Learning in, with and through community: Developing collaborations for transformation

Learning and Teaching Conference 2014

Collaborations

Dr Jenene Burke
Dr Sharon McDonough
Dr Anitra Goriss-Hunter
Dr Peter Sellings
Chris Wines
Our collaboration
Overview

**Presentation**
Provide examples of our learning partnerships

Present evidence that demonstrates the effectiveness of each partnerships

**Workshop**
How our partnerships came about
What each partner hoped to achieve
How we set them up

Participants develop ideas for potential partnerships
Devise action plans
Transformational learning partnerships

**Transactional partnerships**
Usually involve the specific needs of only one partner
(Butcher, Bezzina and Moran, 2011; Teitel, 2008).

**Transformational partnerships**
Those ‘with a moral dimension in which the partners come together to pursue common purpose and create the possibility of generative growth and change’ (Butcher, et al., 2011, p. 31).
Transformational learning partnerships

Foster learning for all involved in a powerful way
Result in mutual benefit to partners
Contribute productively to the broader learning community
Guiding principles for transformational partnerships

• work out a shared purpose;
• lead collaboratively;
• relate on a basis of trust;
• ensure appropriate and adequate resources;
• remain open to learning and change.

(Butcher, Bezzina & Moran, 2011, p. 36)
Developing Engaged Learners

Dr. Peter Sellings
Faculty of Education & Arts
Research Question

Can student engagement* be improved through the modification of teaching practices?

*The model of student engagement used in this study is based on the work of Fredricks, Blumenfeld, Friedel & Paris (2003) titled School Engagement.
The partnership

The partnership between the three teachers and myself was based on:

Trust

Collaboration

Shared responsibility

Honesty
Context

Two lower SES secondary schools.

122 students involved in five classes.

Three teachers involved.

Teachers agreed to trial teaching practices that focused on students representing their knowledge.

Student self report as well as teacher report used.
The intervention

Every lesson, a short activity was developed to gain insight into student understanding.

One lesson a fortnight, a longer activity was developed to gain more detailed insight.

Students asked to draw or create something to demonstrate their knowledge

A real focus on students explaining what they had drawn or created.
The intervention – example

Student response to the question “Why did the flame change colour?”
Results

All three engagement scales (emotional, behavioural & cognitive improved) in all five classes.

Effect sizes ranging from 0.02 to 0.71

Seven of the fifteen effect sizes were large enough to consider significant.

In interview, teachers were very positive about the changes in student responses and in the partnership with the university
Results

Teacher comments included:

"The approach seemed to improve the participation rate in practical activities and discussion. I didn’t think it had a particularly positive or negative effect on student behaviour but I thought that the students were more engaged".

Federation UNIVERSITY • AUSTRALIA
Conclusion

From this study, it can be concluded that:

Modifying existing teaching practices in schools can improve student engagement.

Strong partnerships between schools and universities can assist schools in such modification of teaching practices.

The characteristics of these partnerships will be further explored in the workshop session of our presentation.
It’s a Science Party!

Chris Wines & Dr. Jenene Burke,
Faculty of Education & Arts
The Science Party

• A collaborative project between an outer suburban secondary school and the University of Ballarat (now Federation University).

• 4 PSTs from U.B. worked with a class of Yr. 7 students at the school to set up and run a Science Party for primary students.

• Students from three educational sectors learning together.
What happened?

