Virtual Learning, Real Heritage Benefits and Challenges of Virtual Worlds for the Learning of Indigenous Minority Languages

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Abstract
This paper will present the Island of Avalon Learning in the virtual world of Second Life® (SL). Avalon Learning has been created under the ongoing European project AVALON for the design, testing and implementation of language teaching and learning in virtual worlds. Avalon (Access to Virtual and Action Learning live ONline) is a 2 year multilateral project funded under the EU EACEA Life Long Learning Programme ( LLP) and runs until December 2010. The 10 participating European partners include 5 state funded universities (University of Manchester, University of Vienna, University of Pisa, Molde University College and Mid Sweden University) and 5 other public and private organisations (Verein Grenzenlos — Interkultureller Austausch, Verein Offenes Lernen — Sektion “TALKADEMY”, ICC International Language Network (International Certificate Conference e. V.), LANCELOT School GmbH and the British Council) operating in the following areas: language education, teacher training, intercultural training, language testing and certification, online education, publishing, business communication and networking, design of 3D environments and language learning in virtual worlds. The project is also associated with 5 other universities and 11 smaller educational institutions. The project is a transversal programme which targets language learners from the Leonardo da Vinci, Erasmus and Grundtvig communities. Not only does the project aim to create a platform in which these diverse learning communities can come together but it also has a particular interest in providing access to technology and language learning to learners in remote locations. The ultimate aim of the project is to create both a virtual environment and a sustainable community of practitioners and users which will outlive the project itself.

Recent literature in the field endorses virtual worlds as a particularly appropriate platform for the development of oral language proficiency in distance education, collaborative and intercultural learning contexts and vocational training. The free client programme of Second Life®, for example, is a 3D virtual world accessible via the Internet and which enables its users to interact with each other through ‘Avatars’. An ‘avatar’ is the graphical representation of a computer user representing himself/herself or alter ego and communication with others is possible via both voice and text chat.

Examples of learning scenarios from the Beginners Course of North Sami carried out in conjunction with the Avalon project will help to illustrate some of the benefits and challenges of using virtual worlds for the teaching and learning of languages in general and for indigenous minority languages in particular. Some of the benefits include the provision of online synchronous communication for linguistic communities which are dispersed over vast geographical areas, the co/re-construction of cultural and linguistic identity, opportunities for authentic language contact between native, heritage and L2 learners, the unparalleled creative dimension of the platform in particular in terms of individual and collaborative building and learner movement and freedom within the environment. This paper will conclude with a discussion of some of the challenges of using virtual worlds as a distance education platform in different language education contexts and how they may be overcome.
1. Introduction

The Avalon project is a multilateral project under Key Activity 3 of the LLP for the promotion of ICT (Information and Communication Technology) enabled learning. This project brings together a diverse group of educators who, at the time of application, were already aware of or had direct experience of teaching and learning in virtual worlds and were firmly convinced of its potential for language education. While the main focus of this project is the exploration, experimentation, exploitation and validation of virtual worlds for foreign language education, it is well established within the virtual worlds educational community that virtual worlds hold potential for a multitude of educational scenarios in general [1].

As far as language education is concerned, many of us continue to be acutely aware of the fact that it is still very difficult to provide learners with language practice in authentic and meaningful contexts. Despite the fact that student mobility has increased and been facilitated over the last two decades, it is nevertheless often the case that travel is too costly or not feasible for learners for a host of reasons and thus cannot be considered a real option [2]. In addition, travel is not per se any guarantee that learners will engage in the use of the target language upon arrival within the target culture (for example, English is often the most spoken language rather than the target language). And, while Tandem schemes have proved fruitful, they nevertheless rely on access to speakers of target languages and the maintenance of motivation is often a problem [3]. Finally, for those European countries that increasingly depend on distance education programmes (i.e. Norway and Sweden), ongoing research into the affordances and suitability of new distance learning platforms is clearly of particular interest. The overall aims of this project are, thus, to provide examples of best practice for language education in virtual worlds and to build a specifically designed self-sustaining virtual location which, upon completion of the project, will be open indefinitely to the wider public for educational purposes. In particular, the project aims to:

- design and test learning scenarios;
- provide a certified teacher training course;
- facilitate access in cases where there are limited computer resources;
- promote general awareness of the potential of virtual worlds.

