures, tone of voice, environmental context, conversational engagement, and the multitude of other necessary procedures to construct a conversation, it is understandable why SLA students may begin to feel nervous during independent linguistic production events. However, when playing Golden Week, much of the context required to construct successful conversations is simulated in the cards. Activity cards provide the necessary vocabulary to formulate declarative sentences, resource cards provide the necessary context to engage their partners in face to face dialogue, and event cards provide reasons to interact with the class as a whole in contextually meaningful exchanges. Much of the fumbling guesswork of how to meaningfully engage with others in task based linguistic exchanges is taken out of the equation by representing what needs to be said or otherwise providing the necessary context for linguistic engagement through the specific cards brought into gameplay, thus reducing the inhibition

factor to actively engage in such linguistically productive tasks.

The assumption that Golden Week successfully reduces levels of inhibition during target language production is also supported by the qualitative feedback received in the open ended survey questions. Specifically, the responses stating how, ""the game makes the atmosphere of the class more fun," and that the students, "...can learn English in a fun way," certainly support the idea that the positive atmosphere created by the game mechanics of Golden Week allows the students to interact with English language production in a more recreational manner. Furthermore, the student response stating through gameplay, "...you can make friends at the same time (as learning English)," would also seem to suggest that because students are able to use English language production to accomplish desirable outcomes of connecting with classmates, the level of inhibition they might feel about possibly losing face in front of their peers for making a mistake would be nullified. The entertaining atmosphere coupled with the cooperative nature of the gameplay mechanics characterized a significant drop in inhibition levels during target language production in the gaming session carried out in this study.

Increase in Motivation During Class

It is the conclusion of this research that the in-class EFL card came Golden Week adequately increases the motivation levels of students during class. Other research of incorporating gaming into EFL curricula have reported similar findings, namely that there is a positive correlation between interaction with the game used in conjunction with an EFL curriculum, and motivation levels of students in class (Nemerow, 1996; Svensson, 2002). Although it is difficult to quantifiably measure rises in student motivation, the overall student attitudes towards interacting with the game would certainly suggest concurrent levels of observable motivation. Within this study, the very positive reception of the game is reflected in the student responses which utilized a Likert scale of 1 to 5 (where 1 is the lowest, and 5 is the highest), where the overall score of the game scored a 4.5 out of 5 possible points. In particular, the very high score of 4.8 in the replay value quotient certainly suggests that the students want to play the game in class again. Furthermore, the open ended questions in the postgame student questionnaire revealed many more positive opinions regarding their interactions with the game than improvement suggestions. Furthermore, many students

described the game as a fun way to learn grammar, improve vocabulary, and make friends during class. The very positive reception of the students during gameplay, willingness to play the game again, and the students' own acknowledgement of the fun way in which the game approaches typically zombifying tasks such as grammar instruction all characterize a heightened state of motivation in the students in the communicative English course.

Promotion of Task Based Negotiation of Meaning

It is the conclusion of this research that the in-class EFL card came *Golden Week* adequately promotes task based negotiation of meaning during gameplay. Task based learning and negotiation of meaning have long been characterized as important to SLA processes. *Golden Week* successfully encourages students to negotiate unknown vocabulary, cards, and rules in the task based framework of the game. Before students engaged in the task of playing an activity card on their tableau, they frequently had to negotiate the meaning of the activity cards being played (e.g. Constitutional Memorial Day is 憲法記念日). Before students engaged in the task of trading resource cards, they frequently had to negotiate the meaning of what they wanted to say in English (e.g. "時間ありますか? (Do you have time?)" in English). Finally, before students engaged in the task of using an event card, they frequently had to negotiate the meaning of what effect the card would have on gameplay (e.g. the card "planning trouble" means you can steal two cards). The task based nature of the gameplay engendered many occurrences of negotiation of meaning in the Communicative English gaming session

Cooperative Language Production

It is the conclusion of this research that the in-class EFL card came *Golden Week* adequately promotes cooperative language production during gameplay. Cooperative language learning as demonstrated in peer correction/instruction, pattern mimicry, and task based cooperation have also been recognized as important SLA processes. Cooperative language production is also a key feature of the *Golden Week* gameplay mechanics. Due to the fact that all students are given a partner with whom they must cooperate via the trading of time and money resource cards in order to be the fastest team to construct their Golden Week activity tableau, task based cooperation is necessitated by the very rules of the game itself. These gameplay mechanics resulted in peer correction/instruction (e.g. informing each other of what effect certain event cards had on gameplay).

Furthermore pattern mimicry (e.g. most students began to use the same grammatical pattern of the declarative future tense sentence when playing an activity card on their tableau: "I will..." or "I am going to...") was very common throughout the gaming session. The structure of the game *Golden Week* engendered numerous occasions of cooperative language production in the gaming session undertaken in Communicative English.

Reproduction of Target Vocabulary and Grammatical Structures in Postgame Assessments

It is the conclusion of this research that the in-class EFL card came Golden Week is adequately able to elicit the reproduction of target vocabulary and grammatical structures post gameplay. Naturally, when analyzing the pedagogical effectiveness of any SLA instructional material, it is of particular importance that the students are able to recall the materials introduced in the lesson. As was demonstrated in the results section of this article, the students in Communicative English were amply able to reproduce a number of specific vocabulary and grammatical structures covered directly in the gaming session.