• PSTs did a four week placement at the school
• The students under the guidance of the PSTs needed to prepare fun, engaging science activities (and in the process learn some important science concepts)
• PSTs planned the event, innovatively incorporating knowledge and skills from various strands and Dimensions of AusVELS
<table>
<thead>
<tr>
<th>STRAND</th>
<th>OUTLINE</th>
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<tbody>
<tr>
<td>Physical, Personal and Social Learning</td>
<td>Students learn about themselves and their place in society. They learn how to stay healthy and active. Students develop skills in building social relationships and working with others. They take responsibility for their learning, and learn about their rights and responsibilities as global citizens.</td>
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<tr>
<td>Discipline-based Learning</td>
<td>Students learn the knowledge, skills and behaviours in the arts, English, humanities, mathematics, science and other languages.</td>
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<tr>
<td>Interdisciplinary Learning</td>
<td>Students explore different ways of thinking, solving problems and communicating. They learn to use a range of technologies to plan, analyse, evaluate and present their work. Students learn about creativity, design principles and processes.</td>
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Table 1: Overview AusVELS: Strands and dimensions (adapted from VCAA, 2014a)
Strand | Elaboration
--- | ---
Science Understanding | Science understanding is evident when a person selects and integrates appropriate science knowledge to explain and predict phenomena, and applies that knowledge to new situations. Science knowledge refers to facts, concepts, principles, laws, theories and models that have been established by scientists over time.

Science as a Human Endeavour | Through science, humans seek to improve their understanding and explanations of the natural world. Science involves the construction of explanations based on evidence and science knowledge can be changed as new evidence becomes available. Science influences society by posing, and responding to, social and ethical questions, and scientific research is itself influenced by the needs and priorities of society. This strand highlights the development of science as a unique way of knowing and doing, and the role of science in contemporary decision making and problem solving. It acknowledges that in making decisions about science practices and applications, ethical and social implications must be taken into account. This strand also recognises that science advances through the contributions of many different people from different cultures and that there are many rewarding science-based career paths.

Science Inquiry Skills | Science inquiry involves identifying and posing questions; planning, conducting and reflecting on investigations; processing, analysing and interpreting evidence; and communicating findings. This strand is concerned with evaluating claims, investigating ideas, solving problems, drawing valid conclusions and developing evidence-based arguments.

Table 2: AusVELS, Science Discipline content structure. (adapted from VCAA, 2014b)
Benefits

SCHOOL
• Yr. 7 students engaging in “real” science.
• Transition benefits for students from primary to secondary.
• Showcasing of science facilities
• PD for teaching staff
• Relationships with University staff

UNIVERSITY
• Opportunities for PSTs to engage in innovative teaching as well as traditional methods
• Support through peer team and mentors built PST confidence
• Authentic opportunity to apply AusVELS
• Immersion in the “realities” of schools.

COMMUNITY
• Primary schools benefited for transition reasons as well as student engagement in science
• Opportunities for friends and families to become involved
• Networks established
What is needed for this type of project to be effective?

• Communication is critical
  • Between institutions
  • Within the school
• People who are committed to the project and understand the mutual benefits.
• Time for planning, reflection and organisation of the event.
• Flexibility of timetables, workloads, spaces
Collaborative curriculum creation

Dr. Sharon McDonough,
Faculty of Education & Arts
Who, what and why?

A partnership between FedUni (then UB) and a P-12 school to explore ideas around a ‘third space’ in teacher education.

New opportunities & initiatives for PSTs, school staff related to ongoing learning & use of research in schools.
Third Space Theory

Third space theory: “creates opportunities to bring together practitioner and academic knowledge in new ways” (Cuenca, Schmeichel, Butler, Dinkelman and Nichols Jr, 2011, p. 1069).

Spaces between and beyond first and second order practice (McDonough, in press).

Move beyond triage model to sites for transformation of learning.
What happened?

With our students
Co-ordinated our PSTs on placement, placed with teachers, mentored PSTs and liaised with mentor teachers
Worked with 2 colleagues on a curriculum design project that involved our PSTs and then in Semester 2.

With school staff
Professional Development planning
Research projects in the school – particularly Year 9/10 Curriculum
Curriculum design

Goal of the process: to model and explore processes of curriculum design & development & to build capacity among teachers.
Involves PSTs from a range of universities who are undertaking placement in the school.
PSTs work together with staff on a process of curriculum design and development to see how they can incorporate sustainability perspectives and interdisciplinary approaches.
Uses an Understanding by Design framework based on Wiggins.
A Problem has arisen in Bacchus Marsh and your community needs YOUR help!

