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Learning strategies and learner attitudes in the massively multiplayer online role-playing game cube world

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The rapid progress of technology has revolutionized learning and in the field of computer assisted language learning, the use of digital games has expanded significantly. One type of game that has been attracting interest is massively multiplayer online role-playing games (henceforth MMORPGs). Recent research has drawn attention to the potential of these games as arenas for language learning (Peterson, 2013). This paper will analyze the findings of exploratory research focusing on the use of the MMORPG Cube World involving a group of EFL learners based at a university in Japan. Data analysis of text chats, learner feedback and in-class video recordings revealed that the interactive language exchanges between players when they communicate and collaborate with each other in the game appear potentially beneficial for language learners. The data further showed that the participants viewed language learning through Cube World as fun and motivating. This suggests that learner participation in network-based MMORPGs provides an arena for learner centered social interaction that offers valuable opportunities for target language practice. MMORPGs offer the potential to enhance communicative competence; however, this research also highlights the need for additional studies.

Keywords: MMORPG, Cube World, language learning, learning strategies, learner attitudes

Introduction

The shift from analogue to digital technology has transformed teaching and learning. The dramatic expansion of the Internet presents teachers and students with endless

Forum

new opportunities for creativity and exploration. Research (Bonk & Graham, 2006; Babb, Stewart & Johnson, 2010) has shown that technology can be effectively implemented in blended learning classrooms and as Blake (2008) pointed out, technology can provide the tools needed in language learning as well. The emergence of Web-based learning and the widespread availability of digital devices such as smartphones and tablets have ensured that CALL has recently become more widely accepted as a means to facilitate the process of language learning (Thomas, Reinders & Warschauer, 2013).

Collaborative learning environments such as virtual worlds, social networking and digital games have generated increasing interest from experts (Gee, 2003; Squire, 2005; Peterson, 2010) and past studies (Thorne, 2008; Zhao & Lai, 2009; Zheng *et al.*, 2009) have suggested that of these tools, Massively Multiplayer Online Role-Playing Games (henceforth MMORPGs) are promising educational platforms. It is claimed that these games present engaging environments for learning as they support problem-solving, communication and team work. However, despite the recent expansion in research work, studies utilizing MMORPGs in language learning are relatively limited, mostly small-scaled in nature and confined to investigating a narrow range of variables (Peterson, 2013). This paper will provide an overview of current research and examine the findings from an exploratory case study on how learners manage their in-game interactions in the target language (henceforth TL) as well as how learners view using MMORPGs as a language learning tool.

MMORPGs and SLA

MMORPGs are a type of digital game that takes place in a virtual world where large numbers of players develop their characters in a role-playing environment. One of the features that distinguish MMORPGs from traditional console-based role-playing games is that MMORPG game play is essentially based on alliances of players. This type of game requires collaboration, strategizing, planning and interacting with objects and resources.

Researchers claim that this type of game incorporates features that may facilitate second language acquisition (henceforth, SLA) including assigning user controlled virtual agents known as avatars to individual learners enabling them to experience a higher degree of immersion and emotional investment in the virtual world (Svensson, 2003). Moreover, avatars also contribute to the process of relationship forming and bonding between players by enhancing the role-playing experience (Peterson, 2006). In addition, avatars chosen by the participants as their self-representations in a social setting have shown to decrease the participants' anxiety and self-consciousness during online interactions (Aymerich-Franch *et al.*, 2014).

The processes elicited by the game such as making observations, formulating hypotheses and figuring out rules may be beneficial for SLA as learners experience a continuous cycle of experience, reflection, conceptualization and active experimentation. This experiential learning cycle (Kolb, 1984) enables learners to become aware of the systemic connections between different linguistic forms and supports the achievement of understanding through generalizations provided by feedback from peers.

Researchers claim that the collaborative learning aspects of MMORPG game play not only provides benefits of social interaction in the TL but also fosters motivation, creating opportunities for real-time practice and exposure to immediate feedback (Bryant, 2007; Thorne, 2008). When playing MMORPGs learners can participate actively in goal-based communicative tasks which elicit beneficial forms of TL interaction such as negotiation

of meaning and scaffolding that have been identified as playing a central role in learning in both the psycholinguistic and sociocultural accounts of SLA (Long, 1996; Blake, 2000; Lantolf, 2000; Vygotsky, 1978). Scaffolding, in particular, is important as it is central to the operation of Zone of Proximal Development (ZPD) and this ZPD provides a powerful means for learners to conceptualize the developmental process involved in language learning (Vygotsky, ibid).

