

# The Effects of Group Dynamics on Language Learning and Use in an MMOG

Donald Vosburg

## Abstract

*The use of video games as a learning tool, in particular massively multiplayer online games (MMOGs), continues to grow, as does the research in this field of study; research to date has revealed benefits to the language learner as well as hindrances and research gaps (Godwin-Jones, 2014). This study examines participant perspectives on group dynamics, and how comradery and a foreign language guide affect participants' in-game production of L2 German while playing World of Warcraft (WoW) as an extramural activity. This study focuses on an eight-week long MMOG gaming project, in which two groups of participants played WoW with a native German speaker in order to investigate the effects inter-group dynamics have on a participant's real-time target language production and willingness to communicate. Participants reported during interviews and written journal entries that a lack of shared interests and motivation (learning and gaming) negatively affected the groups' target language participation. The findings additionally suggest that a trained foreign language instructor paired with a motivated learner may result in increased participation; however, these increases may be temporary if a group's relationship does not extend beyond the shared goal of foreign language improvement.*

KEYWORDS: COMMUNITY; EXTRAMURAL; GAMING; SLA; MMOG

## Introduction

Video games are a common form of entertainment, and the gaming industry is thriving (Wattana, 2013) despite the economic slowdown since 2008. According to Siwek (2014), between 2009 and 2012 the annual growth of the video

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## Affiliation

The Pennsylvania State University.  
email: donvosburg1@hotmail.com

game industry in the USA was 9.7% compared to 2.4% for the entire U.S. economy. By the end of 2014, sales for game content, hardware, and accessories for consoles, computers, and smartphones totaled approximately 22 billion U.S. dollars, supported by a growing group of 155 million U.S. gamers (THEESA, 2015). It appears video games are an important cultural part of entertainment for both young people and adults. Interest in using popular video games as a language learning tool is continuously growing, and research has provided insight into various second language (L2) affordances and potential language learning opportunities provided while gaming (Cornillie, Thorne, & Desmet, 2012; Peterson, 2012b).

Getting language learners (LLs) to interact in an L2 in extracurricular or extramural settings is a challenge, and “most language learners rarely receive sufficient opportunities to practice and interact in the L2 both inside and outside the language classroom” (Wattana, 2013, p. 2). If educators are able to utilize language-learning opportunities found in video games in a way that does not distract from the enjoyment of the game (Godwin-Jones, 2014), then there is a possibility to increase LLs’ out-of-class L2 interactions, thus supporting L2 growth. Furthermore, the language affordances found in games could motivate LLs to continue with authentic L2 interactions and language maintenance beyond their high school or collegiate years. Overall, gaming may provide the right motivational tool for some LLs to find enjoyable extramural language practice.

This study discusses a project that aimed to engage college-aged students in foreign-language speaking practice via an eight-week long, extramural, massively multiplayer online game (MMOG) group, and investigates the shared comradery between members of two gaming groups playing an unaltered version of *World of Warcraft* (WoW, Blizzard Entertainment, n.d.). More specifically, the aim of the study was to analyze how group dynamics affected the participants’ target language production.

## Previous research

Video games are believed to provide an environment which promotes many important aspects of general learning (Gee, 2007; Mitchell & Savill-Smith, 2004), and more specifically foreign language learning (see Peterson, 2013, for a broader review of the research). MMOGs in particular give players a chance to engage in one or more target languages (Cornillie et al., 2012), and they “afford learners opportunities to develop language and literacy skills, as players form game communities and create and develop interpersonal relationships” (Rama, Black, Van Es, & Warschauer, 2012, p. 324). WoW was chosen for this study because it is a popular MMOG with more than 5.5 million subscribers as of Blizzard’s most recent report on subscriptions (Makuch, 2015),

and with further game expansions arriving in August of 2016 (see Legion, <https://worldofwarcraft.com/en-us/>). Moreover, MMOGs offer opportunities for increased risk-taking, multilevel feedback, translation opportunities (Peterson, 2010), and promote language interaction via collaborative tasks, reduce foreign language anxiety, and improve confidence and willingness to communicate (Thorne, Black, & Sykes, 2009; Reinders & Wattana, 2011; Reinders & Wattana, 2015; Wattana, 2013).

