

The Flagstone experience: Universities building stronger links to rural education communities through technological creativity

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Abstract

This paper outlines a collaboration between the students and staff of Flagstone Creek State School, a small rural primary school in the Lockyer Valley (Queensland) with an enrolment of 32 and a group of academics from the Faculty of Education at the University of Southern Queensland. The program engaged the school community in a research-led, technologically-enhanced, whole-of-school approach to teaching and learning, and had a positive effect on the university curriculum of pre-service teacher educators.

In 2008 during Phase 1 of the project, Flagstone Creek State School underwent a process of pedagogical and curriculum renewal. In Phase 2, collaboration between the school and the academics from the Faculty of Education, with assistance from the University's Media Services, resulted in the production of a series of artifacts (see Appendix) which are now used as resources for pre-service teacher education. The artifacts demonstrate how the creative use of educational technology transformed the school and engaged the broader local community. In 2009, the project has moved into Phase 3. This sees the university academics (authors) engaging pre-service teachers and novice and experienced educators from across the region in an Information Literate Teachers' Group, drawing on the learnings from Phases 1 and 2.

Major considerations of the project have addressed issues of rurality and the development of a community of learners within a rural context. Community connectedness and the recognition and inclusion of existing social and cultural capital within the education context provide solid foundations for curriculum and pedagogical design. The model has the potential to transform learning in other rural and regional contexts. This paper introduces the project, its successes and its potential for transformative education.

Introduction

Working with children and families in the current societal context has become increasingly problematic (Gardner, 1999, 2003; Prout, 2003), with research indicating that this can be attributed to the uncertainty, discontinuity and insecurity characteristic of the post-modern condition (Hulqvist & Dahlberg, 2001; Jenks, 1996a, 1996b; Lyotard, 1984; Prout, 2003). Concomitantly, the complexities of schooling in rural contexts is seen to add a further level of demand on teachers due to neo-liberal approaches to the provision of education (Ball, 2003; Noble, Macfarlane & Cartmel, 2005; Popkewitz, 2000; Rose, 2000). A lack of understanding of current contexts for children and their families can be seen to further compound the present state of play across the education sector. The preparation of graduates to work effectively in educational settings is challenging as they are provided with many opportunities to work in increasingly diverse settings providing services to children and their families. Indeed, graduates entering the workforce could find themselves working in unfamiliar contexts. As a result, preparatory university programs of

study need to reflect these broader social changes and ensure that the degree programs that are offered do indeed meet the ever-changing needs of the students who enrol, providing them with the necessary knowledges, skills and dispositions that are transferable across the broad education sector.

Setting the scene

From an initial research project conducted on site at the Flagstone Creek State School, a small rural primary school in the Lockyer Valley, Queensland, and in conjunction with University of Southern Queensland (USQ), a strong partnership has been established. At the outset the project was focused on curriculum renewal. Together, university academics and teachers explored the potential use of new technologies and ‘new literacies’ as potential vehicles to drive this renewal, but importantly, there was no sense of how this should be done (Henderson, Noble, Prestridge & Evans, 2009). There was agreement that the project should be evolutionary and that the students should play a significant role in determining the journey that this process would follow.

During Phase 1, the project was focused on the school context, with academics and staff from the University’s Media Services visiting the school and accompanying the staff and students on excursions in the local area. This phase was conducted on site at the school over a school semester and resulted in the production of a variety of technology-driven artifacts developed by the students to showcase their local community.¹ A tea and talk was also conducted as a culminating activity of Phase 1, where the local community attended the school to share in the celebration of learning that had taken place. During this phase, students had become agentive, self efficacious learners.

Following on from the school-based presentation evening, the project began a new phase, where the main focus became the university context. Therefore, Phase 2 began with the staff and students of Flagstone Creek State School visiting the university so as to broaden connections to the university. Importantly, the authors of this paper wished for the school to understand the notion of reciprocity and to see how the learning that had taken place in Phase 1 of the project could potentially impact on the learning of pre-service teachers within the Faculty of Education at USQ, in terms of transformative approaches to learning and curriculum development generally. This paper interrogates the ways in which learners discover, shape, and make explicit their own knowledge through situated learning and how the establishment of strong links between rural schools and universities can impact on the future perceptions of lifelong learning trajectories. Clearly, ‘community connectedness’ and the recognition and inclusion of existing social and cultural capital within the education context provide solid foundations for innovative curriculum and pedagogical design.

This paper begins by describing the approach that was used to support the school’s connection to the university, then illustrates the ways in which student agency developed as students began to explore the ways in which they could make the transformations that had occurred for them in Phase 1 visible to the ‘outside world’. The paper highlights the features of this approach to whole-of-school curriculum development that seem to be offering a successful way forward for rural learners as well as for pre-service teachers and other education stakeholders.