Finally, it is hoped that the physical and social space that is created by the project will be used as a researchable environment in CALL (Computer Assisted Language Learning), CMC (Computer Mediated Communication) and in language pedagogy, language didactics and linguistics in general as extensive direct observation, recording and documentation of learning events is made possible.

1.1 Virtual worlds

Similarly to other telecollaborative tools (i.e. chat rooms, wikis, blogs, video-conferencing programmes, etc.), virtual worlds are spaces where genuine communicative acts can take place at a distance. Furthermore, virtual worlds also offer a host of unique affordances for synchronous communicative language-learning tasks which flow from the representation of self via an “avatar” and the highly immersive, interactive and participatory nature of the 3D environment [4].

1.2 Second Life®

Of the several existing virtual worlds, Second Life® (henceforth SL) is the most recent and most popular. It is a publicly available 3D multi-user virtual world and has been available for public access since 2003 for users over the legal age of 18. Developed by Linden Lab in the US, SL has established itself as an attractive social, entertainment and transaction space and interest from the higher education community is increasing [5]. Contrary to popular belief - and unlike some other virtual worlds - SL is not a gaming environment though it shares many of the affordances of some of the most popular and successful gaming environments such as World of Warcraft for example. Indeed, many educators and material designers are being inspired by the possibility of creating tasks which generate
game-like participatory patterns to foster autonomy, motivation and participation in language learners [6]. The decision to use SL as the main virtual world for the Avalon project stems principally from the fact that several project partners had already gained extensive building and highly successful teaching experience within the specific environment at the outset of the project.

1.3 Avalon Island
The design and building of Avalon Island was completed in the first six months of the project and is currently searchable as “Avalon learning” and open for public viewing via the search function in SL. All project members played an active role in the design of the island and share a common understanding of the intimate relationship between design of the environment and learning. Though the courses described below have been developed and run entirely under the Avalon project, some of them however initially took place on the “sister” island of Kamimo [7] funded in 2007 by the Norwegian University Programme as an educational space in support of life-long learning. Kamimo offers teachers and learners a variety of public and private, traditional and less traditional learning spaces and is still being actively used under the project. In addition, Talkademy, a SL language school already in operation and a participating member of the project [8], was used for the creation and trialling of the business English course materials.

2. Course design and models for learning
Virtual reality worlds render themselves in particular to socio-cultural and situated learning models [9] [10] [11]. These models maintain that human activities take place in cultural contexts, are mediated by language and other symbol systems, and that knowledge is constructed when individuals engage socially in talk and activity about shared problems or tasks. In designing the learning scenarios and tasks, special attention was placed to those aspects of communicative language learning which are enhanced by the virtual environment [12]. Tasks were created which a) foster the creation of community and the sharing of knowledge; b) explore identity and cultural perceptions of self and the other; c) involve collecting artefacts or building; d) encourage artistic expression or representation; e) use SL as a source of information and as a place of navigation and movement. Features of gaming and reward models for learning have also been incorporated. In addition, the various phases of learner initiation and participation were carefully designed according to recent recommendations in the research literature [13][14].

There are currently seven main courses available in the project’s scenario portfolio: the Debating course (English), the Business English course, the Beginner’s Italian course, the Teacher Training course, the Beginner’s German course, Intermediate Speaking Skills (English), the North Sami course (as a heritage, second and foreign language). The portfolio reflects the different language learning needs of the project’s target audiences, the different partners and the long-term sustainability aims. All courses include both teacher-led discussions and group, pair work and individual tasks. All courses share the same general learning objectives:

- learning to use virtual worlds for language learning, both as a tool for communication and a source of information (technical competence);
- collaborating with people from other language and cultural backgrounds in an online environment towards a common goal (social and intercultural competence);
- communicating effectively with others in meaningful and authentic tasks (linguistic competence);
- acquiring new specific knowledge (i.e. content acquisition).

