Anxiety, Motivation, and Self-Confidence in Speaking English During Task Based Activities in Second Life

Second Life Ortamında Görev Temelli Dil Eğitimi Etkinliklerinde Öğrencilerin İngilizce Konuşmaya Yönelik Endişe, Gudülenme ve Özgüvenleri

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Öz

Bu çalışma sanal dünyalarda uygulanan görev temelli dil eğitimi etkinliklerinin endişe, güdülenme ve özgüven açısından katkılarını incelemiştir. Katılımcı grup Orta Doğu Teknik Üniversitesi yabancı dil olarak İngilizce eğitimi alan hazırlık sınıfı öğrencileridir ve çalışma uygulaması küresel kullanıcı profiline sahip Second Life ortamında yapılmıştır. Çalışma sonuçları sanal dünyalarda görev temelli dil etkinliklerinin etkili olduğunu göstermiştir. Öğrencilerin Second Life ortamında edindikleri tecrübelerin İngilizce konuşmaya yönelik endişe seviyelerinde azalmaya, güdülenme ve özgüvenlerinde ise artışa katkısı vardır.

Abstract

This study investigated the contribution of task-based language learning in a 3D virtual world to anxiety, motivation, and self-confidence. The participants were Middle East Technical University preparatory students speaking English as a foreign language, and the 3D environment selected was Second Life, an online virtual world with a global user base. The results demonstrated the effectiveness of task-based language learning in the virtual environment, which had a positive impact on students. Findings suggest that students’ experiences in Second Life provided them with increased motivation and self-confidence, helping them overcome anxiety related to speaking English.
1. Introduction

Learning and speaking a second language plays a major role in the modern world, often adding significant value to day-to-day life and helping to break down the barriers between people from different countries. Language learning and teaching requires the presenting and explaining of new material, followed by practice and testing (Verikaitė, 2008). Yet, traditional language education typically only presents the language and does not require sufficient further practice or application. Learning a language is a difficult process that necessitates practical solutions. Among the key competencies for learning a language, such as reading, writing, listening, and speaking, speaking may be the central and most challenging since students do not have positive attitudes in speaking (Nunan, 1999). Speaking a foreign language is a sign of knowing it well, more so than reading or writing (Soozandehfar, 2010). Ruby (2005) stated that a traditional language classroom sees limited interaction; teachers ask questions, present information, and correct students’ mistakes. However, student participation is one of the most important things in language teaching. Therefore, the students should be motivated to participate in lessons. Since traditional education cannot support student participation, technological developments can solve this problem.

Many factors can affect foreign language communication skills; among them, anxiety, motivation, and self-confidence were the focus of this study. The relationship between anxiety and language learning has been investigated by many researchers, some of whom have noted that anxiety does have an adverse effect on the performance of people who speak English as a foreign language (Chen & Lee, 2011; Horwitz, Horwitz, & Cope, 1986; MacIntyre & Gardner, 1989; Phillips, 1992; Stroud & Wee, 2006; Woodrow, 2006). Anxiety especially has a detrimental effect on the oral performance of learners. Woodrow (2006) indicated that anxiety is a problematic issue for the whole language learning process and can cause unwillingness in potential learners.

Another area of research in language learning is the positive role of motivation. Teachers and researchers have recognized motivation in foreign language learning as one of the key factors affecting success (Baker & MacIntyre, 2003; Dörnyei, 2003; Gardner, 1985; Liuolienė & Metiūnienė, 2006; Oxford & Shearin, 1994; Wang, 2008; Zhang & Fu, 2008). Motivation and success demonstrate reciprocal influence; namely, high motivation leads to successful learning, and successful learning secures high motivation (Cook, 2001). Because of the importance of motivation in English as a Foreign Language (EFL), teachers have continually tried to find new approaches that introduce active, efficient, and motivational uses of EFL in the classroom (Wang, 2008).

Self-confidence is another factor that affects students’ achievement in language learning (Clement, Dörnyei, & Nolels, 1994; MacIntyre & Gardner, 1991; Wu, Yen, & Marek, 2011). According to Vandergrift (2005), the main reason behind students’ low motivation may be lack of self-confidence. Clement et al. (1994) have suggested, “Self-confidence becomes the most important determinant of attitude and effort expended toward foreign language learning” (p. 422). If students consider themselves as incapable of learning the target language, their self-confidence is negatively influenced (Park & Lee, 2005).

