Literacy learning across the curriculum: Flagstones and frogs in action

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During 2008, Flagstone Creek State School, a small rural school, underwent a process of pedagogical and curriculum renewal. In a collaborative partnership with academics from the Faculty of Education at the University of Southern Queensland and assistance from the University's Media Services, the project resulted in a set of artefacts which will be used for engaging pre-service teachers in transformative learning.

Introduction

The Flagstone Schooling for the Future Initiative began as a collaboration between the students and staff of Flagstone Creek State School, a small rural primary school in the Lockyer Valley (east of Toowoomba and west of Brisbane) with an enrolment of 32, and a group of academics from the Faculty of Education at the University of Southern Queensland. The project began when a visiting academic at the University enrolled her two children at the school. As one of the Year 7 students explained, the family 'started asking us questions about our school and the Flagstone Creek community, which made us realise that we did not really know much. Yet we wanted to know, and we should know, because we are living right in it'.

Those initial questions became the catalyst for discussions amongst the teachers and University staff about pedagogy, the use of technologies, 'new literacies' and their place in the curriculum, and the potential for pedagogical and curriculum change. There was agreement that a collaborative process which focused on pedagogical considerations was a useful way to proceed, and that the project would be documented as it progressed using a range of data collection techniques, including video-recordings, field notes and semi-structured interviews with students and teachers. At the beginning, however, there was no sense of what the end-point of the project would be exactly, because it was decided that the project should evolve over time and that the students should play a significant role in determining how it would develop.

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Naturalistic investigation like this makes it impossible to pre-specify the design in detail (Norris & Walker, 2005). Yet the teachers were taking on the challenging roles of 'learning designer' and 'learning manager' (Kalantzis & Cope, 2005a, p. vii) and this required a shift in thinking about how the classrooms operated. As one of the teachers explained, it was necessary for her to 'let go' of her need for structure and curricular control and that meant that she was engaging in a lot of learning herself.

Even though the trajectory of the project was not pre-specified, it commenced with a number of guiding criteria. It was planned as an inquiry-based approach, with the students taking the roles of researchers or inquirers (Doll, 2003; Jacobsen & Lock, 2004; Jardine, 2006). The teachers planned to encourage, facilitate and guide the children towards explorative and deep learning (Kinash, Noble & Henderson, under review) with plans for learning to be represented in multiple ways using technologies (Rose & Meyer, 2006; Rose, Meyer & Hitchcock, 2005). The children were to be afforded agency, efficacy and vision for their own learning, but the approach was underpinned by rich established pedagogy within a contemporary context with infused technologies.

The result was a collaborative, cross-institutional and cross-curricular project that saw four groups of eight students research aspects of their local area. In particular, the students investigated a social history of the school and community, the history of the first crossing of the nearby mountain range by Europeans in 1840 and the site of the first gazetted road in Queensland, and science issues surrounding the local 'water situation'. Each group of students began their investigation by designing research questions, planning how data would be collected, and considering how they would present their findings to the school and to the local community. All aspects of the project were documented, so that the students' learning journey could be reviewed at any point along the way.

Opportunities for literacy learning across the curriculum

Literacy learning was part and parcel of each of the four projects. As the projects were planned and developed, each group focused on the production of an artefact that used learning technologies, showcased particular literacies that related to multimedia presentations, and demonstrated their learnings about the local area.

Each of the four groups of students gave themselves a 'catchy' name. Following discussions about research and, in particular, phenomenology, two of the four groups chose names that played on that term. The Funky Phenos focused on historical research, investigating the history of Gorman's Gap. The group wrote a script and planned costumes and props for a re-enactment of the first crossing of the gap by European settlers. The group performed their re-enactment when all members of the school walked the site of the old road. Their performance was captured on digital video.

The Phenomenomenologists decided to study stories of the local area. To do this, they planned and advertised a Tea and Talk. As a result, 20 members of the local community spent time at the school, during which they were interviewed by the students. Some of the visitors were grandparents who had been enrolled at the school 50 and 60 years previously. The interviews with local community members were recorded using the school's video camera. With Blackcat Spider software, the group produced its own website so that the community's stories could be shared beyond the school context.

The Wildlife Water Warriors investigated the impact of drought and flood on local wildlife as well as on domestic animals. After advertising locally, the group was contacted by two experts. An honours students from the University of Southern Queensland visited the school and demonstrated a device for measuring household water usage, while the Science and

Education Coordinator for SEQ Catchments spent a day-and-a-half with the children. She taught them how to read aerial maps, how to make plaster casts of footprints to determine which animals were visiting local waterholes, and how to use all of their senses in their research. She also accompanied them on an excursion to the drought-affected Flagstone Creek, located near the school, helping the children to collect flora and fauna artefacts. Using software called Podium, the children produced a short educational podcast.

