

Using RIT to enhance the learning of professionals who are dubious of its value

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Background

The RIT project in Cybercrime Forensics ran from January 2007 to July 2008. It involved students on the MSc Cybercrime Forensics and the BSc Forensic Computing programmes. The MSc is jointly validated and taught by the Department of Computing, CCCU and the National Policing Improvement Agency (NPIA). The NPIA is responsible for all high tech specialist training for the regional police forces in the UK.

The RIT Cybercrime Forensics project was focused on breaking down any barriers. Cybercrime Forensics is very new. Changes occur all the time in legislation, offences committed requiring investigation, approved procedures and the underlying computer technology. To be effective those working in high tech crime units, and those training those professionals, must keep up to date. To assist in this process the RIT project created the infrastructure to bring students together with others in the field.

Engaging professional people working at the cutting-edge of their disciplines is not always easy. They can have very strong convictions that the way they are doing things is 'the right way' for such things to be done. They may also distrust the ideas of people outside their normal sphere of activity. Students on the MSc course exhibit the traits one might expect of serving police officers – they are assertive and forthright in their views. Members of the police force are also a very tight-knit group and can treat others as outsiders. While necessary in many contexts, these attributes can be a barrier within the educational process, where ideas from different sources can be considered and valued beside practical experience.

Engaging trainers who work outside HE can also be problematic. The MSc Cybercrime Forensics is taught 50% by the University and 50% by NPIA trainers as Associate staff of the University. The trainers are very skills focused and need to be supported to make the transition to delivering Masters level education.

Approach/methodology

The following activities were undertaken:

- Developing a research network in Cybercrime Forensics including universities, police training through NPIA, the National High Tech Crime Training Unit of Wyboston and commercial security companies, promoting an annual international conference, developing an integrated website, virtual forums and streamed lectures using e-technology.
- One to one interviews with MSc students on the use of RIT during the taught components of their programme.
- Interviews with prominent researchers in the field in the UK.
- Open research seminars with invited academics from other universities, police officers and security industry speakers.
- MSc students and staff attended and presented a research paper at the 2007 international Cybercrime Forensics Education and Training (CFET) conference.

Outcomes

All students had the opportunity to attend CFET 2007 and the two subsequent conferences (CFET 2008 and CFET 2009) with three or four each year presenting position papers on their MSc dissertation work to the international audience. This has led to their involvement in wider networks of researchers and students going on to extend their studies to PhD. Undoubtedly the overall quality of the learning experiences of students has been enhanced.



Nine staff in the Department completed 40 publications (book chapters, national and international conference papers and journal articles) as a direct result of this project. Four staff had the opportunity for international travel to attend conferences to liaise with researchers from around the world.

The Department hosts the CFET conferences as an annual event bringing in distinguished national and international speakers from 18 countries. Selected papers from CFET 2008 appeared as a special invited edition of an international journal.

In 2008 Denis Edgar-Nevill was invited to propose the formation of a new national British Computer Society Cybercrime Forensics Specialist Group (BCS CFSG). It held its inaugural meeting at CCCU in December 2008 where Denis was elected as founding Chair (subsequently re-elected in September 2009). Two other staff in the Department hold positions on the national committee. At the time of writing the BCS CFSG has grown to a membership of more than 900.

It is important to bring together a wide range of external and internal academic and professional expertise establishing credibility when offering programmes at the cutting edge of new disciplines.

Certainly the credibility gap has been spanned by this project. The quality of the work being produced by the students on the MSc in Cybercrime Forensics has been particularly praised by the external examiner for the award who is himself a prominent leading international researcher in this field. This project has had a major impact on the staff and students of the Department of Computing at CCCU. It has clearly established the work of the Department at a national level in the UK.

Enhancing RIT

The project has created many new links and opportunities for students and staff. Learning and teaching is as much a question of who you know and work with as what you know. Of great importance has been developing a range of visitors to the Department giving insight to professional experiences through master-classes and conference presentations. A number of master-classes have been given to undergraduate students by students from the MSc Cybercrime Forensics discussing their roles working for police high tech crime units. These experiences will be remembered and useful to the development of individuals every bit as much as the content of the lecture programmes.

Advice for others

None of the funding provided for this project was used to buy staff time. Remember that it can be a greater and longer-lasting incentive for staff to travel, attend a conference or acquire a piece of equipment.

Reflections and any future plans

The RIT project came at an opportune time to bring together work in the Department. Its undoubted success is partly a result of the many opportunities which arose as a result of the networking and developing relationships with external organisations. This brief report gives only an indication of the many outcomes and events which have their origin in the project.

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