Changing directions through VirtualPREX: engaging pre-service teachers in virtual professional experience
# The VirtualPREX team

<table>
<thead>
<tr>
<th>Sue Gregory</th>
<th>Yvonne Masters</th>
<th>Barney Dalgarno</th>
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<td><img src="image" alt="une" /></td>
<td><img src="image" alt="une" /></td>
<td><img src="image" alt="Charles Sturt" /></td>
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<tr>
<td>Matthew Campbell</td>
<td>Torsten Reiners</td>
<td>Heinz Dreher</td>
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<td>Geoff Crisp</td>
<td>Vicki Knox</td>
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VirtualPREX: Virtual Professional Experience
ALTC Grant 2010-2012

- Practise teaching skills prior to practicum placements
- Use the space synchronously or asynchronously, by themselves or interacting with peers, academics and/or bots (non-player characters)
- Machinima, for self, peer, formative and summative assessment
- Practise teaching skills with the bots programmed to react to certain triggers
- Experience a range of scenarios in a risk-free environment
- Assessable tasks, using bots to teach, peers to role-play teaching and/or machinima to reflect, assess and provide feedback

http://www.virtualprex.com
VirtualPREX: Virtual Professional Experience
ALTC Grant 2010-2012

- Assist pre-service teachers in acquiring a better range of professional skills and confidence before being placed in a real life classroom
- Provide diverse professional experience options for pre-service teachers
- Create awareness about virtual worlds as a pedagogical and social networking tool
- Compare different methods of interaction to enhance student learning and teaching

DEHub
Innovation in Distance Education

Charles Sturt University
Curtin University
RMIT University
ACU

http://www.virtualprex.com
Focus Group Role-Plays

- Getting up and down, wandering around and never still
- Calling out all the time
- Know-it-all – beyond putting their hand up, they just want to get the answer out
- “Goody goody” – just want to please the teacher all the time – going beyond being helpful
- Behaviour Disorders – may not have taken medication
- Tattletale – dobbs on fellow students
- Over-achiever – knows answers beyond capabilities of other students – potential of becoming bored
- Noisemaker – tapping the desk, whistling, humming
- Under-achiever – does not understand and is always asking questions
- Does not pay attention and is always asking what is going on or getting the teacher to repeat things
- Slow learner – always behind in their work and often off-task
- Language Disorders – these children may be a bit slower
- Dominator and defiant – takes the teacher on
- Non-responsive student – withdrawn, sulky, non-cooperative, disengaged
- Eye-roller
- Attention seeker
• Role-play in a virtual world as:
  – **Teacher** - (presented a seven (7) minute teaching episode or idea on teaching – focusing on preferred KLA)
  – **Primary School Student** – role-play as either good or naughty student (these roles were given to students and rotated – they were provided with different roles for each scenario)

http://www.virtualprex.com
During Workshops

- Pre-service teachers were provided with an avatar to use – either teacher or school student
- All text was recorded and on-screen video was taken of all classes (to be later used for self, peer, formative and summative assessment through machinima)
- Pre-service teachers had to keep to protocols of a real classroom
- Text was used for on-campus pre-service teachers
- Off-campus pre-service teachers used audio when role-playing as teachers and text for primary school students

http://www.virtualprex.com
Pre-service teacher instructions

- Pre-service teachers used a Sloodle HUD (Heads Up Display)
- A window on their screen (HUD) enabled them to click on a button to generate a gesture from their avatar
- They could clap their hands, raise, or wave, their arm if they wanted to speak
- The teacher could use it as a method for classroom management

http://www.virtualprex.com
Reflection and Survey

At the end of the role-play:

• Pre-service teachers reflected on their reactions to the role-play activity (their role as a teacher or student were discussed)

• Pre-service teachers in the role-play activity were invited to complete a survey
Role-play in a virtual world

VirtualPREX

Virtual Professional Experience
Role-play in a virtual world

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Innovation in Distance Education

Funded by the Australian Government Department of Education, Employment and Workplace Relations
Demographic Data

**Age**

- Under 26 yrs: 91.0%
- 26 to 35: 1.3%
- 36 to 45: 1.3%
- 46 to 55: 1.3%
- 56 to 65: 1.3%
- Over 65: 5.1%
- Others: 0.0%

**Gender**

- Male: 15%
- Female: 85%

http://www.virtualprex.com
Skill level in relation to virtual worlds prior to commencing University

http://www.virtualprex.com
Importance of learning benefits of virtual worlds

- Assist developing familiarity
- Motivating and engaging
- Transfer of learning to real
- Enable more effective collaborative learning
- Enable to learn through experience in context

http://www.virtualprex.com
Some student comments on their experience with the role-play

**On-Campus**

I enjoyed being the teacher and having to come up with strategies to deal with students that would not follow instructions.

Trying different things to keep the students in task, gave us a chance to practice teaching.

**Off-campus**

It gave me an insight into other people's teaching strategies and also to what had me switch on and be interested when I played the student role.

Enjoyable to see what others did and how they coped with the situation in a safe environment where you could make mistakes and learn from them.
Weighted average of perceptions of the role-play activity
1=Not at all – 7=Extremely (n=80)

<table>
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<th>Perception</th>
<th>Value</th>
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<tr>
<td>Boring</td>
<td>3.23</td>
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<tr>
<td>Difficult</td>
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<td>Useful</td>
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<td>Enjoyable</td>
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<td>Interesting</td>
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Blanka Vlasic, Croatian High Jumper
How the pilot progressed

• A number of technology problems were encountered:
  – In the first on-campus workshop only – the world didn’t rezz, group chat didn’t work and the Internet worked spasmodically (an institutional problem)
  – In the off-campus workshop one student couldn’t hear and use audio – a scribe was needed

• Most students had the opportunity to role-play the teacher
## Student Perspectives

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<th>3</th>
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<tr>
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<td>Easy to use</td>
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<td>Boring</td>
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<tr>
<td>Enjoyable</td>
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<td>19%</td>
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Student Perspectives

- **Best things:**
  - entertaining;
  - novelty of the experience,
  - value of role-playing a teacher or particular types of student

- **Worst things:**
  - problem of everybody talking at once;
  - having to type made things move slowly and consequently they found it boring at times
  - difficulties in obtaining control of the class as a teacher (arguably a good thing)
Next Steps

• Minor improvements planned:
  – Changing appearance from teacher
  – Role-plays being just all “good” students
  – Audio
  – Machinima

• Major enhancement: use of children ‘bots’:
  – Simulated children will allow the activity to be undertaken by distance students without the need for a group of other students to be present (bots);
  – The question of whether sufficiently realistic children behaviours can be simulated is an important one to be explored through our evaluations
The future of VirtualPREX

**Event**
- Student unattended

**Action**
- Throw plane

**Prevention**
- Observe
- Let student draw