MMOGs afford language-learning opportunities via group building, long-term socialization, dynamic relationship maintenance, and community organization with other gaming members (Nardi, Ly, & Harris, 2007). Thorne and Black (2007) describe that the development of intercultural relationships within these games can lead to linguistic and pragmatic learning as well as general awareness of appropriate genres of language use. Zhao and Lai (2009) add that MMOGs create many opportunities for social interactions that are open and free due to greater anonymity, and the reduced importance of physical appearance may increase focus on discourse. Additionally, LLs are given a chance to use meaningful, spontaneous language with immediate feedback that is difficult to replicate elsewhere.

In addition, Sykes and Holden (2011) report that MMOG social interactions have consequences and create increasing levels of interconnectedness which allow players to develop deep connections to each other, thus creating more meaningful spaces to heighten player behavior and stronger collaborative partnerships, leading to increased target language (TL) interaction. Peterson (2011), for example, observed seven Japanese learners of English as they played an MMOG called Allods Online. He found that learners engaged in collaboration and utilized various strategies to maintain intersubjectivity in order to continue and facilitate conversations; they also reported feeling less anxious when using the TL. Peterson (2012b) conducted an additional investigation into another MMOG, Wonderland. Participants in this project were four intermediate university-level Japanese learners of English, who played four 70-minute sessions. Echoing findings in another study with NineRift (Peterson, 2012a), it was found that the participants engaged in TL interactions, used a variety of strategies to establish and maintain interactions, were positive towards the game, and the anonymity provided by the game reduced anxiety.

Reinders and Wattana (2015) also conducted a university-level research project but with 30 Thai learners of English who completed six gaming sessions of Ragnarok Online. Five of the 30 participants were randomly chosen for interviews to assess their willingness to communicate after each of the six gaming sessions. Four of these five reported greater amounts of L2 production after every gaming session and increased English confidence, thus suggesting

an increased willingness to communicate. Furthermore, it was found that all participants reported lower levels of anxiety and greater risk taking.

Furthermore, MMOG supportive features promote in-game interaction through collaborative play (Nardi et al., 2007; Peterson, 2010; Reinders & Wattana, 2015; Thorne, 2008). In addition, recent studies show that the TL opportunities supported in MMOGs can have a positive effect on vocabulary retention and promote episodes of negotiation of meaning (deHaan, 2013; Rankin, Gold, & Gooch, 2006; Zheng, Bischoff, & Gilliland, 2015), general improvement in scores for reading, writing, speaking, and listening (Reinders & Wattana, 2011; Suh, Kim & Kim, 2010), increased turn taking and TL production, (Nardi et al., 2007; Reinders & Wattana, 2011; Sykes, Reinhardt, & Thorne, 2010; Thorne, Black, & Sykes, 2009; Zhao & Lai, 2009), and relationships of gaming frequency and L2 (English) proficiency (e.g., Sylvén & Sundqvist, 2012). Altogether, MMOGs have shown to provide a variety of affordances for language learning.

However, there are still relatively few research projects addressing gains in language proficiency and the effects of user behaviors (Godwin-Jones, 2014), and most previous studies are exploratory with anecdotal evidence, examinations of game characteristics, and subjective assessments on language-learning affordances (Reinders & Wattana, 2015). This study aims to explore the effects of group gaming in an MMOG on LLs' motivation and confidence in TL use. Furthermore, this study reports on levels of TL production and discusses how participants thought group dynamics affected their TL production.

## Theoretical Framework

The data in this study are analyzed using the framework of activity theory (AT) (Leontiev, 1978). AT suggests the necessity of collecting many data points in order to understand how a learner's sociocultural-historical background and mediating artifacts may affect learner activity and resulting learner outcomes.

AT is comprised of three elements of human activity: the levels of (1) motivation, (2) action, and (3) conditions. When there is a need such as to learn a language, motivation is created within the learner to act in order to satisfy this need. The learner's actions are carried out utilizing various mediational activities, which are realized under the current conditions (e.g., tools available, environment, interactional partners) (Lee, 2009). In order to capture as much of the learning experience of an individual as possible, Engeström (1999) lists six components as part of the system of activity: the subject (the individual learner), mediating artifacts (e.g., computer, game, language, regulation), rules (e.g., game rules, time restrictions), community (with whom learners interact and the effects of that relationship), division of labor (role in the group and how one plays out that identity), and the object (goals or

“objectives”). These components interact as part of learners’ activity, thus shaping the desired outcome of the learner (e.g., task completion, improved speaking, passing the class). While all components contribute to a total analysis of learner activity, for the purposes of this study the focus is on the community and the participant-reported community effects on TL production in relation to participant objectives, which were to interact more frequently and gain confidence in L2 German.

