eLivingCampus

Samuel Mann

Lesley Smith

Poster

Information Technology Otago Polytechnic smann, lsmith@tekotago.ac.nz

Otago Polytechnic has set itself a goal of "every graduate may think and act as a sustainable practitioner by 2009". This goal is aimed at contributing to a better community, at producing graduates across the institution with relevant skills and values, and about working closely with industry to both identify and achieve sustainable practice in each discipline (Mann and Smith 2008).

This sustainable practitioner role in computing goes beyond a consideration of our own footprint to supporting a wider application of sustainability behaviours (Blevis 2007). By considering a "sustainability lens", sustainability becomes a context for everything.

Mann and Smith describe the use of real projects in teaching software engineering using an agile development framework (2006). This has significant benefits of dealing with actual clients, facing real problems and real development issues. In "eating own tail" (2007) we describe the side effect of students learning about the subject area of the development task. In that case we made use of this consequential learning by making the development task a project management system for software engineering.

In 2008, the task set for software engineering was to develop the IT infrastructure for the Polytechnic's LivingCampus initiative.

The LivingCampus aims to provide integrated learning opportunities in sustainability for every discipline. The plan for the LivingCampus incorporates the development of three aspects simultaneously: a community garden, an interactive open air experience, and enhancing the sustainability of the campus.

It is envisaged that the Living Campus will become the hub for sustainability-oriented community education services. Staff and students from across the institution are collaborating with the wider community to convert the entire campus to a productive community garden that is also a focus of community engagement.

Using the Agile Development Methodology, groups of three to four students worked to develop solutions for the LivingCampus project managers Paula Petley and Michelle Ritchie. In the first and second iterations, groups worked individually to develop aspects of the solution and then these were integrated in the third iteration. The final system included an interactive map, a weather reporting system, an information kiosk, a visitor management system, games with sustainability messages, and an online community.

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