Connecting with context: School meets university

From the outset of the Flagstone Schooling Project, there has been recognition of the complexities of educational innovations in rural school contexts. Building upon the strong relational ties developed in Phase 1, the second phase of the project provides points of potential dialogue between academics, pre-service and experienced educators committed to mapping and celebrating diversity and innovation in curriculum and pedagogy in different contexts. There has been a conscious effort to dispel deficit discourses that often plague constructions of learners and learning in rural Australia (Moriarty, Danaher & Danaher, 2003) and to instead develop conceptual and methodological tools that challenge these often taken-for-granted, marginalising assumptions of rural educational contexts.

On the initial excursion to the University, the whole school visited various locations within the University, saw how resources were developed by Media Services and where and how the library displayed curriculum resources. The students finished their tour with a visit to the University's television studio where they brainstormed plans for informing the wider educational community about how their projects in Phase 1 had transformed their learning. Students, teachers, academics and other university staff began to work together to develop the children's idea for a presentation evening to showcase their learning. The showcase evening was to be held on the University site.

In the days following the school visit to the University, the Principal was absent at professional development. On his return to the school, he saw that the children had turned a part of the library area into a television studio and on the door had developed a replica of the 'on air' sign that had fascinated them at the University. The children had initiated the development of this space to enable them to more fully develop their initial ideas and they began to experiment with various ways of presenting their learning, further demonstrating the strength of impact upon their notions of agentic learners.

With assistance from other Faculty staff and the University's Media Services, the next steps 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 developing a campaign and the impact of branding with students, Media Services developed the Flagstone Frog logo and related Flagstone Creek topology as the theme for Phase 2, as shown in the illustration that accompanies this paper. The initial idea for the frog logo emerged from discussions amongst some of the school's students who 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 from the story. As one 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 with 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.

This story provided the motivation for the children to showcase the ways in which this 'new way of working at school' encouraged them to feel proud of their well and, at the same time, provided them with ways to explore learning options beyond their local community.

Each of the four groups of students from the first phase of the project, once again worked collaboratively to produce a poster and a brochure about their research project and their specific approach to using new technologies. In the preparation of these resources, the students had to produce purposeful text for a wide educational audience. This work also involved negotiating with the USQ graphic artist, Sian Carlyon, who expressly treated the student groups as clients as she worked to turn the students' writing and design ideas into professionally-produced artifacts. 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 Flagstone Roadshow launch, the students performed a play and original musical rap that 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 artifacts they had produced.

Significant contextual elements: Pedagogical connectedness

The next section of this paper interrogates the nature of pedagogical connectedness through exploring the engagements between academic staff, teachers and students that impacted positively on student learning in this rural school context. In the interrogation of pedagogical connectedness, the mediated and relational nature of interactions in this co-constructed, child-initiated, whole-of-school curriculum development have been explored. It has taken considerable commitment to work in this collaborative manner, providing learning opportunities that are beyond the traditional boundaries of school curriculum development. It has required academics, teachers and students to adopt new ways of 'knowing' and 'doing' (Gee, 1996) in many instances. However, the rewards of such labour are significant. Developing curriculum in this way has brought about a sense of agency for learners as well as for the staff, families and local community. As such, the contextual elements that are of significance are: interactions and relationships; rights and responsibilities; choice; belonging and connectedness.

Interactions and relationships

All participants (academics, teachers, students and their community) have the responsibility to find out what they know and what they are capable of. Therefore, within this learning context, effective communication processes must be established whereby it is acknowledged that all stakeholders have rights. Initially, the development of ways of interacting within this inquiry-based curriculum approach needed to be scaffolded. Students were challenged by the freedoms afforded and needed time to develop a sense of working in ways that were not pre-determined or adult-led.

Indeed the facilitators (university academics and teachers) needed to stop and assist the students to reflect at key points in time on the ways in which they could interact with one another more effectively to achieve their collectively emerging goals. One such example occurred when one of the older children felt an overwhelming sense of responsibility for ensuring that the group was working to the timelines that had initially been agreed upon. Some of the group members appeared to be disengaged. After trying her own ideas to no avail, she appealed to the teacher and academics to help her to better facilitate communication within the group so as to engage everyone in making meaning of the learning that was possible. Through later reflecting on the group dynamics, the members of the group came to realise that, through developing a notion of a collective, they could each work on different tasks at the same time to achieve their goals. These same students began to explore further possibilities in the playground at lunchtime together well beyond the classroom boundaries and time constraints. The older children in the group took responsibility for involving the younger students, although one of the younger students commented that:

in the beginning the big kids bossed us a lot, but then they started to see that we (younger children) had good ideas and they needed to listen to us too. We talked together lots at lunchtimes and we all learned to listen to each other's ideas. The big kids learned from us and we learned from them too!

