

The Keith/Tintinara Experience

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Aims Of The Tintinara/Keith Datalogging Project:

- to develop skills in using dataloggers to collect data from a specified water body to provide evidence of water quality
- to collect data and present it via Moodle for use by client schools
- to use the data to develop inquiry based questions for independent or class research
- to determine the effects of environment on this water
- to determine the effects of water quality on aquatic organisms
- to collect data from water bodies in the region to enable comparisons to be made about water quality

The ADC Moodle:

The use of the ADC Moodle was vital for the success of the project as a means to disseminate information to client or participating schools. Information on the Moodle provides a starting point for classroom use with teachers being able to use the Inquiry lesson plan or being able to adapt according to their needs. Included on the Moodle are links to SACSA, student outcomes and examples of student activities and work. Links have also been made to sites that provide relevant information for a range of activities relating to water quality.

As data collection is ongoing and hopefully continuing for many years to come, this section will be continually and regularly updated and it is hoped that other schools will include data from their aquatic habitats to enable comparisons to be made between different sites. The inclusion of videos of conditions at the different times of testing, provide students with a "virtual classroom". This could be used to simulate real time as much as possible or allow students to go back in time to compare then and now.

An example of a directed practical has been included and more will be added to the Moodle as time progresses. A variety of activities are also included under their own section. It is hoped that client schools will also contribute to our Moodle.



A Problem Encountered And Resolved

Both of us were at Keith Area School when the project commenced. During the project's life, both of us moved schools: Mandy to Tintinara Area School and Belinda to Lameroo Community School. This caused some obvious difficulties, but Luckily Tintinara Area School was sympathetic and had a wetland, so the project continued.

Tintinara Area School is committed to environmental issues relating to the development of the town's artificial lake, and we have started to collect data on water quality. This is a long term project by the Tintinara community and school, and continued collection of data will be supported by the school even with changes in school staff.

Changing schools actually provided an opportunity to rethink the original project to monitor water at Keith and expand it to include aquatic habitats in other areas, thereby providing a means to compare water quality in different locations of this district. Through this, students in other schools will be able to collect their own data and store it on the Moodle for use their own use and the use of other schools.

This data will also be available for schools in areas lacking water. Opportunities exist to link students through safe chat forums etc to discuss data and water issues in different areas or to clarify information presented on the Moodle. Through interschool communication, students may be able to assist each other in developing possible solutions to a range of relevant environmental issues. This is particularly important for small rural schools with low student numbers as they will be exposed to different people and thoughts.

Status Of Project:

Federal funding ran out in June 2009. However, the project continues because we are fired up by the experience and Tintinara Area School is committed to its continuation.

We can't use the dataloggers in 'real time' because of the security issues raised by leaving them unguarded, on site. The development of the Moodle and the use of the flip video to record conditions etc at the time of taking readings enables students to simulate real time experiences. This also provides a means of archiving data and information for later use and for comparisons over an extended period of time. In this way, students from remote, 'client' schools can become actively engaged in the process.

It may be possible for dataloggers to be used by client schools to measure quality of their water but this may need to be restricted to ensure ongoing monthly measurements are possible at Tintinara. This aspect will probably be trialled with Bordertown High School if they decide to continue participation; however, the aim of our section of the project was to experiment with remote access to data collected by the dataloggers, and we have shown it can be done.

We hope that other schools will be interested in joining and contributing to this project, and invite them to contact us.

