Case study

An EfS project involving Kaikorai Valley College and neighbouring schools

Kaikorai Valley College is a co-educational year 7–13 school of 852 students in southwestern Dunedin. Since 2004, students and teachers have worked with members of the community to enhance a local urban waterway. The Kaikorai Stream flows through the school grounds.

Kaikorai Valley College students together with students from other schools in the catchment have established a monitoring programme and blog sites, undertaken rubbish pick-ups and riparian planting, and helped to manage environmental field days. Co-operative involvement with the other schools and increased environmental awareness have encouraged Kaikorai Valley students to take responsibility for new programmes like planting an edible garden (year 13 science) and school-wide environmental projects (year 12 activities).

Synopsis

Kaikorai Valley students together with students from other Dunedin schools in the catchment have been monitoring their local environment and learning about how to participate in social action to improve environmental quality.

Justification

Kaikorai Stream is an urban waterway that has been treated as an open drain for over 120 years. This has led to poor water quality, visual pollution, and loss of habitat and biodiversity. Continuing residential, industrial, and infrastructural developments are overwhelming the entire ecosystem. This situation offers opportunities for active student engagement and learning across and at different levels of the curriculum. Students are being given the chance to act locally and meet the challenges of some of the most important environmental issues of our time.

Objectives:

1. Monitor water quality along Kaikorai Stream.

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2. Educate students and the community and then take collaborative action to improve land, water, and air quality in the Kaikorai catchment.

Method and resources

The project objectives are being met through student and teacher participation in environmental forums, conferences, stream and environmental clean-ups, ecosystem restoration, field days, and sponsored walks and in environmental monitoring and interpretation. Students from different schools have, for example, adopted part of the stream or the air in their area to monitor. Some have developed their own school gardens. In 2009, in association with Otago Polytechnic, a virtual catchment world is being created to link the student activities and the blog sites of different schools involved in the project.

The main resource available to the project has been the commitment and intellectual capital of individuals, students and their schools, and community groups. Those involved in the project have been successful in obtaining some external funding, for example, through the World Environment Day 2008 and the Nutrition Fund. Some of the lead teachers have completed teaching fellowships and study awards focused on the environment. The paid time available through these awards has been very effective in maintaining the impetus of collective involvement.

Evaluation and reflection

The process of developing this project has been lengthy (2004–2009). Activities in these years have raised awareness of the environmental issues surrounding the stream and the catchment. This knowledge is empowering teacher facilitation of further student commitment and decision-making to meet the objectives.

Advances have been made rapidly at times when either dedicated funding for expenses, but particularly teacher professional development, have been obtained. The key idea in the process succeeding is starting an action and establishing win-win partnerships with different groups for their mutual benefit.

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Lead teachers

One teacher initially drove this project, and then a wider group was established. The group involves lead teachers from other primary, intermediate, and secondary schools in the catchment, some already having participated in environmental projects of their own. These teachers are developing action competence within the students at their own schools, now in a local context. Other people involved are a regional council manager, the University of Otago Education for Sustainability adviser, and individuals from community groups.