Attitude of the learner is also a factor that affects students’ success. As suggested by Kaufman (2003) attitude of the learner determines the overall success in language learning more than any factor. It is important to help students develop positive attitudes by increasing their motivation and self-confidence and decreasing their anxiety. However, in traditional language classrooms, students do not generally have positive attitudes about speaking the other language because of a lack of active communication in the lesson (Nunan, 1999). In addition, Nunan (1999) indicated that students who learn English via traditional methods are unable to use that language actively and, consequently, struggle to develop strong communication skills. In order to overcome such problems, teachers need to abandon traditional teaching methods, embracing new solutions with the help of technology.

Modern educators have many options for enhancing their educational environments. For example, 3D virtual worlds (VWs), one recent technology, allow educators to design and develop their own immersive learning environments (Dickey, 2003; 2005). Aldrich (2009) pointed out that VWs allow constructing 3D model structures and these structures give the sense of presence to the users, which has great significance on users’ conception of VWs due to its emotional and social effect. The most common three features of virtual worlds are (1) the illusion of 3D space, (2) avatars that serve as visual representations of users, and (3) an interactive chat environment for users to communicate with one another (Dickey, 2003). VWs offer effective opportunities for creating learning environments (Barab, Thomas, Dodge, Carteaux, & Tuzun, 2005; Ded, Clarke, Ketelhut, Nelson, & Bowman, 2005; Jarmon, Traphagan, Mayrath, & Trivedi, 2008) found to be beneficial for learning and enhancing communicative and intercultural competence (Bryant, 2006; Thorne, 2010). In recent years, researchers have been interested in using VWs in language education (Berns, Gonzalez-Pardo, & Cama-
Purpose of the Study

The purpose of current study was to examine the possibilities of teaching and learning EFL in 3D VWs. More specifically, this study examined the perceptions of university preparatory students and their anxiety, motivation, and self-confidence when speaking English during Task Based Language Learning (TBLL) activities in VWs. This study may contribute to the literature by exploring both the potentials and effectiveness of VWs in foreign language education.

Three research questions were investigated in the study:
1. What are students’ perceptions of their anxiety when speaking English during TBLL activities in a 3D VW?
2. What are students’ perceptions of their motivations when speaking English during TBLL activities in a 3D VW?
3. What are students’ perceptions of their self-confidence when speaking English during TBLL activities in a 3D VW?

Method

To answer the aforementioned research questions, a qualitative case study was applied, allowing for an intensive analysis of a contemporary phenomenon within its real-life context (Creswell, 2007). The main purpose for choosing case study was to provide detailed information about the effects of TBLL in a 3D VW. The case was identified as changes in students’ motivation, anxiety, and self-confidence when speaking a foreign language through VW. The participants of this study included fifteen volunteer students from the upper intermediate level of the Middle East Technical University Basic English Department. There were nine female and six male students ranging in age from 18 to 20. All of the students had personal computers, so they could participate whenever they wanted, but none of the students had previously used VWs. In addition, instructors from the METU Basic English Department and native speakers from various countries participated as facilitators. They helped students with TBLL activities and guided them through the dialogues in the tasks. Students and METU instructors were involved in a two-hour workshop to learn about the study and VW. The study was applied in May 2011 over four weeks. Each week, two sessions were conducted. At the end of the study, interviews were conducted with students.

Context

For this study, a virtual area was designed and developed for TBLL activities. In the overarching scenario, the students were given a role in which they visited the USA for work and travel. Throughout this scenario, students were assigned eight TBLL activities and practiced speaking English with instructors, native speakers, and other students. The tasks were selected to represent daily life situations and to ensure students had a chance to practice speaking.

Task 1: Orientation

The main purpose of the “Orientation” task was to familiarize students with the VW environment and the other participants. This introduction session gave all students the ability to use VW actively going forward. Three areas were designed: an amphitheater for making a presentation about VW, a discussion area for students to talk about their experiences speaking English in daily life under the leadership of instructors, and a dance hall for students to socialize with others (see Figure 1).
Task 2: Work

The main purpose of the “Work” task was for students to have conversations and interviews with prospective employers, plus to practice speaking with others. Each student was assigned to one of three companies for an individual interview; the representatives of the companies were native speakers and instructors. For this purpose, two additional areas were designed: (a) three buildings for conducting interviews with marketing, technology, and amusement companies, and (b) game areas between buildings for students awaiting interviews.

