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

Learning and Teaching Conference 2014

Collaborations

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#### Faculty of Education and Arts

### **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.

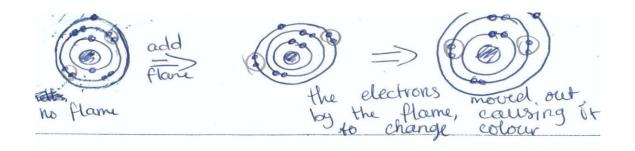
One lesson a fortnight, a longer activity was developed to gain more detailed insight.

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".



### 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



STRAND	OUTLINE				
Physical, Personal and Social Learning	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.				
Discipline-based Learning	Students learn the knowledge, skills and behaviours in the arts, English, humanities, mathematics, science and other languages.				
Interdisciplinary Learning	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.				

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



#### Faculty of Education and 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.





#### Faculty of Education and Arts

### **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.



#### SUSTAINABILITY: ASSESSMENT BRIDE

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

### **Student Feedback**

- \*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



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

Learning design	Event organisation			
Learning intention	Timetable constraints			
Success criteria	Room availability			
Team-planning and teaching	Equipment/materials			
Identifying learning	Budget			
Collecting feedback	Transport			



### WillUB12? Timetable

	9A1	9A2	9A3	9B1	9B2	9C1	9C2	9R1		
9.30	Opening ceremony and briefing H101									
9.40	The Amazing Race -UB									
10.20	Morning tea – cafeteria									
10.35-	Probability	Ethics in society	Generating	Optical Illusions	The Argument	Reconstruction	Koala Evolution	Memory		
11.25			Electricity	T317	Game	Art				
	F312	H122	P811		C902	T208	H124	T210		
11.30-	The Argument	Probability	Ethics in society	Generating	Crime	Industrial	Memory	Koala Evolution		
12.20	Game			Electricity	Statistics	Revolution				
	C902	F312	H122	P811	T203C	H127	T210	H124		
12.20-	Lunch – cafeteria									
1.00										
1.05-	Who eats who?	The Argument	Crime Statistics	Japanese	Generating	Optical Illusions	Reconstruction	Industrial		
1.55	T203a	Game			Electricity	H124	Art	Revolution		
		C902	T203c	H127	F312		T203B	P811		
2.00-	Japanese	Who eats who?	Optical Illusions	Crime	Memory	Koala Evolution	Industrial	Reconstruction		
2.50				Statistics			Revolution	Art		
	H127	T203a	H124	T203c	C902	F312	P811	T203B		
2.50	Buses depart									

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



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