The staff and the children talked extensively about the importance of finding new ways of working together to achieve the goals that they had set, requiring a focus on the importance of interactions and relationships to achieve positive collective efficacy in the school. If all efficacy belief constructs are future-orientated judgements about capabilities to organise and execute the courses of action required to achieve goals within context (Bandura, 1997), then throughout the learning processes it was imperative that the students, teachers and academics revisited their thoughts and the actions deemed necessary to perform the tasks that had been set.

While it was important to create spaces to privilege the development of effective interactions and relationships amongst the children, working in this new way – where children assumed agency for their own learning – also required teachers to reassess their own instructional efficacy and their ways of 'knowing', 'being' and 'doing' teaching (Gee, 1996). Through a process of critical reflection, one of the teachers admitted that:

In the beginning it was really difficult. I was used to structure and following my plan. It wasn't that the children didn't have input, but I really took responsibility for developing the curriculum and setting the children up to answer the questions that I had developed. What I learned early on in this project is that I needed to let go of the structure. I was challenged at first to deal with this sense of lack of control. However, with encouragement from the other researchers I was able to step back and let the children design their projects right from the start. I know now that children can and should plan and direct their own learning.

What is apparent is that privileging interactions and relationships encourages the development and maintenance of collective efficacy and that student outcomes depend in part on the reciprocal relationships that occur between themselves as learners as well as over the teacher's influence on instructional school-based decisions.

Rights and responsibilities

What the students choose to do in order to explore a particular issue is perfectly appropriate. There is no assumption that the learning outcomes be investigated in a prescriptive way. Neither should the learner be stressed by the processes of engaging in critical reflection of learning outcomes. Therefore the students should have the right to explore experiences and knowledge as they so choose. An expectation is that each child is entitled to express his/her reactions to the learning tasks, but has a concomitant obligation to do so in an appropriate way. Therefore rights are understood to be reciprocal. All participants are made aware of how destabilisation and destruction can occur when power over others occurs.

What this inquiry, student-led curriculum design highlighted was the importance of the social processes of learning in conjunction with the cognitive ones. As one of the older students pointed out:

Now that we have gotten to learn in this way, we know how good it can be. There is no way that when we go to high school next year we are going to let them stuff us back in the box. We know how good it is to do it this way and we are going to fight to keep doing it this way now. We need to get others to see how good it is too!

From such a comment it is clear that this project has positively affected the social capital of the students involved and provided them with the initiative to share their future expectations for learning. They understand that they have reciprocal rights and responsibilities.

Choice

Within the learning context, the individual learner has the right to disagree with his/her peers in terms of how to engage with particular learning experiences, but there is equally an expectation that the other learners have the right to disagree and make choices in the same way. However, these choices are framed in terms of there being a joint responsibility to develop a greater awareness and understanding of how each person can work to achieve the fullest potential of any given situation. Students came to realise that the choices they made and the ways in which they exercised personal agency were strongly influenced by collective efficacy beliefs.

We were really excited about our ideas for the project in the beginning and that was great, but when we started trying to work in our little groups we really didn't understand how to make it happen. We couldn't do everything that we thought of at the uni, so we had to bring things down so that we could achieve things. We had to learn how to plan together and to listen to all of the ideas and to find ways to do things so that everyone felt important and that they were doing what they wanted to do. We worked out things that we were each really good

at and we had to make sure that we got to do those things and we could help the others to get good at them too. Once we got things planned out it was easier to see what we needed to do and we could choose what we did each time to make sure that our plan happened.

Likewise, the teachers also became more aware of the ways in which their perceptions of each student's potential agency as a learner affected student performance and achievement. As one of the teachers reflected:

This way of working has opened my eyes to how I have pigeonholed the students. The way that (one of the students) has really become a leader in his group and taken responsibility for others is remarkable. It has reminded me of the importance of keeping an open-mind and always looking for the potentials.

By privileging the element of choice, student engagement has been improved. Perceptions of learners and learning have been questioned and the choices that teachers and children make are influenced by their growing sense of agency within the school context.

Belongingness

This tenet highlights the need for individual learners to feel safe and secure in their choice to engage with the learning outcomes in whatever way they choose. It is imperative that the participants develop a sense of belonging to the social learning context and that they understand their own subjectivity in terms of their learning dispositions. Belongingness, then, attends to the notion of habitus (Bourdieu, 1984).

