How Can 3D Virtual Worlds Contribute to Language Education?

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The project presented in this paper aims to explore the potential of voice-enabled, 3D virtual worlds for Modern Language Education in secondary schools. One of the pilot projects for French as a foreign language in Active Worlds (AW) is described. We document the contribution made by student teachers in the form of virtual role-play and coaching activities to prepare pupils for oral proficiency, performance-oriented assessments. We conclude with a summary of the evaluation research.

1. Introduction

The project ViTAAL (2007-2008) presented here is an initiative of a partnership of two secondary schools, their affiliated teacher education institutions and an educational service provider. The project aims to explore activity designs to tap the potential of voice-enabled, 3D virtual worlds to enhance the attractiveness of language learning and support task-based methodologies with a focus on oral skills.

The project was inspired by the potential added value and good practices of text-based MUVEs in language education as documented in reports and literature studies such as (Schwienhorst, 1998; Koenraad & Goedemé, 2002; Shield, 2003; Kötter, 2006) and ideas on potential uses of and educational projects in 3D virtual worlds as published (Svensson, 2003; Molka-Danielsen et al., 2007) or informally exchanged by early adopters in professional communities, e.g. the teacher training experiment in Second Life organized by LanguageLab.com. **MICaLL** The project experiences with telecollaborative school projects and the provision of technology-rich experiential learning in language teacher education (Koenraad, 2005) helped to realize the actual project definition. Realization was possible thanks to a research grant by Kennisnet, the Dutch national Schoolnet and through participation in a national project on gaming and virtual worlds, organized by 'SURF', the national provider of web services for Higher Education. We highlight one of the pilots, the virtual version of Language Village, targeted at empowering a current, real-life assessment practice for lower secondary education. Further formats that were developed included a cross-media, interactive narrative WebQuest 'Panique à Bord'. This LanguageQuest is situated on a 3D version of the Titanic and centers on a detective-like problem

solving task, involving integrated training of language skills and triggering interviews with the avatars of the story characters.

Material development has also started for another activity format to promote informal learning. This involves the provision of online events and fun activities such as Quizzes, fortune-telling and karaoke competitions in both the 3D locations mentioned.

2. The Language Village Pilot Project

A Language Village is a school-based assessment practice for secondary and vocational school pupils, mostly beginner to intermediate level (CEFR: A1-A2), gaining popularity in a number of European countries. It is a real life simulation with settings created with the help of physical props as scenes for everyday communicative situations such as a shop, restaurant, tourist information, camping site office etc. This annual event - usually set in the main hall or gym of a school- is organized with the help of teachers, native or competent L2 speakers taking on interlocutor and assessor roles offers pupils an opportunity to show their communication skills in carrying out realistic tasks and/or solving authentic 'problems'.

A number of language departments of teacher education organizations provide support to their affiliated schools by having student teachers produce customized practice materials or taking on specific roles.

Over the years the Faculty of Education of Hogeschool of Amsterdam has developed a special variant, the Mobile Language Village. As a regular part of their curriculum student teachers offer the event as a service, taking part in the local organization and providing the actual props. For more information on this mobile variant see Eisberg (2007).

The rationale for the ViTAAL project then was to research if a 3D version of the Mobile Language Village format could meet a number of the challenges the real life version brings with it: limitations in the number of settings for communicative tasks and availability of competent interlocutors. The permanent accessibility of a virtual version was also seen as a favourable condition for more practice of oral skills on a regular basis as the organizational and logistic hassle prevents real life versions of the Language Village to be realized on a more frequent basis.

3. Project Realization

Two schools participated, each with one class. The pupils were 13-14 years of age and had had two years of French, CEFR Levels ranging from A1 to A2. A blended approach was used involving teacher-led f2f preparatory activities and so called in-world sessions with fellow pupils and student teachers as mentors. A team of student teachers (n=18) of the Faculty of Education in Amsterdam were made responsible for the production of the paper based teaching materials. The specifications for the classroom-based, preparatory training materials and the selection of locations in the virtual village (such as a police station, a baker's etc.) were based on an analysis of the content of the textbook covered at the start of the project.

The building of the virtual world and some additional avatars for specific roles (e.g. a baker) was done by a member of the school IT-support team.

Three training sessions were organized for the local teachers and some interested colleagues. Due to circumstances it was near the end of term before the pilot could start. The project ran for three weeks during which two lessons were spent on f2f exercises and two sessions in the virtual world. Each student teacher was assigned to mentor 2 to 3 pupils offering opportunities for in-world fluency practice.

Online mentoring activities included assisting in familiarization with the interface, rehearsing in-world tasks and activities, providing feedback on performance and advising on further preparatory activities.

On average student teachers spent 1.5 hrs in-world to help pupils prepare for their assessment session. The sessions took place during regular lessons at school and after school hours, from pupils' homes.

4. Evaluation

Feasibility was the general focus of the evaluation

research in this project. Key questions in this respect were whether a) this way of training and assessing oral skills could provide a viable preparation or even alternative for the real life version of Language Villages and b) if a proof of concept could be established for the organization and collaboration between parties needed for the realization of this approach.

To this end data collected from a variety of sources (pre- and post questionnaires, focus groups and teacher (educator) observations) was analyzed.

The majority of the pupils who filled out the post project questionnaire (n=12) thought it was an interesting experience and a nice change from regular lessons. They reported to have spent more time than usual on their work, also in after school hours. Half of the respondents felt they had learned more, especially vocabulary and were now better capable of talking about self, ordering things and giving directions. Critical points included the attractiveness and functionality (problems with the voice facility) of the 3D world, personal learning results compared to f2f lessons and organizational problems (partner or interlocutors not showing up at the appointed time).

The local teachers (n=2) confirmed that in general pupils were enthusiastic and they had noticed an increase in motivation, more time on task and less inhibition. The student teacher respondents (n=7) considered their participation in the project as a great learning opportunity, particularly mentioning the instructiveness of collaboratively designing materials and practicing (online) teaching skills such as giving feedback to pupils. They also reported organizational problems (pupil online presence and teamwork) and technical issues (VOIP-functionality, AW- interface skills).

The teacher educators involved (n=3) considered integration of the project in the curriculum module a great chance for linking theoretical input to practice and a powerful experiential learning opportunity in teacher education.

The project group (n=7) concluded that, despite the institutional and technical constraints the project had been very useful in mapping the conditions for successful use of virtual worlds for training speaking skills.

The project partners intend to continue their collaboration. Although further development and fine tuning of tasks, in-world procedures and teaching materials are needed, the approach is seen as valuable and sustainable. As critical factors for success they listed:

plan as a mid-term activity

- timely delivery & quality of the preparatory materials
- available and reliable technology
- teacher competences: classroom management and ICT-skills
- active process management to align the activities of the various partners.

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