



Second Life for Virtual Communities in Education: Sharing Teaching Principles?

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How do expert educators perceive their teaching practice and professional identity in the openness of immersive virtual environments? This paper summarises some findings of a study of teaching practitioners' narratives from the UK about the use of virtual worlds or MUEs (Multi-User Virtual Environments) in higher education and adult language learning classes in the UK. The main questions addressed are whether it is possible in environments such as SL to identify socio-constructivist principles of education practice (in general and more specifically with regards to second language teaching) and whether there are grounds for critical teaching and «reflective practice» (Edge, 2011; Guichon, 2009) in virtual worlds used for higher education that have either been specifically designed for teaching or not. Within the theoretical framework of socio-constructivism and critical multimedia literacy, the data will be commented focusing on how the communities of practice are presented and how the process of teaching and learning is

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perceived. The analysis is qualitative and aims at revealing the positioning of expert practitioners vis-à-vis educational strategies implemented and advantages or disadvantages of using immersive virtual environments to achieve learning goals.

1 Introduction

How do expert educators perceive their teaching practice and professional identity in the openness of immersive virtual environments? This paper summarises some of the findings of a study of teaching practitioners' narratives about the use of virtual worlds or Multi-User Virtual Environments (MUVES) in higher education in the UK. MUVES are virtual environments in which participants are present inworld and interact and communicate (verbally and non-verbally) through an avatar they have chosen, adapted or entirely created from scratch. Some MUVES are private worlds while others, like Second Life (SL)¹, are open to all adult participants. The main characteristic which distinguishes these tools from other social media is that the avatar is visually and communicatively immersed in the virtual world. In this paper I will refer to MUVES in general and Second Life in particular because it is the best known and most widely used MUVE in higher education. I will use alternatively one or the other term to refer to immersive inworlds. An analysis of the differences and similarities between the two is beyond the scope of this article paper.

The main questions addressed are whether it is possible in open environments such as SL or MUVES to identify principles of socio-constructive educational practice (for a variety of subjects and for language learning in particular) and if teachers using these tools are engaging in critical teaching and «reflective practice» (Edge, 2011; Guichon, 2009) in virtual worlds used for higher education in Britain. The overarching hypothesis of this study is that, as Goodfellow and Lamy (2009a, p. 7-9) suggest for cultural studies, we might be at a stage beyond socio-constructivism as theorized by Anglo-Western, English-speaking, ICT-intensive cultural paradigms, especially in contexts of «transnational online learning» within «globalized e-learning cultural challenges» (Edmundson, 2007). Commenting on critical pedagogy, Pennycook (2001) writes:

everything in the classroom, from how we teach, what we teach, how we respond to students, to the materials we use and the way we assess the students, needs to be seen as social and cultural practices, that have a broader implications than just pieces of classroom interaction. (p. 139)

If this is applied to online teaching in a virtual world such as Second Life. On the one hand it can be taken to an extreme: every move, event, participant

¹ Second Life: www.secondlife.com

and interaction is mediated through the virtual platform and its rendering of participant presence, verbal and non-verbal communication, affordances of media converging in this complex world. On the other hand, it can be partly non-applicable because the social and cultural practices as well as the participant identities that can be found in SL are fragmented, changeable, flexible and hybrid in a way which is hard to define and categorise.

The paper will briefly outline the theoretical framework, namely socio-constructivism, as implemented in immersive virtual worlds. The findings of the qualitative data analysis will be summarised focusing on how the communities of practice work and how teaching and learning are perceived. Then the findings will be briefly discussed and interpreted.

2 Theoretical Background

Potentially, virtual environments offer, even more than offline environments and classrooms, affordances that seem to cohere with and be conducive to promoting and facilitating social constructivist approaches to teaching and learning. In particular, as de Freitas and Veletsianos (2010, p. 3), Kluge and Riley (2008, pp. 129-131) and Warburton (2009, p. 421) remark that virtual worlds can:

- contribute to re-organising and extending social interactions and collaboration;
- help increase engagement and motivation through greater learner empowerment, participation and creativity;
- provide broader opportunities for personal and group meaning-making through learner-led activity, problem-based tasks, exploratory learning and user-generated content production;
- offer opportunities to implement simulations and re-create realistic/authentic situations of interactions;
- favour opportunities for experiential learning and generative capabilities (the possibility of creating, manipulating and customizing objects, starting from one's own avatar); and
- promote cross-cultural/intercultural encounters with avatars who speak a different language.

