

# First Steps in Second Life

<http://slurl.com/secondlife/University%20of%20Nottingham/>



The University of  
Nottingham

Academic Division of Midwifery  
IS Learning Technology Section  
*learning to simulate and simulating to learn*

## Arrival and Documentation

**Background:** Story telling has always been a part of midwifery education, enabling communication and passage of knowledge, but traditional role play is often disliked by students and can lead to embarrassment.

**Problem:** Real life face-to-face communication, care of women in labour and dealing with busy staff do not always afford students the ideal time or place for certain discussions and questions to be conveniently addressed.

**Solution:** By using the virtual reality setting of Second life, a 3d, multi-user environment ideal for simulating real life experiences, students and midwives can immerse themselves, quite anonymously, into artificially produced stories to practice communication and management of care issues in a practical and 'ethically safe' environment.

Through role play of birth, they can become accustomed to situations and procedures to which they may not gain access during their normal course of study.

The Midwifery Unit on the University of Nottingham's -Web campus in Second Life has been designed to aid midwifery students in gaining experience of current practice outside of clinical situations, and to develop their care skills.

The teacher/mother can develop the 'story' and allow it to unfold according to the learning needs of the midwife/student(s).

The simulation has been designed to be as realistic and problem-free as possible, so students are not learning how to use Second Life, but how to become *midwives*.

## Options and Facilities



Multiple "animations" exist to simulate birthing positions for the bed, pool and ball

## The Birthing Process



Second Life "notecards" are used to give students information about resources they can use.

### Credits:

Jenny Prior  
Bob Hallawell  
Fay Cross, Patrick Lockley  
Colleen McCants

## Delivery and Aftercare



Post birth care can also be simulated, including APGAR scores and placenta checks.

**Method:** Virtual characters (avatars) were created to represent the pregnant woman and various student midwives. Following the 'story' of a woman's labour, the midwife teacher directs the scenario as 'birth mother,' with students in the role of midwives able to practice communicating with and caring for a woman in labour.

A key question was how much of the simulation should be handled by code, and how much of it should be provided by an avatar. Coded interactions are limited to basic text entry or button-based solutions, which can undermine the richness of the simulation.

In developing the Maternity ward, key considerations were given to which actions, processes and key objects should be in place in order to best simulate the environment. Care was given to the way in which these could be best modelled so as to make them both accurate and usable, without making them overly complicated.

## Progression of Labour



Birthing is controlled via a simple interface, allowing the lecturer to focus on the scenario

*It is hoped in the future that the Midwifery Unit can be further developed to include complications of childbirth.*

**Conclusion:** Virtual reality and immersive story telling can bridge physical, personal and international barriers to learning. It is a successful tool for delivering accessible, transferable learning.