From the outset of the project it was clear that the children were curious about the community and the history that had shaped these physical and social spaces. The questions that developed reflected the students' own abilities to identify their lack of local knowledge and they eagerly embarked on facing this challenge and learning more about where they lived. As the students explained:

We realised that we didn't know very much about where we live, we couldn't answer their questions! Because they came from another country and a big city, it was hard for them to understand our small country atmosphere ... doing this project, we have learned a lot about ourselves and where we live and we want to get it out there, for others to see how important Flagstone Creek is. We want them to know how we can do things in a small school like ours.

In this way collective efficacy is not simply a sum of the efficacy beliefs of individual members (Bandura, 2000), but importantly, there is evidence of an emerging collective responsibility and heightened social and cultural capital.

Connectedness

Implicit in this approach is the fundamental need for learners to have interactions and relationships with others so as to form a network that supports their ongoing learning and development of identity. In this way, a sense of connectedness needs to exist for supportive networks to develop and for experiences to be meaningful. Lundell and Collins (1999) highlighted the importance of avoiding deficit discourses and building on what students already know. We found that the students were generally aware that they brought different experiences – from each other and from members of the community that were engaged in the project – and they regarded these differences as positives. In the words of one student:

USQ academics came to our school to work with us in Semester 1. Our return trip to USQ happened so that we could show student teachers the projects that we had been working on ... as well as to view how USQ could help us to advertise our school and the work we had been doing.

There was an understanding that pre-service teachers could learn from the students' experiences and that the connection to the university was a positive one for all involved. Equally, the Principal, teachers, parents and community members were astonished at the level of engagement by the students. Perceptions of children as learners were challenged and the community felt a connection to the school that had not previously been present. A comment by the Principal is testament to the strength of the connections formed across the community.

I am the proudest principal standing before you today. I am amazed and very proud of what we have achieved through working with USQ. We have connected the community to the school and involved everyone in this project. It has become a real community development and one that we will talk about for a long time to come. We have had students from 50 years ago come back and work with the students and this has been wonderful. Everyone has gained from the experience and it has changed learning at Flagstone Creek State School forever.

For the month following the Roadshow launch, the University library displayed video as well as the other resources in the curriculum materials area, thus allowing the school's students and their families to visit the university to view the curriculum resources. This highlighted the agency that they had developed as learners and the impact that their project had on the university community. This display also provided opportunities for pre-service teachers to explore the resources for future potential pedagogical applications. Upon reflection, it is apparent that this approach worked to develop enhanced collective efficacy and problem-solving capacities as the students, teachers and University staff worked together to find new ways of making learning visible beyond the school context. The resources that were produced are now permanently housed in the USQ Library Curriculum Materials collection, thereby maintaining a permanent connection to the school community.

Conclusion

Through these capacity building initiatives and the privileging of critical reflection, this inquiry-based approach to co-constructing a whole of school curriculum becomes a space whereby all participants experiment, try out ideas, take risks, tackle and puzzle over problems, think, reflect, listen, discuss, ask questions and surprise themselves and one another. Such initiatives provide pre-service education students with an intellectual platform from which it might prove possible to explore other such complex learning conditions and agendas in the future.

The artifacts demonstrate how the creative use of educational technology not only transformed the school and engaged the broader local community, but additionally illustrated the future potential for universities to engage with rural schools to interrogate the preparedness of educators for working creatively in promoting local contexts within a globalised world. In taking this project forward to Phase 3, using the artifacts that are housed in the University's library, an Information Literate Teacher's 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.

This paper argues that provision must be made for experienced and novice teachers to develop continually and sustain the knowledges, skills and dispositions relevant to their work in such complex times. What is advocated here is the privileging of a discursive space in which pre-service and more experienced teachers can explore the theory/practice nexus. Through building social and professional relationships, teachers can connect and be empowered to seek alternative ways of working and to develop existing social and cultural capital within communities. Linking back to the frog in the well story, the authors of this paper continue to develop this project with the formation of an Information Literate Teachers' Group so that other experienced teachers and pre-service teachers may share in the learnings from the Flagstone Project.

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Appendix



¹ For Phase 1 project details, see Flagstone Creek State School website: www.flagcreess.eq.edu.au. We wish to acknowledge the involvement of Dr Shelley Kinash (a visiting scholar at the time from University of Calgary, Canada) in Phase 1 of this project, as well as Janice Jones, Michelle Hoffman, David Prestridge, Carolyn Evans, Melissa Scanlan and the students and local community of Flagstone Creek.