Sydney Workshop

SECTION ONE

General reflections from Manju: The group was interested and keen and had a sense of having achieving something – in both personal and professional journeys. Relatively junior staff from visiting institutions had the opportunity to interact with several senior local people who had not attended prior workshops, and their presence and engagement added considerable value. Siggi had been on study leave, and Gareth had other commitments at the time of earlier SaMnet workshops. Both stayed the whole day. Tim Bedding, the incoming Head of School of Physics, stayed till morning tea.

SECTION TWO – Project reflections

Using ASELL as a framework for driving change

Project reported on by: Gareth Denyer

Project aims, progress and next steps: ASELL surveys are being used in physics and SMB. Data has been collected in first, second and third year physics. Data has been collected in SMB. The design of the SMB labs is as follows: first year is about technical aspects, second year about experimental design and third year is about specialised aspects with a wow effect.

Teaching need/challenges: 2013 has seen the implementation of a massive innovation - electronic lab note books. This was implemented in a ‘slash and burn’ manner, that is, a one-off complete implementation. This is a massive change - a ‘tsunami of change’ – and it has been an incredible pace of change. Therefore, ASELL surveys have not been administered in normal circumstances, but in ones where there is a massive confounding effect.

Thus the ASELL surveys actually provide a snapshot of the student experience when this tsunami of change has occurred. It could provide an amazing data set that could be compared with physics where no change has occurred. Students have found that the electronic lab note books time intensive, demonstrators have had difficulty marking and adjusting.

Leadership need/challenges: There is a need to engage the SaMnet team and to engage the leadership as well. We need to gain balance and consider the situation. On the one hand there is a strong reaction objecting to the implementation of electronic lab note books from demonstrators and students, and on the other, the folk who are implementing them have a
strong belief that the electronic lab note books is the right thing to do.

**Who knows about the project?** Only a few people in SMB about ASELL but many folk know about the electronic lab note books. In physics, the folk who helped collect the data are aware of the project.

**What help do you need?** ACTION: Manju/Will to follow up. ACTION: The SaMnet team to consider writing a paper on their experiences as a ‘case study’. It could capture the ‘tsunami of change’, and the experiences of the staff immersed in implementing the change.

**Embedding Fast and Personal Feedback**

**Project reported on by:** Adam Bridgeman

**Project aims, progress and next steps:** The objective was to extend the automated immediate feedback system that has been successfully deployed in chemistry to other areas - summer school chemistry classes, biology, SMB, dentistry and health sciences. There has been successful uptake in some areas. Student evaluations on feedback are now ‘over the roof’. They rave about it!

**Teaching need/challenges:** Feedback receives low rating on student surveys, so the project was capitalising on an ‘urgent’ need. The challenge is to generate new questions each time around.

**Leadership need/challenges:** The project team is interested in doing the project and in evaluating, but not in publishing. There are competing priorities. However, SaMnet has provided an opportunity to do a project that would not have happened. It has acted as a catalyst.

**Who knows about the project?** Charlotte has presented at ACSME and Sydney Teaching Colloquium. The team is contemplating writing up the project.

**What help do you need?** –

**Improve cohesion within subjects and introduce inquiry-based learning**

**Project presented on by:** Juliy Beckman
**Project aims, progress and next steps:** The project focused on curriculum, specifically the design and delivery of a semester two unit. The objective was to transform a course which used to be taught as separate independent modular topics by four staff into a cohesive integrated module. Inquiry and research has been incorporated in labs (the component that Julley is in charge of). Changes have also been made in two modular units in various ways. The changed curriculum has been implemented and data collected. Student feedback is positive – great, in fact. The unit needs to be, and is being, further improved based on evidence.

**Teaching need/challenges:** Four staff were involved; two participated and two were disengaged for various reasons. It is a struggle but reflecting on where we have come from and how far we have come, we are almost proud of ourselves and we are excited.

**Leadership need/challenges:** Julley has setup a notice board on which she posts materials that folk have commented on. It is being ‘noticed’. All four SaMnet team members are engaged and on-board but have incidents, which have affected their participation at SaMnet gatherings. Julley has attended all/most SaMnet gatherings. Furthermore, two SaMnet scholars are holding the fort in the project as the other two have not been able to. One is on long service leave and the other has had health related issues. It is a reality check when undertaking projects.

**Who knows about the project?** The Dean, ADE, folk in centre for Teaching and Learning, by word of mouth, more staff are getting interested and some colleagues. Two papers are pending.

**What help do you need?** The help provided by critical friend via SKYPE meetings in initial stages was very valuable. ACTION: Manju to visit ANU prior to semester 2, 2013. To possibly re-engage with critical friend for the writing.

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**Embedding change in Biochemistry teaching via knowledge transfer**

**Project reported on by:** Simon Bedford and Karen Fildes

**Project aims, progress and next steps:** The project takes a successful innovation in chemistry (active learning based tutorials) and attempts to adapt/emulate it in biochemistry laboratory sessions. It involves transfer of pedagogies, philosophies and practices from one disciplinary context to another – referred to as “knowledge transfer”. Strategies employed were as follows: 1. staff support each other in deploying the innovation within the new context 2. training was given to staff and tutors delivering the new sessions 3. new active learning activities were created in biochemistry based on chemistry examples, students process lecture content in peer groups and make it relevant to themselves, assessment and peer
marking check and reinforce key learning objectives and threshold concepts 4. time was made available for staff and students to reflect on process and improve innovation for cycle two.