Additionally, MMORPGs provide a social platform for like-minded players to gather and this environment can serve as a catalyst for fostering collaborative learning. It is claimed that in-game collaboration and interactive conversations elicited by this type of game promotes critical thinking as well as supporting types of social negotiation associated with learning (Lave & Wenger, 1991). This in turn allows learners to share information, test their understanding and reflect on their learning (Jonassen, 1999). Instead of learning through explicit linear instruction by reading a manual first, players take their time to gather the information needed by evaluating various options before formulating a plan and change strategies and/or goals according to the different variables presented to them. In other words, MMORPGs have the potential to provide optimal learning mediums that are capable of meeting the needs of the younger generation who have grown up socializing with digital media.

Previous research

In previous small-scale case studies, both Rankin et al. (2009) and Kongmee *et al.* (2012) analyzed the interaction between non-native speakers of English in MMORPG-based digital games and found that participants improved their language learning skills with higher post-test scores. This in turn increased the participants' motivation. These researchers report that the participants were comfortable with the communication environment. The findings of the above studies suggest that the community-based nature of these games provides a safe and fun venue for the learners to take risks and reflect on their mistakes. As is noted in the literature (Kohonen, 1992), reflection plays an important role in SLA by providing a bridge between experience and theoretical conceptualization while risk-taking is associated with a willingness to maximize success. Noels (2001) observed that learner self-motivation is supported by the sense of belonging to a larger social whole which in turn encourages learners to be more willing to explore unfamiliar environments in order to develop their competencies by seeking out and overcoming challenges.

Another MMORPG case study involving a group of experienced gamers from New Zealand and the Netherlands undertaken by Bytheway (2013), shows learners adopting a combination of learning strategies influenced by the games culture which encouraged curiosity and in turn enhanced cooperative interactions with other players. The participants in this study were made aware of a variety of vocabulary learning strategies and many of them agreed that these strategies could be applied to other learning contexts in real life. This research also shows that educators need to dispel the negative conceptions of gaming in order to encourage learners to appreciate their empowering nature.

In a further case study (Uusi-Mäkelä, 2015), Finnish and Norwegian students collaborated in building villages in the MMORPG *Minecraft*. The researcher investigated informal learning. Researcher observation revealed that this phenomenon of informal language learning was observed throughout the study. Learner feedback was mixed. Some learners reported improvement in their language competences while others reported no

improvements. However, most participants agreed that they were able to employ the TL in an appropriate manner. The researcher claimed that the collaborative learning environment provided by Minecraft enabled learners to practice adaptive strategies in order to communicate effectively with each other.

This paper will now examine the key findings of an exploratory study on the use of the MMORPG *Cube World* as a language learning platform. Preliminary results are examined. These observations indicate evidence of extensive collaboration conducted in the TL. The discussion will conclude with an examination of promising areas for future research.

Minecraft and Cube World

The introduction of Minecraft Education Edition enables educators to use this game in a variety of educational contexts. This game is designed to facilitate the development of essential life skills such as computational thinking along with communication, collaboration, critical thinking, creativity and curiosity. Likewise, the interactive environment of Cube World which is inspired by Minecraft (von Funck, 2011) provides participants with the freedom to explore and discover the rules of learning through game play (Bogost, 2008). Moreover, Gee (2005) noted that the interactive environment of the game mirroring the real world also allows for a deeper understanding of simulations and enables learning situated in action to take place.

Figure 1. 3D virtual environment of Cube World.

Figure 1 shows the rich and engaging 3D virtual environment of Cube World, an open world MMORPG developed by Picroma released in 2011, that enables players to explore a large-scaled voxel-based world that is filled with randomly generated features such as grasslands, jungles, deserts and oceans. As is the case in other MMORPGs, Cube World provides access to personal avatars that specialize in different abilities.