## Methodology

Data and methodology used and reported on were collected as part of a larger research project (Vosburg, 2015). Participants were recruited from two sections of third semester German classes from an American university to play WoW as German homework. WoW is a virtual world in which players generate characters that interact with other players and the online gaming environment via an avatar. Players complete quests and various tasks to level-up and interact in a world complete with its own geography, cities, live player characters, and non-player characters. It is possible to interact with other characters by text or voice chat, or by using the avatar’s physical gestures. Gestures, battling, travel, and general game functions are controlled using a keyboard and mouse, and voice-chat may be done with an in-game chat client or another Voice over Internet Protocol (VoIP), such as Skype.

All participants recruited had the same instructor, who was not involved in this study. Initially, 16 male and 5 female students wanted to participate. However, three of the female students decided to drop out and the remaining two did not have a computer that met the technical requirements for playing WoW. The remaining 16 male students were divided into categories of WoW-playing time per week (*never, tried WoW before but I do not play it, one to five hours, and six to ten hours*). Two groups of four participants were selected with the only criterion being that each group contained at least one frequent WoW-gamer (1–5 or 6–10 hours per week) and one who had never played WoW. Otherwise, the participants were randomly selected. Near the beginning of the project, one participant dropped out from Group 2 making the total number of participants seven. The participants are referred to as Gabe, Jim, Kevin, Palmer, Stanley, Toby, and Vance. Stanley and Toby reported playing WoW six to ten hours per week, Kevin played five hours per week, and Jim had played WoW once. Gabe, Palmer, and Vance had never played WoW, but all had played other video games. Their average age was 19.6 years old.

Prior to gaming, the participants reported a desire to game with a native speaker. While local native speakers may be hard to find for gaming, European Union versions of WoW are legal to download from Blizzard Entertainment, and it is possible to play on German servers from the USA. In order to ensure

the presence of native speakers, two native German speakers were therefore recruited as “language guides” (LGs) because (1) they would provide an expert model of German, (2) they may provide extra motivation for participants’ to speak in the TL, and (3) it is a realistic possibility for an LL to seek out German speakers on the U.S. servers or play directly on a German server. Both LGs were women in their 20s and the only local native speakers available to volunteer during the study’s timeframe. One of the LGs previously taught German with the Goethe Institute while the other had not previously taught German. Neither had experience of playing WoW or another MMOG. The data for the LGs are excluded from the word count totals below as they are not the focus of the study.

Before each gaming session, participants logged into Adobe Connect, a virtual classroom which makes use of VoIP technology. At the end of each 90-minute gaming session, the gaming file was saved, and transferred to the researcher’s computer as an mp3 file. All gaming sessions and interviews were reviewed multiple times during the transcription process. Partial words, repeated single words (e.g., *I, I, I, I can do that*), and filler sounds (e.g., *uh, ah*, and *umm*) were excluded from the word counts. Transcriptions included both spoken German and English, in order to compare German versus English use over time. Written counts are not included here.

Participants were provided with the following instructions: (1) to attend the gaming sessions of their group, (2) to speak as much German as possible, (3) to keep a journal, and (4) to participate in both the individual and final group interviews. Participants met twice a week over eight weeks and never met more than two days in succession. Each gaming session lasted approximately 90 minutes of game-time per meeting, resulting in 24 hours of game play. The participants played from their own home on their own computers, since the aim of the study was to investigate the activity and L2 motivation levels in an extramural learning setting. The LGs also played from home. Language quantity, quality, and L2 feedback were not controlled for. The participants and LGs were not given specific prompts or vocabulary to discuss, nor were the LGs given any specific instruction to correct or guide the students, but rather to let conversations arrive organically based on learners’ wish to speak in German.

The journal was used by the participants to make note of learning moments, good or bad, what they were doing at the time, with whom, and why they felt it was a moment to take notice of. The participants were instructed to write down short, quick notes during gaming in order not to disrupt the game, and complete their entries at the end of each gaming session. The journals were designed to give the participants and researcher a chance to further discuss valuable moments of learning during the interviews by reflecting upon the journal notes.

