Virtually Enhanced Languages

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Our journey today

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1. VEL project - rationale

- **Two** key challenges faced by Australians in the present century are technology and foreign languages.
- Technology in general, and communications technology particularly, is becoming increasingly pervasive in all aspects of our lives.
- The challenge we face is how to best use technology to value add to the student learning experience and learning outcomes with an eye to increasing our competitiveness in the global market.
- Likewise, the need for skills in languages other than English is becoming more pressing as neighbouring economies come to play an increasingly important part in Australia’s future prosperity. Mobilising technology to enhance language learning is at the heart of Virtually Enhanced Languages.
1. VEL project - funding

- **Funded** by the Australian Federal Government Office for Learning and Teaching, Virtually Enhanced Languages (VEL) builds on five years of experience using online 3D multiuser virtual environments (MUVEs) to enhance tertiary level Chinese language and culture learning.
1. VEL project - aims

*Aims of the project*

1. To promote and facilitate the widespread integration of 3D multiuser virtual environments (3D MUVE) and task-based language learning into formal tertiary Chinese language curricula;

2. To develop and disseminate technical and pedagogical design standards that make adoption, integration, development and sharing of 3D MUVE and pedagogical resources easy and inexpensive;

3. To develop a three-tiered infrastructure for the development, showcasing, sharing and dissemination of these resources;

4. To develop a basic suite of ready-to-use 3D MUVE environments, virtual assets, virtual tools and learning modules that can be easily adopted by other tertiary level Chinese language and culture programs;
1. VEL project – the challenges

- The educational challenge

- Despite recognition of the need for young Australians to learn foreign, and especially Asian, languages, there has been an ongoing decline in non-background students (who do not have a family or heritage grounding in the language) studying languages such as Chinese beyond the compulsory 1-2 years at high school.

- CFL and FL education more generally has struggled with low contact hours and increased budgetary constraints which impact the quality of learning and teaching, and proficiency outcomes.

- Opportunities for meaningful communication in the FL classroom and to receive individualised formative feedback is limited. A report looking at the retention of beginners in tertiary programs found that over 60% of learners surveyed speak only English at home. For these learners, the opportunity to actively use the FL outside the classroom is usually limited.
1. VEL project – the challenges

- The technological challenge
  - Virtual Worlds (VWs) such as those created in Second Life (SL), OpenSim and other similar platforms, have been developed for a range of educational purposes. While such environments have much to offer language learners they remain infrequently used, largely due to the steep learning curve, time and technical skills necessary.
  - Such investments are rarely supported or recognised in teachers’ workloads, and yet, most educators start from scratch, rather than building on the existing work of other educators.
  - Our survey of academic staff teaching introductory level Chinese at 20 Australian tertiary institutions for the VEL project (details below) found that, of the 15 respondents, seven had previously considered using VWs while the remaining eight had not.
1. VEL project – the challenges

- The technological challenge

- Of the eight that had never considered using VWs, the most common reason, other than having never heard about VWs, was not knowing how to start (4 responses). This was closely followed by the difficulty of developing resources from scratch (3 responses). Of those who had considered using VWs, but in the end did not, the most common reason again was that they did not know how to start (6 responses), closely followed by it being too hard to develop resources (4 responses).

- Clearly, the main factors affecting the attitudes of educators are a lack of familiarity with VWs and the challenges of development.
2. TBLL

- One of the key elements of the lessons developed for our three virtual world projects is that of Task Based Learning or Task Based Language Learning (TBLL).

