The motivation for the construction of the PITS simulation was twofold:

First, it served as a vehicle to investigate the transfer of simulation technology knowledge from one university (Deakin) to another (RMIT).

Second, it supported investigation of the role that simulation technologies can play in allowing students to experience and test designing system requirements gathering interviews.

This simulation is built around a case study of the Purple Taxi Company, which requires a new computer-based information system (PITS) at their taxi dispatchers’ desk. Students are supplied, in the first instance, with a text-based requirements brief, prepared by the company, to which they must respond. Students prepare initially a set of models of this information system, using techniques taught during the course. Subsequently they reflect on this work and prepare an assessment of the feasibility of proceeding to full scale implementation.

To support their assessment of feasibility to proceed with the PITS system implementation, students are provided with a simulation of interviews, conducted with characters drawn from the initial brief. Students are provided with thirty to forty questions from which to choose, to put to a character in the simulation, spanning issues from business need, to functionality, technical issues, economic challenges, office politics, and the personal reactions of the character to the proposed project. In a two hour class, students work initially to design an interview with this character, to inform their assessment of PITS feasibility. They are challenged to choose typically 12 questions from the set provided, and to order them logically as they would propose such an interview should proceed.

When happy with their design, the students “run the interview” using the PITS simulation. They are then guided, in their teams, and subsequently in a plenary session, to reflect on how their planned interview “played out”, and to suggest improvements to their choices of questions and to the sequencing they proposed.
Simulation Treatment

At the heart of the learning that students take from the PITS simulation is the plenary session. In these sessions the instructor takes a selection of the interview designs from class groups and plays them to the full class.

Students critique each other’s designs, reflecting upon both question choice and sequencing. Proposed alternatives can be played immediately.

In so doing, students get first-hand experience of the process of interview design, and feedback on the possible consequences of poor question choices and poor ordering choices.

Whilst the question choices and sets of question responses could have been provided in paper-based form, the immediacy of having the computer-based simulation play the interview that has been designed encourages students to experiment, providing students with immediate feedback on the consequences of choices that are made when designing interviews.

Underpinning this simulation is a model of action learning, facilitated by the simulation. An initial phase of interview planning is followed by students “experiencing” the interview, as played out using the computer-based simulation.

The concluding plenary session facilitates both individual and collective (all-of-class) reflection.

Alternative interview designs, postulated by students in the plenary session, are played to the whole class, as a means of confirming learning.

Blended learning used in this case, fuses reality and virtuality into a single and consistent world; first to create a sense of authenticity; and, second to provide educators with a degree of control over the simulation outcomes.

Evaluation and Lessons Learnt

Feedback on the PITS simulation, formally evaluated using a survey completed by 80 students was overwhelmingly positive – positive responses were in excess of 70% for almost all questions.

Supportive responses to the open questions include comments such as:

“It relates to business … because it helps teach the sort of questions that you would need to ask”; “What was explained would occur in reality as it looks like and sounds like a real interview”; and “It allows you to understand and see how you need to perceive business problems and where you should look”.

Results of two (2) of the 38 survey questions are presented below.