An interview guide was created and used to elicit responses in a series of semi-structured individual and group interviews in which the suggested points of influential conditions (according to the framework of AT) were discussed. The purpose was to understand changes in participant activity. The questions mainly dealt with within-group interactions and motivation in relation to gaming and language learning, and how interactions and motivation were perceived by individuals and possibly affected their TL production. All interviews were audio recorded and transcribed. Participants were interviewed individually at the beginning of week 1 and during week 4 (Mid) and 8 (Final), and they also completed a post-project group interview.

## Results

The results section is divided into two subsections. First, participant-reported themes related to the perception of group dynamics are listed. The second section is an overview of the TL and English activity.

### Perceived Group Dynamics

The participants completed interviews and journal entries in order to determine what they thought influenced their participation in gaming and TL use. Regarding group dynamics, three main themes of major influence were repeatedly mentioned in both groups. The one recurring positive influence was the LG interactions, and two negative influences were a lack of commonalities and differing levels of motivation for L2 learning among group members.

Regarding the LGs, the participants had the following to say. Group 1 participants, who had the teacher-trained LG, reported that the LG was “great” and “easy to work with” (Group Interview). Kevin said he felt comfortable speaking in German with the LG and reported that a major benefit was “definitely being able to speak with a native speaker” and “definitely being able to have someone there to tell you you are doing something wrong or translate” (Final Interview). Jim echoed a sentiment by all in the group when he said he could “think quicker on my feet” and understand “possibly the different accents” (Final Interview) thanks to working with a native speaker. Vance added, “I just like being able to speak with a native speaker and having to figure out how to say stuff in German, having to formulate sentences, make small talk with a native” (Final Interview). Although the participants felt that their level of German was adequate to navigate gaming and engage in general discussions, it was the LG’s presence and assistance that motivated them to keep using German. In particular, participants felt that the LG’s way of providing feedback was beneficial for their learning and confidence because they never felt intimidated by her corrections, and they received feedback immediately (cf. Gee, 2007; Sykes et al., 2010). It appears that the LG’s teacher training



was advantageous because the participants appreciated the calm and responsive way in which she reacted to various language situations, and she provided explanations regarding the German language that were easy to understand. Unanimously, all members of Group 1 said they were completely comfortable speaking with the LG, and they “would not have spoken nearly as much German” or been as “confident using German” without the influence of and the “safe space” created by the LG (Group Interview).

Group 2 participants reported similar feelings about working with their LG throughout all interviews and confirmed their feelings in the final group interview. Toby said that he “mostly talked with the LG and liked that a lot” and because of the comfortable atmosphere with the LG, “it was fun trying to get one’s point across,” and he “saw things as a puzzle with vocabulary” (Final Interview). Stanley reported that the LG was “a lot of fun”, “was easy to work with, and very friendly,” and he felt comfortable to speak often and enjoyed the challenge of working with and adapting to a native speaker. Palmer stated that the LG was great to work with, “significantly helped my speaking,” and “was helpful when it comes to listening and correcting my words” (Final Interview). As Group 1, Group 2 felt the LG created a comfortable environment, in which the participants felt freer to interact confidently in German as the project advanced (Group Interview). The LGs, on the other hand, had mixed reactions

The LG of Group 1 reported that she enjoyed working with her group and saw that her interactions with the gaming group encouraged more TL interaction (LG Interview). However, the LG in Group 2 found the interactions more frustrating, and she felt her interactions did not lead to more TL communication, which is a diverging opinion from her group. While the participants claimed they wanted and appreciated the LG’s feedback and talking with the LG, the LG was frustrated by the lack of response to feedback or to general conversation prompts. Many times the participants would not answer her, even if the same question was repeated or additional recasts were provided. While some questions may have been more difficult to answer in the TL, many questions required simple yes/no or short answers to questions such as “Can you help me?” or “How are you doing today?” Even these questions were often left unanswered.

The overall lack of communication most weeks was extremely disappointing for the LG of Group 2, and she believed the participants were either not paying attention or, more likely, were not prepared to answer the question in German and opted instead for silence. She came to this conclusion because participants would respond to their name, which indicated the audio was working. However, when a question or statement was uttered, the participants would remain silent. This silence strategy ultimately led to less communication, fewer