Task 3: Travel

The purpose of the “Travel” task was to provide students with experience speaking at the airport and being transported to the place where they would work. For this purpose, three areas were designed: an airport with points to check in for a flight to the USA, teleport points for moving students, and a hotel where students sought out a roommate.

Task 4: In the States

The purpose of the “In the States” task was to prompt students to discuss a controversial topic, cloning. For this purpose, a discussion area was designed (see Figure 2).
Task 5: Health

The purpose of the “Health” task was for students to have dialogues in the hospital, where they were expected to get a health certificate to work in the USA. A hospital was designed that included a reception area, doctor’s office, and sickroom for students to talk about their health problems.

Task 6: Leisure & Culture

The purpose of the “Leisure & Culture” task was for students to socialize with people from different cultures and obtain basic information about accents. For this purpose, a restaurant was designed for students to share dinner and dialogue.

Task 7: Shopping

The purpose of the “Shopping” task was for students to gather information about products they liked by researching prices and buying something. For this purpose, a mall was designed, including stores for female clothing, male clothing, and technology products.

Task 8: Farewell Party

The purpose of the “Farewell Party” task was to determine all groups’ impressions about the tasks. All participants gathered at the dance hall and discussed their experiences, as well as how and where they can continue to use spoken English in real life.

Data Sources and Analysis

A 20-item background questionnaire was designed to gather information about students’ interest in computer and Internet technologies and their experiences in English education. Semi-structured interviews were administered in order to get more detailed information about students’ perceptions of VW and the study. Content analysis was applied to the interviews. For that purpose, interviews were recorded and transcribed. A list of themes emerged and the data were searched for relevant comments. Themes were chosen based on the research questions, and they provided direction for the data analysis. Ultimately, data were coded according to the themes, and a peer debriefing method was conducted to ensure trustworthiness. An expert examined the transcripts and provided feedback to the researcher.

3. Results

Anxiety when Speaking English during TBLL Activities in VWs

The findings from this study address important elements related to anxiety. Results showed that 3D VWs and TBLL activities had an important effect on anxiety and helped learners to overcome anxiety-related problems. During interviews, students presented the elements of the study that had positive impacts on their anxiety levels (see Table 1).

Table 1. Elements Affecting Student Anxiety

<table>
<thead>
<tr>
<th>Elements</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of gesture in VW</td>
<td>Decrease in excitement</td>
</tr>
<tr>
<td>Existence of native speakers in VW</td>
<td>Decrease in fear of making mistakes</td>
</tr>
<tr>
<td>Understanding mistakes are normal</td>
<td>Decrease in the number of mistakes</td>
</tr>
</tbody>
</table>

All students indicated that speaking in that environment was much easier when compared to face-to-face instruction. One aspect of VW that made speaking appealing was that other participants did not see the face of the person speaking. Eleven students stated that knowing others did not see their face while speaking was relaxing. As S2 explained, “In VW, it is possible to be more comfortable since you do not see the gestures of the other person.” According to the results, the native speakers, who actively participated in the activities and engaged in conversations, also enabled students to feel more comfortable in speaking. Three students expressed how speaking with native speakers helped them to understand that they had the ability to communicate. S1 stated, “I would feel shy and stay back if a foreigner asks me something before VW. But now, I feel like I can speak with a foreigner.”

Unfortunately, a common misunderstanding in learning is that mistakes are not normal, making students anxious. Three students indicated that they understood that making mistakes does not cause problematic situations and that it is possible to reach out and engage in healthy communication with native speakers and other participants. According to
S7, “There was fear to make mistakes at the beginning, but there is not now because I saw that I could rephrase the same sentence in different forms when I make a mistake.”

In summary, within the scope of the related research question, students who were anxious about speaking English before the study discovered several means of overcoming that obstacle within VW.

**Motivation when Speaking English during TBLL Activities in VWs**

According to the results of the study, students had positive perceptions related to their motivation. In this respect, the characteristics of VW contributed. In fact, at the end of the study, motivation levels were actually higher than the beginning. This study was an opportunity for students to practice English with native speakers in an enjoyable and attractive environment. During interviews, students presented the elements of the study that had a positive impact on their motivation levels (see Table 2).