In addition, players can interact with each other in real-time using text chat that is displayed in an on-screen text box. Navigation is achieved by the means of keyboard commands that enable players to move and explore the world. Enemies are a mixture of fantasy creatures and animals that inhabit universes corresponding to their real life counterparts. For example, one will encounter wolves in the jungles but not in the deserts and one might

encounter a shark in the ocean but not in the rivers running through the grasslands. It is this realism that allows participants to relate game dialogues, images, experiences and actions to the context of use, actual experiences, functions and problem solving in the real world. The complex cognitive processes that are elicited during the completion of tasks involving problem solving (Rankin et. al, 2006) make it possible to understand conceptual learning and apply the knowledge obtained.

Collaborative learning in Cube World

A study done by Swier (2014) indicates that learners gain opportunities to engage in beneficial types of dialogue through social interaction in popular MMORPGs such as Minecraft. However, to date, most research is small scale and limited in scope. Moreover, few studies have explored learner strategies during task-based interactions or learner attitudes. In order to address these gaps in the literature a case study was undertaken to answer the following questions:

1. What discourse management strategies do learners take during task-based TL interaction in a MMORPG?
2. What are the learner attitudes to study in a MMORPG?

The case study was held weekly during the fall semester of 2015 involving a class of 10 Japanese EFL, six female and four male, students ranging from 19 years old to 25 years old. A pre-questionnaire was administered at the beginning of the class in order to gauge the participants computing skills, gaming experience and linguistic capabilities. All of the participants claimed they possessed competent computer skills but only two of these participants mentioned they had prior background in playing MMORPG games. Nine out of ten students claimed to have average reading skills while three students admitted to have poor writing skills in the pre-questionnaire. Eight out of ten of the participants stated that they are learning English to pass the TOEIC/TOEFL exams. This showed that the most of the participants are not well versed in playing MMORPG games and they are not confident in their English writing skills. However, they are confident that they can read and understand English instructions.

Cube World was chosen as the platform to investigate the learning strategies and attitudes of these students during task-based TL interactions in the game. Similar to other studies (Anfara, Brown & Mangione, 2002) in attempting to develop a holistic understanding of the conclusion by the use of a triangulation of questionnaires, observations and document analysis, this research has collected in-class video recordings, text chats and learner feedback after each session in an effort to employ a better understanding of the data. All participants were requested to participate actively in completing the tasks which were designed to meet learner needs, encourage active participation and elicit meaningful collaboration by engaging learners in purposeful interaction using the specific tools provided within Cube World. These tasks were completed in class in order to reduce the possibility of network issues impeding data collection on top of allowing the researcher to observe in-class interactions among the participants. Each task lasted for at least one session per week while some activities were done over a span of two to three sessions. Further relevant information on the tasks can be found in Figure 2.

Table 1. Gameplay tasks and descriptions of the activities.

Task	Activities
Self-Introduction	In order to break the ice between participants during their first meeting in the game the learners were required to introduce themselves and explain the reasons for their choice of avatar. They also gave feedback on the avatars chosen by other players.
Find A Place	Each participant was given a different clue and they have to take part in question-and-answer sessions with their group members to reveal the name of the place they were looking for in the game world.
Guessing Game	Learners were given bingo boards with various clues and the learners worked together with their group members to solve the clues in order to complete the bingo board.
Story completion	Learners worked together to fill in the blanks of a fairy tale. The required words and phrases were embedded in the game world.
Description Game	Learners were requested to visit a specific location in the game during a given time limit before heading back to base camp where they described their journey to the other group members.
Obtaining A Pet	At the start of the session, each participant was provided with an incomplete instruction sheet for finding an animal in the game world. The participants have to share and exchange the information they have with each other in order to find the animal specified in the instruction.

Learner interaction in Cube World

As was noted previously, Cube World is a MMORPG inspired by Minecraft and just like its predecessor which encourages players to freely explore and make use of the tools in the game world, Cube World provides next to no instructions. Players are left to their own devices and there are four possible sources where they can learn: through trial and error, experimentation, online resources, or by requesting assistance. The maximum number of players allowed to play on the LAN network was limited to four at a time but for the purposes of this study, the class was divided into groups of four and two players with each player being rotated between the groups so that the participants have the opportunity to interact with everyone in the class. A learner feedback group was created on the learning website Edmodo where the participants were required to write their comments at the end of each gaming session. Each participant submitted an entry per session and the statements quoted in this paper corresponded to each individual participant. Statements from learner feedback showed that the group size and rotations did not affect the players' interactions.

