# Researching Language Learning in Virtual Worlds. An Exploratory Case-study

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#### Abstract

This study explores the notion of learner participation within the context of online language learning in virtual world platforms. Participation is discussed as learner interaction in the target language with reference, in particular, to Breen [1] and Lantolf [2] and as online learner activity as discussed by Bento and Schuster [3] and Hrastinski [4]. In addition, the study builds more specifically on existing research into learner participation in virtual worlds by Deutschmann, Panichi and Molka-Danielsen [5] and Peterson [6]. Data was collected through a case study of a Business English course within a European telecollaboration project at tertiary level. The course at the centre of the case study comes under the umbrella of the EU-funded Euroversity Network (www.euroversity.eu). The study makes use of Reflexivity (e.g. [7]) and Exploratory Practice as its core methodological approach to the building of the case. The virtual world data is analysed from a multimodal perspective within CMCL (e.g. [8]) and makes use of visualisation [9] as the primary analytical tool. The study provides an expanded definition of learner participation which reflects the learning dynamics of virtual worlds within the specific teaching and learning context. The study evaluates the role played by designer beliefs in determining learner participatory outcomes and makes recommendations for teaching and future course design. The study also illustrates the use of virtual world platforms as a research tool.

#### 1. Introduction

This paper aims to provide an illustration and discussion of the specifics involved in researching language learning in virtual worlds and the unique research approach this platform generates. In responding to the call for more multimodal research within Computer Mediated Communication in Language learning (CMCL) [10], this study set out to explore whether there were other ways of looking at language learner participation in virtual worlds that went beyond an analysis of linguistic data. As a result, this study is the first contribution in the field of CMCL to a discussion of language learner participation in virtual worlds based on visualisation (i.e. [11]) as the key analytical tool. As such, this study not only addresses the observed bias in the research literature towards linguistic data, but it also provides new insight into how learner participation can be conceptualised in general. It contributes to the discussion of online communication within CMCL by adding avatar movement to the list of ways learners may participate within online learning platforms.

#### 2. Methodology

Following an initial introductory excursus into my philosophical assumptions and their role within my research project, the section on methodology of this paper will discuss the rationale for my research design and how it was supported and developed by my research protocol. I will then illustrate how, through the use of reflexivity and ongoing reflective engagement with my research project and its processes in the qualitative research tradition (e.g. [12] [13] [14]) I was able to gain a more in-depth understanding of what I was doing. In turn and over time, this increased awareness of what I was doing enabled me to go on and frame my research project within the field of Practitioner Research, and to make use, more specifically, of Exploratory Practice (EP) as defined by Allwright [15] [16] and Allwright and Hanks [17]. Last but not least, as I moved away from my initial conceptualisations of what I thought I was doing and gained a better idea of how my project was indeed unfolding, I also came to the decision to present my research project as a case study (e.g. [18] [19] [20]) albeit with a very heavy 'reflective' coating. To conclude, this section is thus to be understood as both an overview of the procedures I followed in my research project, including a discussion of the underlying rationale for those procedures, and as a narrative of emergent understandings which resulted from that process and which ultimately came to bear upon the research project in terms of significant procedural outcomes in their own right. These outcomes were:

- The decision to relate my project to the Exploratory Practice approach and
  The decision to frame my work as a Case Study.

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Indeed, these are not to be considered as a priori research decisions but as outcomes from the reflective process. This approach to Case Study research whereby the case often only becomes apparent after the researcher has started working with her research project is also confirmed in the Case Study research literature (e.g. [21]).

#### 2.2 Research Design

From the very beginning of my research project, my main aim was to create a research design which would allow me to think about participation in relation to formal language instruction in three dimensional virtual world platforms in a more 'fluid' and 'flexible' and less 'structured' way than had been done in previous research. Indeed, while my own experience with Action Research [22] [23] had enabled me to discuss bringing about changes in student participation in virtual world language learning, I was nevertheless left with the nagging feeling as a practitioner researcher that perhaps our focus on bringing about and documenting change had overlooked a more fundamental educational issue, namely, what is meant by participation in the virtual world in the first place, how do we as teachers and course designers impact on it and, more generally, why we are doing what we are doing at all. In other words, it seemed to me that my previous research had taken for granted the concept of participation. I was convinced that further research could only really make sense if it allowed me to go back and find a way of getting at some of the assumptions that were being made in the research literature in general. In other words, I felt I couldn't move forward until I had taken a couple of steps backwards. In view of the discussion above, I was aiming for a research design that would enable me to incorporate my professional and epistemological bias and that would be as open as possible so that I would have ample room for both thinking about participation as well as documenting how it played out in the virtual world. I felt I needed to create a research design which would enable me to explore the methods available to me just as much as the topic. In this sense, the research project became equally as much about thinking about ways of understanding participation in the specific context as understanding the phenomenon itself. Thus, I envisaged a methodology that would attempt to capture, on the one hand, as broad a picture as possible of what we were doing as a community of language practitioners in virtual worlds in relation to my research topic but which, at the same time, would provide me with a framework for "letting go" of previous methods and allowing new methods to emerge. This non- prescriptive and flexible approach to research methodology is often referred to as "emergent design" in the qualitative research literature (e.g. [24]). As a result, the aim of my research design was to cater for the delivery of two kinds of research outcomes:

- 1. Outcomes about participation and:
- 2. Outcomes about a methodology for thinking about participation in my specific context.

## 2.3 Research Protocol

The Protocol which is discussed and presented here is to be considered a summary of my data generation and collection plan and the issues involved in this process during the entire duration of my research. My research design and research questions, and their development over time, are clearly stated and traceable in the documents that inform my research protocol: my initial research proposal, in the progress reports, in a memorandum to my research supervisors and in my researcher log. The Protocol was intimately related and logically connected to the research design (i.e. my aims, my rationale and my bias or starting point) and constituted the identification, sequencing and interdependency of actions that needed to be taken for the implementation of the research project in relation to the information and resources that became available to me as I progressed with my research project. This dynamic process as captured by this set of documents is one with which I constantly engaged as I proceeded with my research project both as a means of making sure that I was on track and as a framework for justifying all deviations from the initial research design as they became necessary. Yin [25] highlights the importance of adopting a research protocol in Case Study research. He argues that research protocols contribute to validity of Case Study research by providing the researcher with a logical sequence of events and procedures to be followed with constant reference to the research questions and propositions [26]. In addition, protocols can also be seen as contributing to the general qualitative research requirement of transparency [27] by allowing for closer scrutiny of the researcher's actions and thinking at the time he or she was carrying out the research. In line with recommendations in the Case Study research literature ([28] [29]) my Protocol addressed the following data collection and procedural issues:

- 1. Identification of an appropriate data collection setting;
- 2. Identification of the data to be collected;
- 3. Identification of the methods to be used for data generation and collection;

- 4. The timeframe for data collection;
- 5. Ethical requirements for the research project;6. Risk management;
- Methods for data analysis;
- 8. Data classification;
- 9. Procedures for reporting of the project.

## 3. Summary of research outcomes

There are two main research outcomes that stem from the methodology discussed in this paper. The first is an enriched definition of what is meant by language learner participation; the second is the provision of a research methodology that enables virtual world researchers to collect and analyse data that, in previous research, was overlooked or not fully incorporated into data sets.

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