Cycle one: this is now complete and student evaluations have provided evidence that the content was embedded further and deeper than previously examined (qualitative and quantitative data has been collected). Secondary effects have been improved enjoyment and “buzz” about the subject content and overall greater satisfaction among all involved in the subject.

Cycle two: will now commence with some key changes following on from the reflective practice study. These will be: 1. There will now be a more substantial quiz, worth more marks following each workshop that will be marked by academics. 2. Each workshop will be more evenly spaced throughout the session and focus on a discreet section of the lecture content rather than trying to cover too broad a range of topics. 3. Improvements to question design based on student and staff feedback collected in 2012.

Teaching need/challenges: This biochemistry subject has historically had high failure rates, lack of student engagement and poor student feedback ratings. Students were not supporting each other and while they enjoyed laboratory work they did not engage with the theory/content being delivered in the lecture environment. So there was a clear need to intervene. The chemistry team have been previously working with this innovation within a different subject, year and with no financial support. So to deliver change in another subject area and higher level was seen as challenging especially as all staff involved were time poor. Another issue was that limited time and funding only allowed the workshops to be run as practical classes (80 students) rather than as tutorials (21 students).

Leadership need/challenges: The project is occurring in times of incredible change in the higher education sector, with the TLOs, and standards and quality agenda. There was a need to convince staff who were not teaching focused or who had little teaching experience that they are able to successfully use new methods of teaching to the benefit of all. These staff members were willing to use new methods as long as they were supported – this requires investment in time and adequate training. By providing a supportive environment and regular opportunities to reflect on practice and improve on it through a peer mentoring model it was possible to make staff feel valued, excited and positive about change. Although challenging, it was rewarding to see that these staff considered other opportunities within their teaching to try to innovate further – thus spreading the culture for change.

Who knows about the project? The project has been presented as a paper at the national ACSME conference, at a special seminar at the home institution, and at the school planning day. The team is writing up their findings for an IJISME publication in the Autumn 2013.
What help do you need? Some more active probing/prodding from our critical friend to help us publish our research findings.

**Interactive Lecture Demonstration**

**Project reported on by:** Siggi Schmid

**Project aims, progress and next steps:** The aim of the project is to give students a reason to attend lectures. Lecture attendance is low and even lower when the lectures are recorded. The project is about adding value to lectures, with strategies such as worksheets incorporated with lecture demonstrations. In semester 1, 2012, Chiara and Toby implemented strategies with no formal evaluations. Informal evaluations indicate positive reactions. In semester 2, 2012, Adam implemented the strategy (worksheets with lecture demonstrations) with formal evaluations and a third year TSP student did a formal study. There were two surveys. It is noted that students are always positive about lecture demonstrations. The students preferred lecture demos with worksheets, and wanted more worksheets. Attendance did not drop in weeks 8 to 13. It could also be ‘Adam effect’ as he is a popular lecturer – maybe difficult to decouple the ‘Adam effect’ from the worksheets!

**Teaching need/challenges:** One needs to book demos to fit topic and to have automated generated worksheets. One needs to balance content coverage with discussions. Some material may need to be left out of syllabus.

**Leadership need/challenges:** The intention is to roll out to other courses. Adam is first year director.

The project went well and would not have happened without SaMnet.

**Who knows about the project?** Dean, Teaching Committee and all staff involved. The SaMNet team is writing a paper. Papers are being presented in NZ, Symposium and FYHE conference.

What help do you need? -
SECTION THREE

How has SaMnet added value?

Simon Bedford – There is a lot of good stuff happening and not being published. SaMnet provides a mechanism for publishing that could add value to the community – this is a big plus for SaMnet.

Karen Fildes – Skype offers different advantages and at different time points in the project. It’s difficult to find out where to publish and to do literature searches - trolling the internet takes time, and I have involved librarians. However, as they don’t necessarily know what we are after, they may not be that effective. We could use more strategic advice on where to publish. Small groups are good as the group follows a thread of conversation, rather than branching out too quickly, and the group actually knows a few things about each others’ projects and can follow their development over time.

Simon Bedford and Karen Fildes - SaMnet has provided the opportunity for two departments/disciplines to work together who would not have otherwise. The deadlines and timeframes provide the imperative to keep things percolating and moving along; slow progress but sure and steady. There is urgency to reporting at workshops, face-to-face, which is good. Skype meetings are more challenging to manage.

Juliey Beckamn - The SaMnet project has been very timely for me, as it occurred when I moved to ANU as a new staff member. SaMnet offered collaboration at a good time. I got involved with an ‘external authority’ running a project, providing a level of credibility to my work. Being a new kid on the block, SaMnet provided impetus and a mechanism for connecting with people.

Siggi Schmidt – SaMnet was a catalyst in getting our project going. The project would not have happened in the systematic way it has without SaMnet. SaMnet provided a welcome opportunity to do something that we wanted to do. I had not attended other workshops, but this workshop was very useful, especially discussing how other projects are going.

Gareth Denyer – It is inspiring to see what others are doing. It is a way of benchmarking our activities and acts as a reality check.