> Team member was different from last week. I enjoyed joining the game with a new friend and I think I can corporate with new friends well next week too.
>
> —Learner A

> At this time I worked together with [Learner C]. He was a friendly person. We work good together. I want to talk more with playing with him.
>
> —Learner B

Analysis of the text-chats revealed that majority of the participants chose to ask their group members for assistance, regardless of the group they were in. This mutual engagement of participants in coordinated effort to solve the problem together (Roschelle & Teasley, 1995) represents the type of collaborative learning that not only develops social and communication skills but also builds positive attitudes towards peers and learning materials as well as building social relationships and group cohesion (Johnson & Johnson, 1999).

(1) 1. Learner 1: my target is crocodile
2. Learner 2: crocodile?!
3. Learner 2: that sounds so hard
4. Learner 1: i don't know where thwy live
5. Learner 2: lets help each other
6. Learner 2: follow me!
(3 lines)
7. Learner 1: OK, lets go and find out crocodile
8. Learner 2: he is live near water
9. Learner 1: how you know?
10. Learner 1: so, lets go western river
11. Learner 2: crocodiles likes water, I think
12. Learner 2: let's go

In the above interaction, Learner 1 reveals the target of his/her task and in doing so, elicits help from a group member who obliges, thus creating a collaborative bond between these two participants in the gameplay. The target of the task (in this case, the crocodile) became the subject of subsequent conversations that further helped in strengthening the established coalition as well as helping the participants to focus on the task at hand.

In addition, a significant feature of the data involves either self- or other-initiated correction in the TL as seen in the excerpt below,

(2) 1. Learner 1: i dont understand what 'fay-man' means…could you tellme?
2. Learner 2: fay-man?
3. Learner 3: you mean 'hay-man'?!
4. Learner 1: yea! yea 'hay-man'!
5. Learner 1: sorry!

Learner 1 makes an error in turn 1 in his/her TL output by misspelling the word "hay-man". This utterance draws a swift response for Learner 2 who signals that an error has occurred. In the next turn, Learner 3 provides appropriate corrective feedback. In turn 4, Learner 1 acknowledges the error and apologizes in turn 5. This example draws attention to an advantage of the communication environment provided by the game: learners can view their TL output on screen in real time as it is produced and this may facilitate the noticing first identified by Schmidt (2001).

(3) 1. Learner 1: you have clues for me?
2: Learner 2: yes.
3. Learner 2: mosqtoes are active during __ (sunrinse) or __ (sunset)
4. Learner 2: sorry! mosquitoes :D

5: Learner 1: ww thank u

In interaction (3), Learner 2 commits an error in the form of misspelling "mosquitoes". In turn 4, this learner notices the error and provides the correct spelling and attempts to convey humor through the use of an emoticon in turn 5. As the avatars in this game cannot display facial expressions or use intonation, players normally employ a variety of text and keyboard symbols in an attempt to display these aspects of communication (Danet, 2010). The usage of the emoticon by Learner 2 elicits a positive response by Learner 1 with the abbreviated form of "u" and this learner further displays happiness through the use of Japanese version of LOL "ww".

Another noteworthy observation is the use of positive politeness in this session. As defined by Brown and Levinson (1999), positive politeness is an approach-based action taken signaling the desire wanting to be noticed, understood and accepted by the other members in the group. By saying "thank u" to Learner 2 after he/she has received the clues, Learner 1 has successfully signaled his/her interest in the interaction and established social cohesion with the other participants during the sessions. Furthermore, Japanese learners of English adapt to L2 communication by using hedge expressions especially in contexts where they were influenced by age differences or in first encounters (Nozawa, 2015). This phenomenon can be observed in the following excerpts.

(4) 1. Learner 1: hi
2. Learner 2: heya hey
3. Learner 2: where we go today?
4. Learner 3: hello!

(5) 1. Learner 1: who has clue 1?
2. Learner 2: mutsu
3. Learner 2: mutsuta pick tem up!
4. Learner 1: i have clu 2

As seen in interaction (4) above, the participants were greeting each other at the start of the session while in interaction (5), the participants went ahead with the given tasks without any greetings at all. This difference in language exchanges showed that informal greetings were used in order to minimize social distance and to signal desire to establish and maintain collaborative interpersonal relationships in an early game session when the participants met each other for the first time and were getting to know each other. Contradictory to previous studies, which suggest that informal greetings grow lengthier as learners become more familiar with their peers (Darhower, 2002; Peterson, 2012), the participants immediately engaged in interactions that reflected the collaborative atmosphere of solving the task at hand. By the later sessions, the participants were very well-acquainted with each other and did not appear to think it necessary to initiate greetings.