- Includes communication activities, using language to carry out tasks, language use that is meaningful to the learner and has a purpose, and communication activities that reflect real-life activities with authentic materials.
2. TBLL

- Criteria for TBLL:
  - The primary focus should be on ‘meaning’ (learners should be mainly concerned with processing semantic and pragmatic meaning).
  - There should be some kind of ‘gap’ (a need to convey information, express an opinion or infer meaning).
  - Learners should largely have to rely on their own resources (linguistic and nonlinguistic).
  - There is a clearly defined outcome other than the use of language (language serves as the means, not an end in its own right).
3. The road to VEL – Chinese Island
3. The road to VEL

Chinese Island

- A Chinese-themed virtual city (“Chinese Island”) in Second Life was built and TBLL lessons were incorporated into the mainstream curriculum of beginner level students in 2008-2009.
- A total of six 2-hour lessons were designed and incorporated into the formal teaching schedule as computer lab sessions (3 lessons per semester).
- The lessons were constructed around topics appearing in the main textbook used by Chinese Introductory students at Monash.
- Topics include restaurants, shopping, seeking & following directions, seeing a doctor, purchasing railway tickets, and renting accommodation. Other topics taken from everyday life in China include festivals, making a traditional dish, buying street food, using Chinese currency, buying fresh ingredients from local markets, reading street signs, etc.
3. The road to VEL

Chinese Island
- Learners interact with both highly interactive pre-programmed Non-player Characters (NPCs) and live native speakers.
- Since 2008, approximately 1000 introductory level students have undertaken lessons on Chinese Island.
3. The road to VEL

Virtual Arabia
3. The road to VEL

Virtual Arabia

• In response to the limitations of the FL classroom outlined earlier, a collaboration was set up between Monash University and the University of Melbourne (UoM) to investigate if a blended approach combining a standard LMS (Moodle) and SL to facilitate engagement with culturally-based content outside of contact hours could result in learning outcomes at least as good as traditional classroom-based outcomes.

Funding for the project was provided by LCNAU (the Languages and Culture Network of Australian Universities)
3. The road to VEL

Virtual Arabia

• A virtual simulation of Arabic family life in Cairo was built in SL.

• Students played an international student spending a semester studying at the University of Cairo, engaging directly with aspects of Arab culture at both an intellectual and visceral level while learning, practising and consolidating new language.

• Five scenarios were designed: getting to know a local student at the university cafeteria, accepting an invitation to a family lunch, asking for directions, meeting the family of the local student in their apartment, having lunch with the family, and taking leave after the meal.

• Students were also required to explore the apartment to gain an understanding of typical living conditions in Cairo, and through interacting with a range of items, learn additional vocabulary and cultural information.
3. The road to VEL

Virtual Arabia

- Eighty-five students were asked to volunteer to participate in one of two groups: a test group using the blended approach (SL Group - SLG), and a control group (Classroom Group - CG) who engaged with the same material in a normal classroom environment.

- Nine took part in the SLG and completed all of the scenarios in the VW, but only seven students completed the post-lesson quiz and questionnaire.

- Seven took part in the CG and completed the lesson and role-play in the real-world classroom, however, only five completed the post-lesson quiz and questionnaire.
3. The road to VEL

Virtual Arabia

- SLG students were given the opportunity to access the simulation in their own time, as often as they wished, from their home or institution.
- The control group students were taken through the same content in a normal classroom session by an experienced tutor originally from Cairo who normally tutors Arabic 1 at UoM. In addition to discussions about daily life and customs in Egypt, students were also taught new vocabulary and engaged in role-play imitating the situations in the VW.
- After both groups had completed their respective engagement with the content, they were required to complete a graded quiz on Moodle.
3. The road to VEL

Virtual Arabia

– Analysis of the quiz data indicated that the learning outcomes were indeed at least as good in the SLG as in the CG, and possibly marginally better (77.20% average for SLG and 75.23% for CG).
– The main caveat is that the research sample size was limited. Together, the participants only represent 14.11% of the entire Arabic 1 cohort.
3. The road to VEL – Virtual Prato
3. The road to VEL

Virtual Prato

- “Virtual Prato” is a simulation of the Monash Prato Centre in Italy and its surrounds.
- Growing out of the previous work undertaken in the development of Chinese Island and Virtual Arabia, Virtual Prato was envisaged as fulfilling a number of roles including:
  - promoting the Centre
  - facilitating pre-departure orientation for students traveling to Prato for study
  - as a learning resource for students of Italian at Monash.
3. The road to VEL

