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**ChemNet skype meeting #8**

**Wednesday July 25 at 3:30 pm Brisbane time**

Attendees:

James Mitchell Crow (Project officer) jmitchellcrow

Madeleine Schultz (QUT) madeleine.schultz

Glennys O’Brien (Woollongong) glennys.obrien

Dan Bedgood (Charles Sturt) dan.and.chris.bedgood

Lachlan Yee (SCU) lachlanhy

Ian Jamie (Macquarie) ijamie01

Chris Thompson (Monash) christovac

Steph Beames stephaniebeames

Will Rifkin (USyd) will\_rifkin

Dino Spagnoli (UWA) dino.spagnoli

**Minutes:**

1. **TLO mapping**

6 unis complete for first year chem units. Need to add units that are compulsory for BSc but not chemistry (ie not yet mapped)

**2. Assessment of TLOs**

**Quantitative skills in the TLOs:**

*Investigate and solve qualitative and quantitative problems in the chemical sciences, both individually and in teams, by:*

Glennys: This needs to be discussed at discipline day – how much maths do they need to have eg calculus.

**General discussion of assessing TLOs**

TLOs are very vague at the moment, need to pin down the exact things that students need to do. Eg can’t just say “thermodynamics”; need to give detail of what the students need to be able to do

That is, we need to give actual examples of assessment that would demonstratate mastery of the TLOs, this will develop detail of what is required.

Assessment items highlight **depth** and **breadth** of knowledge that we expect.

This leads to the standards that we require for a degree to be approved by TEQSA

Dan B: graduate skills rather than outcomes. Standardisation – students could take an exam at the end of their degree for feedback for themselves and also for potential employers. It would not mean that the degree is not valid.

Glennys: when TEQSA is applying the standards, there are 2 processes for a student to get a degree – 1. Normal process, tick of subjects and get over line. 2. In addition, demonstrate mastery of TLOs. Different kettle of fish – need an array of assessments that are fit for purpose. 50% in exam – what did they know? How can we demonstrate that students know stuff? New environment, do not want too itemised with ticks.

Model from engineers, need to look at others. Hard to have a line from TLOs to statements of attainment and assessment.

See how far we can get on discipline day. Timetable around 18 months? Has slipped back. We might not finish within 2 years but can get to guidance about assessment. Ideas for an implementation pathway, to get to usable assessments and also process.

Dan B: other disciplines such as medicine, vet can do this so we must be able to.

Which students are going to do this? Just BSc (Chem). Big issue – other students do the same units and therefore will have same assessment. Generic TLOs useful for all first year students. Eg synthesise and evaluate information from a range of sources.

Don’t forget: The Chemistry TLOs are a discipline-specific formulation of general science TLOs

TLO group can post to discussion forum.

**3. ACSME September 2012**

Morning of discipline day at ACSME there is a SaMnet workshop about community of practice on standards run by Brian and Sue.

Afternoon will be ChemNet work on TLOs and assessment; people need to prepare.

Don’t forget free registration for the person with most posts on discussion board plus one free rego for randomly chosen person who has contributed to discussion.

Deadline for early bird registration 17 August

**4. ACDS T&L meeting report Sydney July 19/20**

Glennys: UNE ADT&L : one discipline (history) tried to map 3 institutions and they did not do well. Issue of assessing to show mastery.

Positive feedback from John Rice; John Rice named Siobhan Lenihan now at OLT as source of information.

**5. Other business**

http://www.abc.net.au/worldtoday/content/2012/s3542594.htm

Lachlan: Doing research on anxiety in chemistry. How it affects performance. Even giving them the survey shows your awareness of their potential anxiety so should help.

Later survey on confidence so can see how they progress

Dino: Chemical misconceptions – does it affect them whether they are chem major or not; maybe more confident in lab.

Chem concept inventory to be shared around Aust? MS to ask Gwen!

**Next meeting:** Wednesday August 29 3:30 pm (MS in Germany, 8 hour time difference!)