Positive politeness was also observed in another session where one member of the group asked for help and another member of the same group responded and offered his/her assistance.

(6) 1. Learner 1: Who not found his pet yet?
2. Learner 2: hi

3. Learner 2: please help me-
4. Learner 1: how does it look like? If we found it we tell you where it was
5. Learner 2: it is so small, it is a insect
6. Learner 2: we all hate it because they stole the blood of us
7. Learner 2: black one
8. Learner 1: Oh, I see, we'll search it
9. Learner 2: i found it 2 time! but i dont know how can i take it as pet!

In the above interaction (6), Learner 1 asked a question to the group and Learner 2 responded by asking for assistance. In turn four, Learner 1 reacted and attended to the cry for request by eliciting more information from Learner 2 which led to Learner 1 promising his/her assistance in the search for the object. As the analysis in this section shows, both participants utilized positive politeness strategies in order to minimize social distance and to build supportive relationships between interlocutors. Furthermore, the usage of "we" in the conversation showing that the participants regarded themselves as members of a group, rather than individuals which implies a well-established collaborative relationship between the members of the group.

The participants rarely elicited meanings from their group members. The one time when negotiation of meaning occurred is shown in the example below.

(7) 1. Learner 1: please tell me what the word of 'inflate' means…
2. Learner 2: I think 'inflate' means 'increase' or something
3. Learner 2: Im not sure, sorry
4. Learner 1: like more?
5. Learner 3: yes, I think 'inflate' means 'increase more' too
6. Learner 1: ok wwwwwwwwwww
7. Learner 2: wwwwwwww

In interaction (7), Learner 1 posed a question regarding the meaning of an unknown word to members of the group. Learner 2 gave their opinion as to the meaning of the word while acknowledging that this might be incorrect: implied that the reply had been made without consulting a dictionary or any other source of reference. Learner 2 also used the word 'sorry' in turn 3 in order to maintain the positive relationships between group members. Learner 1 subsequently came up with a word with a similar meaning to the answer given by Learner 2 and asked for confirmation in turn 4 to which Learner 3 agreed to the proposed answer. Learner 1 accepted the confirmation and the conversation ended with both Learner 1 and 2 displaying their satisfaction through repetitive use of the Japanese version of LOL "www". Although the conversation was brief, the participants were involved in negotiation of meaning where Learner 2 and 3 responded appropriately to the initial request made by Learner 1: offering helpful feedback regarding the meaning of the unknown word. Learner 1 gladly accepted the assistance and went on further to reconfirm his/her own understanding of the meaning before internalizing the word. This interaction reflects the fact that the learners encountered previously unknown linguistic forms while interacting with others and subsequently internalized them.

Learner feedback and in-class video recordings

Post-questionnaires and in-class video recordings disclosed some interesting findings on learner feedback in Cube World. The researcher observed that throughout the sessions learners appeared highly motivated. And despite earlier claims that they are not confident in their English writing skills earlier in the pre-questionnaires, the learners reported that rather than being embarrassed by their errors, they perceived mistakes as a source of opportunity. The participants asserted that a benefit of the game was the access to new vocabulary and although the participants acknowledged that they have limited vocabulary skills, they displayed a willingness to learn more.

> I found many words I didn't know such as 'rooster', 'purr', 'racoon' and more. There are so many words I haven't seen yet.
>
> —Learner C

> The level of today's work was a little higher than mine. The words...I have never heard…I could realize I have to study English more. But it was fun.
>
> —Learner D

> Todays task was so difficult. Though there were some words we didnt know, we tried to. We couldnt fill all blanks. I thought to gain more words.
>
> —Learner E

> I could not find answers of blanks. I have a few knowledge of English, so there were many words whose means I didn't know. I want to know more words next time.
>
> —Learner F

