



## **Chapter IX**

# **Developing an Online Classroom Simulation to Support a Pre-Service Teacher Education Program**

Brian Ferry, University of Wollongong, Australia

Lisa Kervin, University of Wollongong, Australia

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### **Abstract**

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*Evaluations of our pre-service teacher education program identified a need to provide more classroom-based experience for our students. This motivated us to embark on the journey of developing an online classroom simulation. The establishment of a team and the different areas of expertise we brought to the project resulted in a theoretically sound response to this challenge. In this chapter, we share some of our insights from our experiences over the past three years working on this project. In particular, we focus on the key stages in the development of the software, the roles we assumed, and the lessons we learned.*

## **Rationale for Designing a Classroom Simulation**

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Having spent some time working with James Gee in the United States of America, Cambourne, and Turbill, two of our team members bought The SIMS™. This was one of the many computer games that Gee had discussed that engages the user in ways that involve deep level cognitive and linguistic skills. On the long flight back to Australia, while playing with the simulation, Cambourne had the idea that it would be great to create a simulated classroom that could be used by our pre-service teachers.

Once back at the University of Wollongong, a team was established to prepare a submission for funding to the Australian Research Council. The team proposed that the development of a classroom-based simulation would support both our pre-service teachers and the pre-service teacher programs in three key ways.

Firstly, it acknowledged that the work of a teacher is very complex and one that requires complex decision making. Danielson's (1996) research showed that classroom teachers can make over 3,000 nontrivial decisions each day, and these findings pose serious challenges to pre-service teacher education. The development of a simulated classroom would provide an avenue to support pre-service teachers to think like a teacher and participate in making "typical" classroom decisions.

Secondly, recent reviews into teacher education identified that many university courses failed to help pre-service teachers make meaningful and clear links between the theory of teacher education and the practicalities of the classroom. Batten, Griffin, and Ainley (1991, as cited in DEST, 2002, p. 104) suggested that the challenge for teacher educators is "...in helping students to make stronger links between theory and practice." The use of a simulation was identified by the team as one way to support pre-service teachers in making these connections while working within a "virtual" classroom.

Finally, the team concurred that the development of a simulation would provide pre-service teachers with an additional classroom-based experience. Like many institutions, we have limitations on how often our pre-service teachers can visit "real" classrooms. Indeed, the cost of the practicum experience, school availability, and university course requirements place limits on access. Ramsay's (2000) review of teacher education in New South Wales strongly recommended that pre-service teachers receive quality classroom-based experience supervised by an accredited teacher mentor; however, the provision of more extensive classroom-based experience does not guarantee quality experience. Darling-Hammond (1999) and Ramsay (2000) both conceded that school-based practical experience often consists of a series of isolated, decontextualized lessons prepared and implemented according to the requirements of the supervising teacher and at worst can be an unsupported and disillusioning experience.

## **Establishing a Simulation Team**

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The team Ferry, Cambourne, Turbill, Hedberg, and Jonassen worked together throughout 2001 to formulate the initial proposal for funding to support the development of a class-

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