These affordances seem to facilitate interconnections, creative capabilities and interactivity to such an extent that one-sided authoritative sources become less and less acceptable, while the new «learning ecology» is based on participatory and creative practice, content creation and interactivity (Greenhow *et al.*, 2009, p. 249).

Second Life can be included in what Greenhow, Robelia and Hughes (2009,

p. 249) define as «knowledge building» environments, that is environments whose affordances are «interconnections, creative capabilities, and interactivity». As will be seen, all these affordances are potentially present, but this does not mean that they are exploited by users in teaching and learning since «shared theories» do not necessarily become «shared practices» (Stevens, 2009; Trappes-Lomax & McGrath, 1999).

This brings us to “critical multimedia literacy” in virtual world use, namely in environments for which the word “literacy” is problematic in etymology and definition. Kress thus summarises the issue: «When referring to script and writing, the notion of literacy is problematically imprecise. It becomes an obstacle when extended to other modes and processes of representation» (Kress, 2010, p. 102). While acknowledging the controversial use of the word “literacy” for an immersive context such as SL, I still retain the term since no other “label” so far has satisfactorily replaced it. Lemke (2006) believes that the key to «critical multimedia literacy» is «creative authoring» and production, namely, helping students to use existing multimedia independently and creatively, which is also a key issue mentioned by MUVE practitioners in the data and takes us back to socio-constructivist practices of learning.

Communities of Practice (CoPs) in virtual learning environments are practitioners in networked learning; as a consequence, participants gain skills and knowledge from expert community members (Gannon-Leary & Fontainha, 2007, p. 3; Wenger, 1998). The participatory nature of virtual worlds has the potential to enhance the principle of knowledge as «decentralised, accessible and co-constructed by and among a broad base of users» (Greenhow *et al.*, 2009, p. 247). But how do practitioners relate to all this?

3 Data and Methodology

In order to analyse the voice of virtual world practitioners, I chose two different and complementary sets of data. The first set of data consists of six reports from the several commissioned and sponsored by Eduserv and Virtual World Watch about the use of virtual worlds in higher and further education in the UK, which were reported in a series of published *Snapshots*². The second set of data was chosen to focus more closely on one of the many disciplines taught and learnt in SL, and it consists of the discussion of the pros and cons of SL for language teaching and learning recorded as a public interview of the language teacher trainer and SL practitioner Nik Peachey in a discussion about teaching English as foreign language³. Both sets of texts report the informal

² John Kirriemuir (ed) *Snapshots*. Eduserv www.eduserv.org.uk. Virtual World Watch www.virtualworldwatch.net (accessed on 30th December, 2009). These reports were freely downloadable from the website from 2007 up to 2010.

³ Nik Peachey (2009): the interview (88 minutes) can be downloaded from <http://www.blip.tv/file/2482035> (accessed 20th January 2012).

voice of practitioners in written form (chats, interviews, questionnaires, and so forth) in the case of the *Snapshots*, and in transcribed form for the oral discussion with Nik Peachey.

The analysis carried out on the two sets of text is qualitative and based on the identification of examples that can help reveal how expert practitioners position themselves vis-à-vis teacher roles, student roles, educational strategies implemented, and the advantages or disadvantages of using virtual environments such as SL to achieve learning goals. The written and oral narratives were categorised and interpreted using the three domains of mediation identified by Lantolf (2000) for language learning and adapted here to a much broader virtual context of learning and teaching: «mediation by others in social interaction; mediation by the self through private speech; mediation by artefacts» (p. 80). Since these domains are interrelated in complex ways and feed into each other, categorising instances in quantitative terms would be problematic. The narratives alternate voices of a variety of participants which have been dealt with as a complex and flexible virtual community rather than in terms of individual participants.