This willingness to learn more also known as "Intrinsic-Knowledge" (Noels, ibid) refers to the happy feelings from satisfying one's curiosity about a certain topic. It was observed that this "Intrinsic-Knowledge" desire motivated the participants to seek out the meaning of unknown words and phrases through electronic dictionary applications on their mobile phones. Once they have discovered the meaning of new words or phrases, it was observed that they sometimes share them with other participants. In-class video recordings captured the moments when participants exchanged information with each other off-screen. This is an important finding as it is noted in the literature that the feeling of succeeding as a communicator plays an important role in future success (MacIntyre, 2007). This finding echoes previous research (Brown, 2000; Horwitz, 2001). Data shows that the participants were clearly comfortable with the communication environment and were willing to take risks in the TL while working together in a group. Moreover, they were open to receiving help in overcoming errors showing that cooperative learning proved to enhance the feeling associated with surpassing oneself and mastering a difficult task with the help of others. This intrinsic motivation in turn helps to promote effective motivational thinking and self-regulated learning. However, as is noted in the literature, motivation only keeps the learner engaged for a fixed span of time. In this context, digital games should not be considered a "silver bullet" with a unique power to help learners focused on their learning (Zagal, 2010).

Another observation particularly relevant to the findings of this study is most of the participants claimed in their feedback that particularly in the early sessions; they had difficulty in understanding the game commands and in controlling their game characters which in

turn lowered their motivation levels by the end of the class. A study done by Noels (ibid) has shown that learners developed a sense of competence and high intrinsic motivational level in a clearly guided environment. And this is accomplished by providing feedback in supporting the learner's progress. Although the motivational levels of the participants decreased during the game session, it needs to be stressed that the participants stated they were motivated to learn from errors and mistakes made during communication exchanges which in turn helps them to understand the game better. Moreover, they were engaged by the interactive environment of the game. Post-questionnaires further revealed that

> In normal classroom, we sit and listen to the Professor but in this class, we read and type in English while playing games. This keeps motivation up and students will be more willing to study.
>
> —Learner G

It was the complexity of the game play itself which appeared to, on occasion, frustrate the participants. In this context learners stated in the post-questionnaire that:

> My character is too weak to do tasks.
>
> —Learner H

> It is difficult to control game character with slow connection.
>
> —Learner I

> I didn't get used to play PC games.
>
> —Learner J

This finding suggests that contrary to popular belief, not all teens and young adults are adept in playing digital games although studies (Pew Research Center, 2015) have shown that 81% of teens in the United States have access to game playing consoles.

Conclusion and future directions

Data analysis revealed the presence of extensive collaborative dialogue involving forms of self- and other- initiated correction. In addition, viewing TL output on screen in real time helped in drawing attention to errors and eliciting appropriate feedback in facilitating peer scaffolding. Moreover, it was found that learners deployed positive politeness throughout the sessions in order to maintain social cohesion. They also use paralinguistic clues such as abbreviations and emoticons to replicate the beneficial collaborative relationships that are found in real life face-to-face communication in the computer-based communication of the game.

However, a case study involving a small group of participants in a relatively unknown game cannot offer definitive results. Furthermore, computer lag proved to be a limitation as participants had to deal with typing in the chat box as well as dealing with the time delay between typing and reading the chat text. This case study though experimental, indicates that MMORPGs such as Cube World provide an engaging learning tool for the new generation of digital learners.

Knowing and understanding how learners communicate and adapt various strategies in their TL online interactions and how learners perceive learning the TL through digital games are essential to the foreign language learning process. Furthermore, learner

feedback indicates that the rich 3D world provided by the game and learning from mistakes appear to enhance intrinsic motivation and engagement which allow learners to take risk and promote the desire to improve in future language learning. These findings have implications for future research. Going forward, educators may investigate the implementation of meaningful task-based activities with the goal of better comprehending how participation in MMORPG-based gaming enables learners to engage in valuable forms of TL interaction that expand their learning skills. Moreover, future studies into learner attitudes offer the prospect of enhancing understanding of learner in-game experiences.

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Ms. Shu Li Goh is currently a doctoral student at Kyoto University, Japan after completing her Masters degree in the same university. Born and raised in Malaysia, Ms. Goh graduated with a Bachelors degree in Translation and Interpretation and was an amateur translator before coming to Japan for an intensive language course in Japanese. While polishing her Japanese language skills back in Malaysia, she found that interacting with native Japanese speakers through digital games helped and motivated her in the learning process. This experience made her realize that digital games could be a new learning platform for language learning and thus, she is researching into the potential of utilizing digital games as a way to motivate and improve learners language proficiency.