Working in groups, you will create a print publication of your choosing to one of the following audiences:

- Primary Producers (farmers)
- Consumers (your parents)
- Legislators (local councils/state government).

The problem is, that Bacchus Marsh has grown significantly and has become unsustainable. This is due to the population growth out-stripping local food production and the lack of infrastructure. The production of electricity relies on non-renewable sources of energy. This is achieved by burning brown coal, which is extremely harmful to the environment - even more so than black coal! As you will soon discover...

**Primary Producers:** Local producers provide sustenance to the town and the surrounding areas - including Ballarat and gold mining sites. Due to the geographical location of Bacchus Marsh, this means they need to have state of the art machinery and technology to continue to provide for the constant growth of local population. The production of food is only part of the problem, the other lies in the distribution of the produce. Due to the great distances the
It is a privilege to be involved in such an ambitious and on-going project, with enormous potential to satisfy curricular and extra-curricular requirements for the school for a number of different year levels.

I left the meeting a little overwhelmed but from past experiences knew that any opportunity to develop professional skills would be extremely beneficial.

… the more I asked questions the more I got to understand how curriculum planning works in schools.
Skill development

Curriculum writing
Cross-curricula writing
Time management
Communication Skills
Teamwork

Problem Solving
Relationship building skills
Negotiation skills
Strategic planning
Staff/ PST learning

Need for ongoing mentor training and development
Differing institutional expectations
AITSL online professional learning program for mentors
Conferences - ACSA in Darwin 2013.
Secondary college activity day

*WillUBhere?; WillUB12?; Big Day Off*

Dr. Anitra Goriss-Hunter
Dr. Jenene Burke

Faculty of Education & Arts, Federation University Australia
150 year 9 students

• 34 PSTs
• 12 small teaching groups

Series of 3 lessons

• Design a lesson that complements the school curriculum
• Repeat teach three times

Reflection

• Reflect on learning
• Feedback from supervising teacher
• Feedback from students
8 weeks preparation

Formal course content explicitly linked to planning

PSTs pondered problematic elements

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<th>Learning design</th>
<th>Event organisation</th>
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<td>Timetable constraints</td>
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<td>Success criteria</td>
<td>Room availability</td>
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<td>Team-planning and teaching</td>
<td>Equipment/materials</td>
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<td>Identifying learning</td>
<td>Budget</td>
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<td>Collecting feedback</td>
<td>Transport</td>
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<td>9.30</td>
<td>Opening ceremony and briefing</td>
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<td>9.40</td>
<td>The Amazing Race - UB</td>
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<tr>
<td>10.20</td>
<td>Morning tea – cafeteria</td>
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<td>10.35-11.25</td>
<td>Probability</td>
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<td>F312</td>
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<td>11.30-12.20</td>
<td>The Argument Game</td>
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<td>C902</td>
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<tr>
<td>12.20-1.00</td>
<td>Lunch – cafeteria</td>
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<tr>
<td>1.05-1.55</td>
<td>Who eats who?</td>
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<td>2.00-2.50</td>
<td>Japanese</td>
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<td>H127</td>
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<tr>
<td>2.50</td>
<td>Buses depart</td>
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Fig. 1: WillUB12? Timetable. (Burke & Goriss-Hunter, 2013)
Ordered sharing and written reflections revealed...

Scaffolded lead – in to first professional placement

Authentic focus – ‘teach real kids as real teachers’

Small PST groups offered support for individuals

Drew on collective ideas and strengths of individuals

Noticed how various factors impacted on student learning (time of day, group dynamics)

Repeat teaching allowed PSTs to try again

Structural constraints impact on learning (environment, timetable, time)
2012 SEC (Student Evaluation of Learning) results

10. Overall, how would you rate this ‘course’?

4.8/5.0

2014 student evaluations