attempts at recasts and repeated corrections, and heightened frustration for the LG of Group 2. None of these types of problems were seen in the data for or reported by Group 1. It was asked if the increased interactivity with the game may have at times diverted participant attention away from language learning or use (deHaan, Reed, & Kuwada, 2010); Toby stated, that he was “more worried about getting the objectives in the game rather than staying with the group or talking” (Mid-Interview). However, the participants often denied increased game interactivity was an issue. Participants countered with increased TL use around weeks 5 and 6 as an example of their most challenging week as they were in constant combat in the dungeons. Indeed, the data in Figure 1 seem to support this statement. Production increased from week 5 to 6 for all participants. Interestingly, participants reported that the first two weeks of gaming were the only stressful weeks, and they reported speaking less during those weeks. However, Figure 1 shows the first two reportedly stressful weeks in fact contained high TL production totals. Therefore, it does not appear that increased game interactivity or training effects played a role in distracting TL participation as one may expect (cf. deHaan et al., 2010; Peterson, 2011). Instead, it appears that the added interactivity provided more in-game topics to discuss as participants needed to communicate in order to learn the game.

Overall, participants of both groups reported that the LGs established a comfortable atmosphere for the groups which opened the door to increased opportunities for speaking in German, listening practice, feedback opportunities, and a sense of authentic TL communication. Participants believed that over the course of the project, they became more confident and spoke more German directly due to the tone the LGs set in the group, and had the LGs not been there, they believe they “would not have spoken nearly as much German” (Kevin, Final Interview) and relied more on English (Group Interview). Even though the LG from Group 2 saw their interactions more negatively, participants from both groups felt the LGs were the single most important member of their gaming community.

The groups believed that two important influences negatively impacted the community, which affected their desire to interact in the TL. While all participants initially claimed that they enjoyed the group, when asked further about group dynamics over the course of the project, two main themes continuously appeared. If the game or the LG did not open up for a conversation, the participants were not interested in interacting due to (1) a lack of general, community common interests, and (2) differing levels of motivation for TL learning, academics, and gaming. Since the participants did not share interests that could be discussed beyond game tasks and lacked motivation to improve German, they did not “have really a strong desire to speak with each other” (Group Interview).

Similar to others, Gabe reported that there are “no issues with anyone” but “without common interests” starting a “random conversation was difficult” (Mid-Interview), and if the game did not provide them with something to discuss, then “I was just playing the game and I didn’t speak so much because there was no reason for me to” (Final Interview). The group “gets along” and “works out well” (Group Interview), but Kevin thought that “having multiple groups” would be a solution to find groups with common interests and creating additional speaking opportunities (Mid-Interview). Jim added that he never could see the group “hanging out” (Mid-Interview), and when Vance was asked about group comradery, he answered, “none that I know of” (Mid-Interview). Participants confirmed during final interviews that they generally had nothing in common and did not feel the desire to carry on conversations without an in-game task (Group Interview). Gabe stated, “[W]hen the game like makes you do it, I feel it’s more helpful. Especially because even if we are separate ... and talk about whatever, it’s not as meaningful” (Group Interview). Toby added that it would be good, “[i]f you could find a group of people with common interests because we really don’t talk about anything other than what is going on in the game” (Mid-Interview). Generally, all participants felt that a lack of common interests between group members hindered their desire to speak, and thus lessened their motivation to remain engaged with their group and use the TL.

The participants of Group 1 additionally listed different levels of motivation for learning German as a source of community interference. Kevin and Jim believed that the other members were “not really trying” and at times felt like, “I’m really the only person interacting” (Mid-Interview). According to their self-reports, Kevin and Jim in particular were strongly motivated to be academically successful. Kevin specifically wanted to improve his German before studying abroad for a year. These two participants were often frustrated with the remaining participants as they felt they were not trying hard enough. When asked about preparing for German, Vance, Gabe, Toby, and Stanley all admitted that they did not prepare for gaming in German, and they reported doing the minimum homework for German class. When Gabe, Toby, and Stanley were asked what their goals were for German class, they responded that they just wanted to pass it, whereas Kevin and Jim responded that they expected As. Furthermore, Gabe, Toby, and Stanley reported a competitive gaming drive during interviews and questionnaires, and indicated that they “get focused on doing the quests,” which led to drops in communication (Group Interview). This difference in learning and game motivation, according to the participants, was frustrating and disturbed some of the group dynamics. For instance, due to Kevin’s willingness to practice German, other group members began to take advantage of

Kevin, who became frustrated, saying “I don’t know. The others just really aren’t speaking” and “that I haven’t like, mostly whenever anyone has a problem I am the person they go to.... I mean there is most of the time it’s alright but sometimes it’s like every five minutes for a while” (Mid-Interview). Kevin reported that when requests for help became too much, he became irritated and remained quiet more often in order to force the other group members to participate. Overall, a lack of common interests and shared levels of motivation disrupted the group dynamics, and these factors were reported to have a negative effect on TL use.

