

## **Electronic Supervision of Research Students**

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Unitec's Master of Computing requires students to complete a substantial research-based dissertation or thesis, as well as course work. Students are located in various parts of New Zealand, Taiwan, Germany and Norway and each student has two supervisors. Most supervisors are located in Auckland but three are professors from elsewhere: one each from Australia, Hong Kong and Mexico (Joyce, Barbour, Fielden & Muller, 2003).

Supervision of research students works best if supervisors and students have common understandings, preferably in the form of a formal contract or code (Phillips and Pugh, 2000). Unitee's code for research supervision requires that supervisors have frequent and regular contact with their students (Unitec, 2003). When students and supervisors are separated by significant distances, this creates some logistical problems. However there are a range of electronic means that can be used to overcome or minimise these problems.

Asynchronous methods include:

- using the "course information" and "course documents" facilities of Blackboard to provide general information (about institutional requirements, available resources, referencing)
- using the "discussion board" facility of Blackboard to promote staff-student discussions about common concerns
- exchanging emails containing questions and answers or generalised feedback
- using visual "change tracking" to highlight suggested improvements to drafts.
  - Synchronous methods include:
- using the virtual classroom" (or "chat") facility of Blackboard
- conducting "voice-only" supervision sessions by phone or via the internet

 conducting "sight-and-sound" supervision sessions using video-conferencing facilities or webcams

For students with good command of English, asynchronous methods have proved effective and have avoided the problems created by different time zones. Indeed supervisors often respond to students' emails while the students are asleep, and vice versa. This allows both parties time for reflection, which is often a good thing! Synchronous methods can be beneficial when concepts are difficult to explain in writing and can "humanise" the exchanges, however there may be logistical problems (eg timing and technical malfunctions).

## References

Joyce, D., Barbour, B., Fielden, K. & Muller, L. (2003) "Research supervision: Process and experience". Proceedings of the 16th Annual Conference of the National Advisory Committee on Computing Qualifications, 295-298.

Phillips, E.M. and Pugh, D.S. (2000) "How to get a PhD". Maidenhead: Open University.

Unitec (2003) "Code for Supervision of Postgraduate Students Undertaking Research".

Auckland: Unitec New Zealand.