**Table 2. Elements Affecting Motivation**

<table>
<thead>
<tr>
<th>Elements</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D environment</td>
<td>Increase in fun, curiosity</td>
</tr>
<tr>
<td>Existence of native speakers in VW</td>
<td>Increase in willingness to speak</td>
</tr>
<tr>
<td>Realistic 3D virtual environment</td>
<td>Increase in immersive feeling</td>
</tr>
</tbody>
</table>

At the end of the study, thirteen students who had positive motivational responses towards speaking stated that they found the environment entertaining, they participated in the activities with pleasure, and they were enthusiastic about communicating with others. Four students mainly compared 3D environments with 2D environments, indicating that they preferred the 3D environment for its entertainment value. S3 said, “I can say that I would not enjoy it this much if it was a 2D game or something like Skype. For instance, the airport was really good.” Six students also shared positive comments about motivation in terms of communicating orally with native speakers in VW, which encouraged them to speak more often. S3 explained, “It is a motivating thing that the ones that you talk to are native speakers. Sooner or later, you would go abroad and speak English there.” One of the most important positive aspects of 3D VWs is their visual richness, which immerses users in the realistic environment. Two students, including S9, indicated that these factors made them much more willing to speak: “It became more realistic by being 3D. We carried out a story since the beginning... I think that motivation has increased as a thing that self-confidence has provided.”

In summary, within the scope of the related research question, students had positive perceptions related to motivation, with higher levels of motivation at the end of the study than the beginning.

**Self-Confidence when Speaking English during TBLL Activities in VWs**

Different elements affect students’ self-confidence. During the interviews, students presented the factors in the study that affected their self-confidence (see Table 3).

**Table 3. Elements Affecting Self-Confidence**

<table>
<thead>
<tr>
<th>Elements</th>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easiness of the navigation in VW</td>
<td>Speaking easily</td>
</tr>
<tr>
<td>Existence of native speakers in VW</td>
<td>Seeing personal capabilities</td>
</tr>
<tr>
<td>Practicing in VW</td>
<td>Feeling confident</td>
</tr>
</tbody>
</table>

Study results showed that self-confidence is closely related to both anxiety and motivation. Students developed self-confidence when speaking by the end of the study because of decreased anxiety and increased motivation. Students especially emphasized how they could speak more easily after the study. As S14 shared, “It makes you gain self-confidence. Yes, I had felt that it would be useful like this while taking the classes in VW environment. Since we speak more frequently, VW has accelerated the process in this context.” Five students indicated that seeing their capabilities when interacting with native speakers made them more confident. S7 expressed, “Obviously, since I had spoken with the native speakers, my self-confidence recovered. …Maybe, since I have heard both their voice and speaking style, it has been better and nice for me.” One important issue was providing students with conditions in which they could actively use English in realistic daily situations. Three students indicated that practicing speaking in VW provided them with increased self-confidence. S11 explained, “When I spoke in VW like this, I felt more relaxed, I felt like I know English and I can speak English and such like that.”
In summary, within the scope of the related research question, students had positive perceptions related to their self-confidence. At the end of the study, their self-confidence was higher than the beginning. In this respect, the characteristics of VW contributed highly.

Based on the qualitative results, the current study revealed important findings for language education. The interviews showed that beliefs of students can be changed in a positive way with 3D VWs. This study was an important opportunity for students, since they would not have had as much practice speaking English if they had not participated. Students realized that they had the ability to speak English proficiently after they practiced in a relaxing 3D environment. Even those who did not believe they spoke English well changed their minds after seeing their potential.

4. Discussion, Conclusion and Limitations

Discussion and Conclusion

The results of this study primarily demonstrated the effectiveness of TBLL in 3D VWs, which had a positive impact on students and improved their attitudes towards speaking English. According to the results, students were pleased to have such an experience in an attractive environment. In particular, they showed more enthusiasm about speaking with new people, especially native speakers, which is necessary for active usage of a target language. Despite the study was conducted in 2011, current studies conducted in VWs support the findings of this study (Canto, Jauregi, & van den Bergh, 2013; Deutschmann, Panichi, & Molk-Danielsen, 2009; Melchor-Couto, 2016; Satar & Özdener, 2008).