The courses listed above have been test run under the project and are now in the final phase of editing for publishing and will be publicly available under the Creative Commons Act upon completion of the project in 2010. This paper will now focus on the North Sami for Beginners course. The course
is of particular value to the Avalon project as it addresses key issues such as remote access and limited access to virtual worlds and is an example of the use of virtual worlds in the promoting, spreading and sustaining minority and heritage languages and cultures of Europe. In particular, the authors of this paper have chosen the North Sami for Beginners course as sample of best practice for a number of reasons:

- the course is designed so that it can meet the special needs that North Sami students have living across Scandinavia, speaking a highly endangered language and having to cope with bias and prejudices from outside as well as from their own language community
- it offers the students a common ground without looking at ethnicity
- the 3D environment gives a valuable possibility to tie together the communicative and the grammatical aspects of the course at the same time as the students have a feeling of doing meaningful things together
- the course adds to the revitalization process of the language as well as it functions as a community builder

The following section provides a description of a course model for North Sami based on the course carried out in conjunction with the project and the lessons learnt.

2.1 North Sami for Beginners Course description

**Target audience:** Beginners in North Sami, university students

**Target language:** North Sami (a Finno-Ugric minority and heritage language)

**Language of instruction:** Swedish

**Required language levels for participation:** No prior knowledge of North Sami is required but the course is given parallel with a more theoretical grammar course

**Duration:** 60 minute in-world sessions once a week spread over 18 weeks (every student is required to attend SL sessions at least 9 times during the course).

**Format:** The teacher and the students meet in a virtual classroom before every in-world session in order to discuss the in-world task or activity and to go through a list of words and useful phrases for the session, all activities are teacher initiated but the students have the possibility to fulfill the task outside the virtual world session time together or individually depending on the task.

Every activity in SL is thematically bound to the literature and materials used during the course. SL activities focus on improving the spoken skills of the students and encouraging them to communicate in North Sami with each other and with the teacher. Another main reason for using a 3D world is the possibility to exemplify the spatial nature of the language, in which a rich case system and directionality of the adverbials are in focus. All materials are given to the students in advance. An example of a language task on this course is a map exercise, where the students work in pairs in order to find some locations on the map and to answer some questions about these locations. Although the students have very little knowledge of North Sami, they are at all times expected to speak North Sami, and helpful lists of words and phrases are given to every student in-world. Those students that cannot access SL from their own computers get to work in SL using Adobe Connect and its screen sharing options. Most of the students that have Sami background feel that meetings in SL have given them confidence to talk in North Sami, which in turn has had a positive effect on their self image and has strengthened their Sami identity.

3. Sustainability

In the interest of long term sustainability, informal agreements are being reached with several groups of educational practitioners and institutions so that they may add content of their own to the island of
Avalon subject to Avalon project validation. The project encourages ongoing working relationships with leading practitioners in the field and related projects such as the Niflar [15], icEurope [16], AVATAR [17] and VirtualLife [18] projects. The Avalon ning further promotes the sharing of best practice for teaching and learning in virtual worlds within the wider educational community [19].

4. Conclusions
The final part of this paper will provide a brief comparison between the teaching and learning of the different languages under the Avalon project in an attempt to illustrate some of the educational challenges they share and to what extent they may require customised solutions.

References
[7] Kamimo is searchable as “Kamimo” or “Kamimo Island” in the search function in SL. More information can also be found at http://www.himolde.no/index.cfm?pageID=2232
[8] www.talkademy.org
[16] http://134.2.2.174/