Limitations and Future Considerations

The scope of this study is not without its limitations. Firstly, there was only one gaming session from one course. To corroborate the data gathered on behalf of and analyzed within this article, more data from further gaming sessions within the same communicative English course or from gaming sessions conducted in other courses would certainly be fruitful to reinforce the conclusions made in this study. Secondly, the postgame target vocabulary and grammar assessment worksheet proved to be quite useful in determining the pedagogical impact of the in-class EFL card game Golden Week, however, due to the fact that there was only one postgame assessment administered immediately after the gaming session, only the short term pedagogical impact can be ascertained. Gathering more data on students' ability to reproduce vocabulary and grammatical structures from numerous gaming sessions throughout the entirety of one academic semester or one academic year would reveal longitudinal patterns of vocabulary and grammar acquisition elicited by the game. Finally, to observe the pedagogical effectiveness of the implementation of the game, no supplementary instructional materials regarding vocabulary or grammatical structures utilized during gameplay were made. In order to observe the pedagogical effectiveness of the Golden Week gaming session with no supplementary instructional materials versus a gaming

session with supplementary instructional materials, data collected from a comparative study would prove particularly useful, especially in terms of how best to integrate the game *Golden Week* into a university level curriculum in Japan.

Conclusion

At the start of this study, five criteria were defined to help gauge the level of pedagogical effectiveness that in-class EFL card games such as Golden Week from Tanuki Games would have on a first year communicative English course at a Japanese university. These criteria stipulated that a pedagogically effective game would reduce inhibition levels of students during the production of the target language, increase student motivation during class, promote task based negotiation of meaning, encourage cooperative language production, and elicit the ability to successfully reproduce both vocabulary and grammatical structures used during gameplay. In order to weigh the game's effectiveness against the aforementioned criteria, both quantitative and qualitative data were collected from one gaming session with ten students enrolled in first year Communicative English. The data were collected in the forms of instructor observations during gameplay, a postgame survey featuring Likert scale questions, open ended student response questions, and a postgame vocabulary/grammar assessment. The in-class EFL card game Golden Week from Tanuki Games was received very positively by the students in first year Communicative English, and it is the opinion of this study that Golden Week meets all five criteria to be considered pedagogically effective at instructing students in a range SLA processes including vocabulary acquisition, conversation ability, and grammatical comprehension.

References

Bryant, Todd. "Using World of Warcraft and other MMORPGs to foster a targeted, social, and cooperative approach toward language learning."

Academic Commons (2006).

Gaudart, Hyacinth. "Games as teaching tools for teaching English to speakers of other languages." Simulation & Gaming 30.3 (1999): 283-291.

Holden, Christopher L., and Julie M. Sykes. "Leveraging mobile games for place-based language learning." *International Journal of Game-Based Learning (IJGBL)* 1.2 (2011): 1-18.

Huyen, Nguyen Thi Thanh, and Khuat Thi Thu Nga. "Learning vocabulary

- through games." Asian EFL Journal 5.4 (2003): 90-105.
- Nemerow, Laurence G. "Do Classroom Games Improve Motivation and Learning?." *Teaching and Change* 3.4 (1996): 356-66.
- Peterson, Mark. "Learner interaction management in an avatar and chat-based virtual world." Computer Assisted Language Learning 19.1 (2006): 79-103.
- Peterson, Mark. "Computerized games and simulations in computer-assisted language learning: A meta-analysis of research." Simulation & Gaming 41.1 (2010): 72-93.
- Peterson, Mark. "Learner interaction in a massively multiplayer online role playing game (MMORPG): A sociocultural discourse analysis." *ReCALL* 24.3 (2012): 361-380.
- Ranalli, Jim. "Learning English with The Sims: exploiting authentic computer simulation games for L2 learning." Computer Assisted Language Learning 21.5 (2008): 441-455.
- Schroeder, Ralph. "Social interaction in virtual environments: Key issues, common themes, and a framework for research." *The social life of avatars*. Springer, London, 2002. 1-18.
- Schwienhorst, Klaus. "Why virtual, why environments? Implementing virtual reality concepts in computer-assisted language learning." Simulation & Gaming 33.2 (2002): 196-209.
- Svensson, Patrik. "Virtual worlds as arenas for language learning." Language learning online: Towards best practice10.1 (2003): 123-142.
- Tanuki Games, 2016, www.tanukigames.org
- Thorne, Steven L. "Transcultural communication in open Internet environments and massively multiplayer online games." *Mediating discourse online* 305327 (2008).
- Toyoda, Etsuko, and Richard Harrison. "Categorization of text chat communication between learners and native speakers of Japanese." (2002).

Observations on the Pedagogical Effectiveness of Gaming in the EFL Classroom

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Abstract

This study analyzes the pedagogical effectiveness of the in-class EFL card game Golden Week from Tanuki Games. To gauge the relative pedagogical effectiveness of this game, one gaming session was conducted in a first year communicative English course at a Japanese university. Five criteria were proposed to determine relative pedagogical effectiveness and both quantitative and qualitative data were collected to support the conclusion of whether each criteria had been adequately satisfied. According to the proposed criteria, a pedagogically effective game must 1) decrease levels of inhibition in students, 2) increase motivation during class, 3) promote task based negotiation of meaning, 4) encourage cooperative language production, and 5) elicit the ability to successfully reproduce both vocabulary and grammatical structures introduced during gameplay. Data were collected by means of instructor observation during gameplay, Likert scale questions, open ended student responses, and postgame vocabulary/grammar assessments.