Virtual Prato

- For non-Italian as a FL students, a series of tasks have been designed that require them to investigate a replica of the Monash Centre and a range of locations that replicate real-life cultural landmarks in Virtual Prato.
- Environmental cues help students to navigate Virtual Prato, which is mapped to the real Prato streets and landscape, enabling them to become familiar with the environment prior to going on study abroad.
- For Italian as a FL students, Virtual Prato follows a similar model to Chinese Island, drawing on lessons in the textbook utilised in Introductory Italian at Monash to provide students with as close to “real-life” as possible communicative scenarios that require them to make use of the language they are learning in the classroom.
4. Research – VWs & language learning

– In a longitudinal study of introductory Chinese learners on self-efficacy, Henderson et al. (2009) found a significant increase in their beliefs about their abilities across a range of language skills at the end of a collaborative lesson on ordering food.

– In another study of cognitive skills and strategy use on Chinese Island, Henderson et al. (2010) found that the authentic learning site maintained student focus and promoted utilisation of a range of academically valued thinking skills and strategies.

– Grant, Pasfield-Neofitou and Huang (2013) found that students undertaking lessons on Chinese Island experienced significantly lower levels of FLA (foreign language anxiety) as compared to the face-to-face classroom environment.

– Grant & Huang (2012) analysed breakdowns in communication between students and the NPCs on Chinese Island that led to negotiation of meaning and attempts at self-repair, seen as a precursor to L2 acquisition by many theorists.
5. VEL surveys

– In addition to the survey of tertiary institutions with Chinese language and culture programs mentioned earlier, a survey to establish what textbooks are used in each of the tertiary programs at introductory level was also undertaken.
– The survey found that approximately seven different textbooks were commonly used.
– An analysis of the contents of the textbooks revealed approximately 9 common topics and themes appropriate for TBLL lessons in a virtual environment like Chinese Island.
6. VEL long term

One of the key purposes of VEL is to share with other interested educators our nearly 6 years of experience developing, trialling and implementing task-based language learning in immersive, highly interactive virtual world simulations rich with linguistic and cultural input and opportunities for learners to engage in meaningful target language communication.
6. VEL long term

The VEL website
http://www.virtuallyenhancedlanguages.com

- Central repository for free shareable resources
- Conduit for communication for a community of practice
- Central location for news about on going training and development, e.g. webinars
- A place to bring together research on virtual worlds & TBLL
- Promotion tool
6. VEL long term

The VEL Demonstration region

- [http://zetaworlds.com/zmw/](http://zetaworlds.com/zmw/)

hg.zetaworlds.com:8002:VEL Demonstration
6. VEL long term

The VEL website

- The team
  - International collaboration
  - Cross institutional
6. VEL long term

The VEL website
http://www.virtuallyenhancedlanguages.com

- Resources
  - Pedagogical
    - Exemplar lesson plans
    - Exemplar quizzes
  - Technical
    - Full region OAR files
    - Individual virtual asset files
    - NPCs & chat engine
    - Learning tools
6. VEL long term

The VEL website
http://www.virtuallyenhancedlanguages.com

- Resources
  - Instructional guidelines
  - Setting up & running online virtual regions
  - Choosing online service provider
  - Setting up environment on USB
  - Creating virtual assets
  - Lesson & task design
  - Designing and setting up assessment in virtual environment & on LMS like Moodle
- Webinars
6. VEL long term

The VEL website
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- Contributed resources
  - Resources contributed by other educators who have used VEL resources to get started developing their own pedagogical and technical resources.
  - Freely shareable resources from other members of the broader Open Sim community
- Resources will be online by mid to late January 2015
6. VEL long term

The VEL website
http://www.virtuallyenhancedlanguages.com

- Community
  - Community forum for the exchange of ideas, seeking assistance, looking for collaborative partners, connecting with other educators
  - Google+ Virtual World Teacher Network