The fourth group, the Slippery Sliders, became the 'recorders' of the entire project. They documented the progress of each project, produced a PowerPoint slide show, and organised an event where each group could display the results of their research project, their use of technologies, and their learning about the local area.

As each of the groups designed their investigations, numerous opportunities for situated literacy learning were planned and conducted (Barton & Hamilton, 2000). The students and teachers not only brought expertise from the local area into the school, but they also moved out of the school grounds to visit a local museum, to locate historical plaques and cairns on the old road site at Gorman's Gap, to visit the local creek, and to learn about the Indigenous heritage of their locality. The students used a digital camera and video camera to document their learning. As the project progressed, student-developed and student-designed artefacts began to accumulate in the classroom. Every activity provided opportunities for literacy learning, with students taking on the roles of narrators, news reporters, script writers, web-designers and so. Numerous texts – print, oral and multimedia – were designed, displayed and used in the students' classrooms, as the students learnt to 'solve problems, collaborate and be flexible and creative' (Kalantzis & Cope, 2005b, p. 10).

The culminating activity of this first phase of the project was a celebratory performance evening at the school, which was attended by the students, the teachers and residents of the local community. The students presented their learning and the multimedia texts they had created to an appreciative audience.

The development of a new phase

Following the presentation evening, the project began a new phase which resulted in the development of a range of artefacts that are now housed in the University of Southern Queensland's library as resources for pre-service teachers. During the first phase, the project was focused on the school context, with academics and staff from the University's Media Services visiting the school and accompanying the students and teachers on excursions away from the school. However, in the second phase, the main focus was the University context.

As part of this new development, the whole school visited various locations within the University, saw how resources were prepared by Media Services, and where and how the library displayed curriculum resources. The students finished their tour with a session in the University's video studio where they brainstormed plans for informing the wider educational community, including the University and other schools in the area, about how their research projects had transformed learning. As with the first phase, these events were recorded using digital technologies.

Working with Drs Karen Noble and Robyn Henderson from the University's Faculty of Education, the students and teachers prepared for a presentation evening which would be held on the University site. With assistance from other Faculty staff and the University's Media Services, the next step of the project included the production of materials that could be used to encourage pre-service teachers to take on transformative approaches to learning. Through discussions about design with the students, senior graphic artist Sian Carlyon developed a 'frog logo' for the project, as shown in the illustration that accompanies this article.

The idea for a frog logo came from discussions amongst some of the school's students. One student had read Li Cunxin's (2003) novel *Mao's last dancer* and had likened the students' learning experiences to the Chinese proverb of the frog in the well. As the student explained:

> The story is about a little frog in a well. All his life he's been down the well … One day a frog from the outside came and he looked down the well. The little frog said, 'Come down here. It's the best well and we've got everything.'
>
> And the frog on the land said, 'No. You don't even know what it's like to be on the outside. You've never seen anything like this.'
>
> The little frog went and talked to his father and his father told him the same as the frog on the outside. For years his dad had been trying to get out but the well was too deep …
>
> Sometimes we just feel like the little frog, but the difference is that we're going to get out of our little well.

In this next phase of the project, each of the four groups of students produced a poster and a brochure about their research project, focusing on conventional print literacies. In the preparation of these resources, the students had to write for a wide educational audience for a particular purpose. Their work also included negotiations with the graphic artist, who turned the students' writing and design ideas into professionally-produced artefacts. The University staff also produced a set of posters that explained the project and its purposes and provided information about the collaborations that were involved.

At the celebration and launch evening, the students performed a play they had written about their learning experiences in front of an audience of academics, pre-service teachers, local educators, parents and community members. Additionally, each group displayed their poster, brochure and multimedia items and talked to those who attended the event about their projects and the artefacts they had produced.

The ripple effect

Whilst the project with Flagstone Creek State School has reached closure with the celebration and launch at the University, the project is now moving in a new direction. Using the artefacts that are housed in the University's library, an Information Literate Teachers' Group is being formed, so that other teachers in the local area and pre-service teachers may share in the learnings from the Flagstone Project.

In particular, the two phases of the project highlighted the success of developing child agency in learning, including literacy learning and the use of technology; the benefits of students becoming researchers; the success of an inquiry-based pedagogical approach; how technology can be used as a tool for learning and can help to foster the learning of 'new literacies' (for students and for teachers), and the benefits of cross-institutional partnerships. Based on these key tenets, the next phase of the project will involve teachers and pre-service teachers in action research projects relating to information literacies.

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