

Virtual crime

Real-life crime scenarios are going virtual to help Victorian detectives perfect their crime-fighting skills, writes JUNE YU

The trainee detective is at the bar where a murder has just taken place. He surveys the room and takes photographs and fingerprints. Later in the investigation, he watches as a woman is interviewed in relation to the crime. He strains to hear her muffled voice as she hesitates before answering a question.

The trainee is using a new interactive CD-ROM developed by Monash's Faculty of Information Technology, which the Victoria Police plan to introduce into its detective training program in the coming months.

The CD-ROM is the result of a two-year Monash multimedia research project and was developed to test detectives' knowledge and understanding of the procedures and processes of crime investigations, explains School of Multimedia Systems researcher Dr Raymond Li.

"The project provides simulated real-life situations, starting from the minute a phone call arrives at the police station to the actual solving of the crime," he says.

"Responding to the instructions of the participant, it involves visiting the crime scene, taking photographs, taking fingerprints, writing reports and interviewing suspects."

Dr Li says the CD-ROM captures an interview situation where the trainee detective must observe the interviewee and extract meaningful information for the 'investigation'.

"You can actually see the person being interviewed hesitating in giving evidence, as well as their facial expressions. This can't be



Photography Maurice Grant-Drew

Dr Raymond Li, Sen. Sgt Ged Griffin of the Strategic and Planning Unit, Det-Sen. Sgt Rod Lloyd, and masters student Mr Ben Lipa test out the interactive CD-ROM developed by the Faculty of Information Technology.

done in text-based exams – using multimedia gives you a better way of developing the skills of the trainee detective," he says.

Dr Li says the software application tracks the movements of the trainee detectives as they move through the program and logs them onto a database.

"This allows the instructor to review and assess the competency of the trainees and check whether they have followed the right procedures and completed tasks in the correct order," he says.

The CD-ROM has been tested by trainee detectives, and their responses were used to make improvements to the user interface.

"We invited another group of trainee detectives to evaluate the final product, and the response was very positive. A high percentage of the participants accepted computerised competence testing and believed this type of multimedia product was the way to go," Dr Li says.

Victoria Police Crime Course Unit manager Detective Chief Inspector John Mugavin says the multimedia product would boost

These are the witnesses from the crime scene. YOUR task is to select a witness, in the order YOU deem most appropriate, to see what he/she has to

Victoria Police - Crime Courses Unit

This is where the text instructing you what to do for this screen goes. This should always read when entering a new screen.

Notes: Notes which you think may be useful later go here.

Answer: When asked a question, you must type your answer here.

Time remaining 9:59

YOU are now in charge of the crime scene. All persons have been removed from the scene. YOUR task is to search the crime scene. It will be YOUR responsibility to locate exhibits, possibly related to the alleged Crime, and take appropriate action in relation to each. Use YOUR cursor to scan the crime

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flexibility in delivering training but would not replace the current training methods.

"We look at the multimedia application as part of a range of training resources and strategies that could be used in enhancing the training and assessment of detectives' skills," he says.

"We will also use the product to help develop judgement skills in dealing with people who have drug problems and are involved in criminal activities."

Detective Chief Inspector Mugavin says that while training detectives in either real life or simulated scenarios was probably the best

way for police to learn, they were not always practical.

"However, these approaches are dictated by real-life situations as they occur and cannot be fitted into a training schedule," he says.

"Simulations are very costly to set up, particularly if there is a course with 20 or more participants.

"The multimedia product is individual in that one participant can use the training paradigm and can complete it at their leisure."

The CD-ROM incorporates a template, which means alternative videos and scenarios can

be dropped in to meet other training needs of the police.

Monash University and Victoria Police are now in discussions about developing other multimedia products to support e-learning and internet technologies within the police force and to assess how mobile computing could assist the police in their work.

Action For more information about the development of multimedia applications, contact Dr Raymond Li on +61 3 9905 2354 or email raymond.li@infotech.monash.edu.au Visit the Faculty of Information Technology at www.infotech.monash.edu.au/