### German production

Group 1 spoke an average of 313 German words per gaming session per participant, ranging from 200 to 379 and a slight decrease in German activity during the second half of the project (−6.6%). Individual variation within Group 1 ranged from 96 words to 594. Group 2 averaged 176 German words per gaming session per participant, ranging from 98 to 239 and also saw a decrease in spoken activity during the second half of the project (−5.0%). Individual variation within Group 2 ranged from 70 words to 278 (see Figure 1).

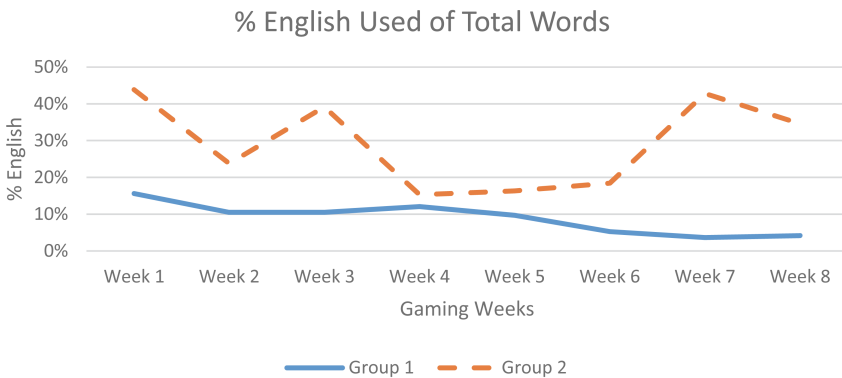


Figure 1. Average German words spoken per participant (by group) per gaming session.

Group 1 used English in 8.7% of the total number of words accounted for, and there was a steady decrease in the amount of English used throughout the project. The members of Group 1 reduced their reliance on English by 53.2% after week 4. Group 2 had an uneven performance and relied on English more frequently (30.7% average). However, the members of Group 2 reduced their English slightly (−8.1%) after week four (see Figure 2).

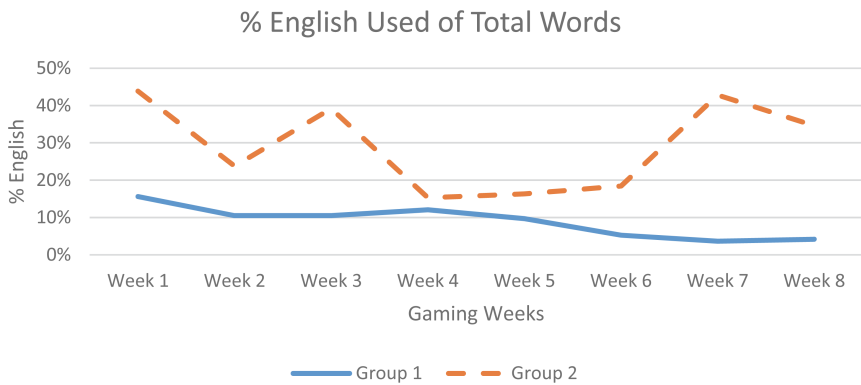


Figure 2. Percentage of English used out of the total words spoken by group.

## Conclusions

The feelings of interconnectedness group members had towards one another seem to have had an effect on their willingness to communicate in German. Numerous reasons were provided by the participants as to why their spoken TL production fluctuated as seen in Figures 1 and 2. Three central themes were reported as influential on participants' desire to use the TL, two of them negative: the lack of common interests within the group/community and the various levels of motivation with regard to gaming and /or TL learning. The positive theme was linked to the LGs.

The lack of group comradery in this study stands out as different in comparison with many previous reports (cf., e.g., Sykes & Holden, 2011; Purushotma, Thorne, & Wheatly, 2009). In this case, the lack of interconnectedness resulted in lessened motivation to interact in the TL. Differing focuses on German learning or game playing also led to communicative frustration, resulting in periods of silence. The reported hindrances to TL production were a lack of commonalities between group members and differing levels of motivation both for language learning and gaming. Despite the reported hindrances and the additional frustrations of the LG of Group 2, there was only a slight decrease in TL activity during the second half of the project (weeks 5–8). However, the decrease of production in the second half was mainly due to a very non-communicative week 7. Even though slightly less TL activity occurred over the last four weeks, when conversation did occur, the participants were willing to speak more often in the TL. The decreased ratio of English-to-German supports the participants' statements that they felt more comfortable and confident regarding using German (particularly Group 1, which reduced its usage of English by 53.2%). While it appears as

if participants became more comfortable using more German over English, their claims that they felt like they spoke more total German over the course of the project were overestimated.