The main goal of language learning is the capability to express oneself to native speakers of the target language (Payne & Ross, 2005). It is common that native speakers are the best teachers of English as a second or foreign language (Kachru, 2005). Findings from this study suggest that VW formed an effective bridge between cultures, enabling learners to interact with native speakers. 3D VWs offer many opportunities for applying different contexts in language education, such as TBLL. When students in the study recognized how well they spoke with natives, they developed a more positive attitude and, as a result, overcame barriers that discouraged them from speaking. These positive elements helped them to improve their English, and interacting with native speakers paved the way for continued real life experiences. Furthermore, the results of the study proved that the accessibility to native speakers enabled students to improve their English pronunciation and listening skills in addition to their speaking skills. The findings of the study are in line with the literature. In the study of Jauregi, Canto, Graaff, Koenraad and Moonen (2011), students were observed to have positive attitudes towards interacting with native speakers in VW. Chen (2010) conducted a similar study in VW in which Chinese students communicated with native English speakers, and the students were successfully able to communicate and exchange ideas and opinions.

According to the results of the current study, an important advantage of VWs is the avatars that represent users in the environment. This finding is consistent with previous studies (Aldrich, 2009; Baharum & Tretiakov, 2008; Bailenson, Yee, Merget, & Schroeder, 2006; Bailenson, Yee, Merget, & Schroeder, 2006; Iqbal, Kankaanranta, & Neittaanmäki, 2010). The avatars enabled students to feel more like a part of the environment, a significant difference between 3D and 2D platforms.

In terms of moderating anxiety, the study found VWs to be an effective platform. Students had the chance to practice English from behind their avatars, which helped them to overcome anxiety-related problems. They found speaking easier in VW compared to other environments, which is also consistent with previous research. Jee (2010) indicated that VW creates a non-threatening environment, allowing students to interact with people more easily. Some students in the study found speaking with native speakers to be relaxing, which alleviated their anxiety. The inclusion of native speakers in the study helped the students to understand that they did have the ability to communicate in English.

For the purposes of motivation, the results of the study were also efficient. According to the results, the enjoyable, entertaining aspects of 3D VWs motivated students to engage in the activities. They enjoyed participating and had fun during the lessons. In contrast, 2D and face-to-face environments are generally less attractive. Hislope (2008) indicated that people tend to learn better when they enjoy what they are doing. Similarly, Wu, Yen and Marek (2011) found in their study that entertainment in a learning experience is the best predictor for long-term changes in ability. Kaplan and Haenlein (2009) observed that a key motivation for spending time in VWs is to have fun. The characteristics of VWs were also found to be a motivating factor in this study. The rich visual elements of a 3D virtual environment were shown make the learning process more realistic, motivating students to speak. Omale, Hung, Luetkehans, and Plagwitz (2009) likewise indicated that research conducted on the motivational aspects of 3D VWs showed that those environments, especially their graphical interfaces, motivate learners because they are visually appealing, animated, and interactive.
Finally, for self-confidence the study results were also effective. VWs enable students to gain self-confidence when speaking English, which is in line with the literature (Henderson, Huang, Grant & Henderson, 2009; Hislope, 2008; Loureiro & Bettencourt, 2011; Wu et al., 2011). According to the results of Hislope (2008), VW is a beneficial resource for conversational opportunities and cultural experiences, both of which improved self-confidence during the present study. Similarly, Henderson et al. (2009) conducted a study to investigate the effectiveness of an immersive VW on self-efficacy beliefs about using language in real-life contexts. They found positive results in terms of self-efficacy and self-confidence. As in this study, when students realized their capabilities using English, their self-confidence increased. They started to speak more easily in comparison to the beginning of the study, which is consistent with Zheng, Young, Brewer and Wagner (2009), who determined that 3D VWs enable learners to develop self-confidence while actively using English.

To conclude, results of the study implied that students’ feelings need to be examined and teachers should try to use new methodologies and approaches in language learning processes by taking the negative beliefs of students into consideration. TBLL activities in 3D VWs provide opportunities to learners to gain positive attitude. Each participant in those environments can have a responsibility and hold a different portion of the task and thus have enough interaction. As a results, it is possible for students to overcome the problems they have in speaking English.

Limitations

Although this study provides valuable information in the field of language education, the number of the participants was the most important limitation. A future study can be conducted with more participants with an experimental study.

The other limitation of the study was the technical problems occurred sometimes during the activities, due to speed of the Internet or the computers of participants. Those kind of technical problems prevented the flow of the activities at some points.

5. References