The manual analysis identified key concepts related to the expressions mentioned above: teacher and student roles (self and social mediation), educational strategies implemented (self, social and artefact mediation), and the advantages or disadvantages of using virtual tools and contexts to achieve learning goals (artefact mediation). These key concepts (linguistically expressed in a great variety of ways and therefore not detectable by a software tool) constituted the basis for a manual semantic and discourse search of the data to identify significant aspects in the way the expert participants express their views and opinions about their work as educators and the virtual community they belong to. The following points are some of the most relevant findings in the data analysis.

4 Data analysis

The reports show a very high level of awareness in self mediation on the part of the participants in terms of reflection on their teaching practice: they refer to the need to focus on learning-centred practice not as an abstract requirement, but as the only possible way to obtain results in immersive virtual world teaching. The narratives show that there are many shared principles of education amongst the participants, i.e.:

- the general high level of reflective awareness on the use of virtual environments for teaching;
- the need to explore, plan and implement new methodologies, materials and participant roles along with the impossibility to apply offline world activities without adapting them to virtual affordances;

- the need to focus on the learning process;
- the relevance of proficient levels in multimedia literacy for students and lecturers;
- the high motivation to explore original ways of using MUVES; and
- the awareness that MUVES might not be the ideal solution in some instances and might create new problems and require new solutions (e.g. the specific social skills to cope with virtual interaction, etc).

Being a reflective practitioner does not seem to be an ideal to attain, but a real necessity in virtual world teaching, as these quotes show:

[I] like to think of there being a dimension that goes from “Learning about” through “Learning by doing” to “Learning by becoming”. (May, 2009)

The kind of pedagogy SL fosters – interactive, personal, creative – is a transformative pedagogy rather than a passive one. (May, 2009)

The emphasis is on a socio-constructivist type of learning where “social” mainly means Virtual E-Communities, and “constructivist” emphasises meaning-making in the sense of exploratory and imaginative solutions. However positive the shared principles above might be, the overarching hypothesis that we might be at a stage beyond socio-constructivism is not confirmed since these principles are suitable to and theorized by Anglo-Western English-speaking, ICT-intensive cultural paradigms, as we shall see below.

This brings us to social mediation, Lantolf’s second category. The social aspect of learning as co-construction takes on great emphasis in an environment whose main characteristics are networking, interaction, immersivity. Furthermore, as some of the teachers in the narratives point out, «presence» is much more directly involving (and challenging) than in social networks such as Facebook or Twitter, let alone traditional classrooms:

When the barriers to engagement are removed (e.g. good inductions, suitable hardware, timetabling) students learn in a qualitatively different way than traditional teaching methods allow. Participation becomes an adventure and the activities are often reframed as ‘fun’ (December, 2009).

The exploratory quality and enquiry-rich learning of virtual worlds involves both teachers and students, as indicated in these comments:

[t]he most effective structures that we have put in place have been the ones that enable and encourage freedom. This is usually in the form of a coaching-based approach, with staff and other students acting as mentors and guides to the virtual

world and all it has to offer. (May, 2008)

You still have to scout for locations, build sets, source props and solve problems. Problem solving skills come into play again in the programming tasks. The LSL [learning in SL] language doesn't do everything for you, you have to find workarounds. Programming in LSL also brings in some ideas that I think are overlooked these days when students create applications. (December, 2009)

The relevance of games, tasks and projects in SL, and the collaboration and teamwork required to carry out tasks and projects correlates with the tendency towards a socio-constructivist approach to learning and requires hybridization of identities between the communities of teachers and learners. However, this might not be «universally» suitable for all participants (Goodfellow & Lamy, 2009a and 2009b). As no technological or pedagogical choice is culturally and ideologically neutral, the dominant cultures in MUVes such as SL tend to respond to Anglo-Western conventions of society and power-relation in education (distributed cognition, connectivism, and so forth), and so does the technological and economic set up of such worlds. The Anglo-Western centrality and bias is reinforced by the dominant languages used in SL: varieties of English and different uses of English as a lingua franca for education and transactions.

