The Local Ecostudy project developed by Macquarie ICT Innovations Centre (MacICT) in collaboration with Field of Mars Environmental Education Centre and Macquarie University Department of Education was launched at the start of the 2008 school year. It was conceived as a way of making environmental education an authentic and engaging experience for primary and secondary students, while teaching them how to use new technologies in the field.

Director Deborah Evans says: “Instead of studying text and pictures in the classroom, we wanted to give students exposure to real fieldwork using mobile data collection devices such as Nova5000 data loggers, iPhones and digital cameras.

“It’s a fast track way to get students into collaborative learning while building the confidence of the individual.”

Now in its third year, the project continues to attract enthusiastic participation from schools in Sydney’s Northern Sydney Region, including the Northern Beaches area. The schools participating in the project have collaborated with the Narrabeen Coastal Environment Centre to investigate issues specific to their local ecosystem [http://www.pittwater.nsw.gov.au/environment/cec].

The project pairs a secondary school with a primary school and older students working with younger “buddies”; typically two 14-year-olds with two 10-year-olds, in a team of four.

Depending on whether the school is a primary or secondary, the typical project life is around 10 weeks. Participating teachers develop and plan their own projects based on the curriculum, often referencing their school’s School Environmental Management Plan (SEMP). Comprehensive assistance and support is available for teachers at the MacICT website [http://www.macict.edu.au].

Experience of early projects demonstrated the importance of teachers and students learning how to use the devices competently before a new study gets underway in the field.

Regular teacher training days are held and all students attend a simulation day at the Innovations Centre, during which they complete three activities in the surrounds of Macquarie University’s beautiful lake.

The simulation fieldwork starts with the students choosing which of three activities they want to complete first. They then use GPS and Google Maps on iPhones to navigate from the
Macquarie ICT Innovations Centre
www.macict.edu.au

MacICT is located at Macquarie University, Sydney. It is a collaborative agreement between the NSW Dept of Education and Macquarie University, which provides NSW DET students and teachers with access to innovative technologies in teaching and learning.

The Centre’s focus reflects a project-based approach to working with teachers and their students. Its core business includes a comprehensive teacher professional learning and support program where MacICT staff and school teachers develop projects that are curriculum-based and meet the individual needs of the teachers and their classes.

For the ecostudy project, MacICT works in cooperation with the Field of Mars Environmental Education Centre http://www.fieldofmars-e.schools.nsw.edu.au/index.html.

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Keepad Interactive, an industry partner of MacICT, supplies the Nova5000 and a range of over 60 Fourier sensors. Visit http://www.keepad.com.au for a range of products.