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The Call Triangle: student, teacher and institution

Using a quest in a 3D virtual environment for student interaction and vocabulary acquisition in foreign language learning

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Abstract

The gaming and interactional nature of the virtual environment of Second Life offers opportunities for language learning beyond the traditional pedagogy. This study case examined the potential of 3D virtual quest games to enhance vocabulary acquisition through interaction, negotiation of meaning and noticing. Four adult students of English at advanced level and a native speaker of English formed two groups, one group of two students and one group of two students and the native speaker. The groups took part in the Pot Healer Adventure Quest in Second Life. Qualitative analysis showed that a) there was a great amount of output and meaningful interaction, as well as negotiation of meaning and negative feedback for the words tested, b) small but substantial quantities of incidental learning of vocabulary occurred, together with some small samples of incidental learning from some students, and c) noticing worked very well in the activity, due to the combination of the written chat, the virtual environment and the game itself. There is a need to promote the creation of quests that will combine the attractive elements of games with the aim of second language learning. More research is needed to see how we can have effective language learning while interacting in virtual environments. More study cases with various samples should be conducted for more conclusive evidence.

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Keywords: Virtual environments; quest; Second Language Acquisition; interactional theories; incidental and intentional learning; vocabulary learning.

1. Introduction

The value of Virtual Reality as a pedagogic-didactic tool is well established in literature. The advantages of 3D virtual environments as educational tools include presence, creative skills, participation, collaboration (Fokidis & Tsolakidis, 2007), as well as active involvement, motivation, a high degree of interaction and individualization (Mikropoulos, 2000). On the other hand, quests have been widely used in language learning (Baltra, 1990; Pereira, 2009), since they allow second language acquisition to take place in a natural way through discovery learning.

The combination of the benefits of both quest games and the virtual environment of Second Life was assumed to lead to positive learning outcomes. The basic idea behind this study was to ask students to participate in a quest in Second Life and interact amongst them, to find out whether virtual quests can

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enhance interaction and vocabulary acquisition within the framework of informal learning. We are looking into all these factors: interaction, game and virtual world that might offer better conditions for incidental vocabulary learning and second language acquisition in general.

2. Method

2.1. Theoretical framework

The theoretical framework moved around two axes: didactics - pedagogy and language. As for the first axis, we are looking into those approaches that pay particular attention to students' interaction and cooperation, that is Sociocultural Theory (Vygotsky, 1978, in Ohta, 2000), and game-based learning (Prensky 2007; Gee, 2007b). Then we have the interactional theories (cited in Mitchell & Myles, 2004) with the notions of Negotiation of Meaning and Noticing (Long, 1983c, in Ellis 1990; Gass, 2003; Jepson, 2005), Incidental and Intentional Learning (Schmidt, 1994a; Hulstijn, 2003) and Communicative Approach (Howatt, 1984, in Sullivan, 2000).

2.2. The research

This case study followed the qualitative research model. The researcher was involved as participant researcher. For the needs of this study a non-probability sample was chosen, more specifically purposive sampling was conducted. The people who participated were 4 adult learners of English at advanced level, a native speaker and the researcher, in the role of facilitator.

2.2.1. Research questions

Two questions have been formed in the study. The first question regards quest and interaction: Are virtual quests suitable for extensive interaction, negotiation of meaning and negative feedback, provided there is collaboration among students and among students and a native speaker? We are looking into the quantity, the kind of interactional modifications as well as if those lead to language acquisition.

The second question refers to the quest within a virtual world: What are the features of the specific quest and the virtual environment itself that assist vocabulary acquisition? Data are being examined within the context of incidental learning and the notion of noticing.

3. Discussion

The game lasted several hours in a duration of three days; great amounts of output occurred, a fact that shows that games in which players communicate and collaborate are suitable for extensive interaction. Negotiation of meaning and negative feedback have also emerged, although not in great amounts, for those lexical items that had a prominent place in the game, as well as for the game itself. The amount of negotiation of meaning seems to depend on the language level of the students, the quantity of the key-words that will be highlighted in the game, as well as the complexity of the riddle throughout the quest.

Negotiation of meaning led to foreign language acquisition, but not in all cases. However, even if negotiation of meaning does not always lead to acquisition, it is clear that it facilitates the development of communicative competence, as also shown in this quest, where learners used various strategies to deal with communication problems. As it has been assumed from the beginning, negotiation of meaning that focused on language had almost exclusively had to do with words and expressions, mostly with their meaning, and less with their form. Clarification requests and paraphrases for clarification prevailed. In the total of negative feedback, most prominent were recasts.

Interaction in small groups was richer and more constructive, mostly because of the nature of text chat, but also, like it would happen in face to face communication, each one's participation is greater and more isomeric in groups of two and three people rather than in bigger ones. Moreover, conversations with the native speaker seemed to be more complex and constructive, because she produced utterances that caused greater negotiation, but even when they didn't, they were noticed and retained by the learners.

Small but essential quantities of vocabulary learning occurred, mostly incidentally, together with some small samples of intentional learning from some students. Noticing worked very well in the quest, due to the combination of text chat, virtual environment and the game. Words and expressions that have been multimodally presented in the game, were the ones that have been retained by the learners.

4. Conclusions

The findings of this study suggest that it is worth creating virtual quests for second language learning purposes. Virtual quests can be beneficial mostly for interaction, negotiation and communicative competence and less for vocabulary acquisition. However, since this is a case study with a small sample, and the quest is not designed for second language learning purposes, we must be careful with the interpretation of the results. More research should be conducted with quests that combine the attractiveness of a game with the learning techniques used in education.

Educators should see those games as the learning environments of future generations. And the real challenge is not just to bring any technology at school, but rather change the school's mentality regarding the way of learning. Gee says "So the suggestion I leave you with is not "use games in school" –though that's a good idea – but: How can we make learning in and out of school, with or without using games, more game-like in the sense of using the sorts of learning principles young people see in good games every day when and if they are playing these games reflectively and strategically?" (Gee, 2005:28).

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