The performative characteristic of participant presence inworld through his/her avatar and immersivity, derives the most highlighted quality of MUVes: the possibility of implementing experiential learning through simulations and object and context creation. This is connected to the third and last type of process mediation: artefact mediation. The emphasis on experiential learning and creativity shows throughout that the most valuable implementations of SL for higher education have so far been in fields which involve hands-on, contextual experience (such as design, fashion, professional training, etc) and profit from simulations (situated learning for tasks and projects). One lecturer writes:

The big attraction for me is the user created content. We are making the world. I don't know if Second Life will be overtaken by something else in the future. Perhaps it doesn't matter, for virtual worlds are, presumably, here to stay. (December, 2009)

In the reports, the interrelated aspects of experiential learning, simulations, creativity and imagination are continuously highlighted as assets of virtual worlds which involve and motivate students in direct «world creation».

The areas which tend to be little mentioned are theoretical subjects or issues of critical thinking about the subjects dealt with (debates, critical approaches to issues discussed). As some practitioners point out, courses in MUVes might be more useful for skills-based subjects than for subjects which need a greater

amount of abstract thinking.

A problematic issue which is never clearly discussed in the data, concerns transferring skills from virtual worlds to first life: research on education in virtual environments shows that it cannot be taken for granted (Bossard *et al.*, 2008). And this critical aspect is closely related to another crucial problem which is never referred to in the data. Friesen (2010) describes it as «educational brilliance», that is the «sanitized» contexts created for simulations in virtual environments to favour learning. At times, virtual learning environments offer students simulations of experiences which are far from the corresponding real/offline world learning experience.

As far as language learning is concerned, the data confirm the great potential of MUVES and SL in particular to practice languages in virtual contexts, experience social interaction in “authentic” settings, experience cultural diversity and practice language in a variety of communicative events (avatar-to-avatar interaction with voice or chat, written texts, use of virtual libraries, etc). Informal ways of learning («meeting people, going to events») seem to be considered by some language teachers as the best opportunities offered by MUVES and SL: «places similar to normal classes are not suitable to student-led activities» (ESL Discussion, 2009). For instance, visiting the SL Globe Theatre in London or a famous SL museum and interacting with avatars there might result in much more interesting language exchanges than some formal classes in SL.

There are aspects not found in the data which are particularly relevant for second or foreign language learners. Lamy and Hampel (2007, pp. 80-81) refer to the anxiety caused by the synchronous and immersive environment. In avatar-to-avatar interaction or avatar-group interaction, verbal and non-verbal communication must be processed in real time (both understood and produced, in voice or chat) and can become rather stressful for language learners. The «aloneness factor» (the individual is alone in a study room in front of a computer) and contextual deprivation of some cues such as body language and facial expressions (limited to avatar movements which are more stereotyped than face-to-face interaction) can add to the strain of processing communication synchronously and become detrimental for language performance. Lamy and Hampel (2007) call this «stress from synchronous multimodal environments» and it is due to the pressure to respond and react.

Conclusions

In the voices of the participants, we can perceive the continuous re-negotiation of individual and group identities which contribute to the porous and hybrid characteristics of these virtual identities. Teachers tend to describe their role as facilitators, and learners are called to participate actively through experiential

learning, task-based activities, problem-solving activities and co-constructed projects. SL teachers, trainers and students learn together about new ways to exploit the daunting potential of virtual learning environments where traditional teacher training skills are only an insufficient starting point, and opportunities are often discovered and re-defined within the virtual community.

Rather than «greater equality» between learners and teachers, it may be rather more appropriate to say that teachers, trainers and learners all encounter different kinds of «facilitations» and «barriers» in a MUVE environment since power relations are not eliminated but transformed by it (Shields, 2003), and the different levels of awareness, critique and criticism will necessarily remain different among participants

Within the limited scope of this study, it is possible to give tentative answers to the questions posed in the introductory section. Educators are aware of the significant challenges especially in “transnational online” and “globalized e-learning” worlds. The data, however, do not capture an overtly critical approach to multimedia literacy. Also, there is no recognition or awareness that, for the fragmented, changeable and hybrid virtual communities of practice, the Anglo-Western call to individual/group meaning-making might not be completely acceptable for or shared by students and practitioners with very different cultural backgrounds.

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