Group 1 consisted of the participants who interacted more frequently, used less English, had the two most academically motivated students (Kevin and Jim), and the teacher-trained LG, whereas Group 2 coincidentally had three of the higher game-motivated participants, the three participants who admitted to not preparing for gaming and only wanted to pass their current German class, and the non-teacher-trained LG. Because of these group differences, a definite divide appeared between the results of the weekly chat data. Group 1 contributed to 70.1% of the total German word count data in this study, and their average English use was low, only 8.7%. Group 2, on the other hand, contributed a total of 29.9% of the German word count data, and had a much higher use of English (30.7%). While these data do not illuminate the entire picture, these seemingly positive factors for Group 1 provided a much better group structure and balanced roles that, most likely, supported more interaction. This interaction was often spurred on by the highly motivated participants, Kevin and Jim. However, this does not mean that Group 2 did not experience any benefits from this learning environment. Group 2 also reported and possibly exhibited more confidence using the German language (a slight decrease in English use in the latter weeks), and despite their weaker group structure, they still used German.

Overall, group dynamics played an important role as regards the extent to which the participants were willing to participate. According to interview statements, Group 1 appeared to benefit from an LG trained in a communicative approach to L2 teaching, more communicatively active group members, of which two were academically motivated. Group 2's general non-interest in each other combined with three of the least motivated German students and the three highest gaming-focused students plus an LG lacking teaching experience seemed to create an environment which made it impossible for Group 2 to keep up with the activity and general performance of Group 1. This finding indicates that LLs should choose their gaming interlocutors wisely if spoken language practice is a goal. As seen in Figure 1, TL production waned slightly as the project moved forward, and the participants believed that their lack of interest in each other and lack of shared goals played a crucial role in closing down communication. As suggested by the participants, in order to maximize the possibility of gaming to be a longer-term learning activity and one that optimizes TL opportunities, learners should seek out interlocutors with whom they can enjoy discussing common interests, share similar game or non-game related interests, and include a native speaker who is patient and contributes to a comfortable atmosphere that promotes speaking in the TL.

## Further research

While much CALL research indicates that gaming provides a viable language learning option for many, something as simple as group membership can severely hinder the possibilities of language learning and motivation at an individual level. As seen in Group 2, its combination of participants derailed much of the conversation, thus reducing group members' interactional opportunities. As with many learning tools, 'the right fit' must be found in order for it to benefit learners.

As an extramural activity, learners should be cautious as to whom they choose to game with or, as with Kevin and the LG of Group 2, risk becoming frustrated, which may lead to discounting gaming altogether as a learning path. However, if a person finds the right people to game with, extramural gameplay is likely to be beneficial, as previous research has shown. Regardless of their actual production, all participants in this study reported greater confidence in using the TL and found gaming to be a viable and enjoyable tool for TL practice.

Future research could continue to investigate more closely how interactional partners affect TL use and motivation. Not only could various combinations of compatible interlocutors be explored, but also the role of gender in mixed male/female gaming groups. Since both groups, due to circumstances described above, contained male gamers and female LGs, it was not possible to investigate the potential role of gender here. Since WoW-gaming may have been a distraction at times from using the TL, comparing the MMOG data to other collaborative multiplayer games, such as Sandbox-type games, other role playing games, or real-time strategy games would be valuable. WoW did provide many opportunities to practice the TL and the increased in-game interactivity seemed to generate more speaking. However, the game itself may not provide enough motivation to keep learners using it as a long-term learning tool. Therefore, it is suggested that language learners seek out target-language speakers with a shared interest in the target language and as well as in gaming.

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## About the Author

Donald Vosburg is a lecturer of German at The Pennsylvania State University. His research interests include Germanic linguistics and Second Language Acquisition. His primary interest is with second language acquisition and technology, focusing on the reduction of anxiety both in the face-to-face and online classroom,

teaching with technology, distance language learning course and material design, online instructor training and evaluation, and a special interest in the use of games as a tool for language learning. In particular, he has a deep interest in the use of massively multiplayer online games as a language learning tool.

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