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**ChemNet skype meeting #14**

**Wednesday February 27 at 3:30 pm Brisbane time**

Attendees:

Madeleine Schultz (QUT) madeleine.schultz

Kieran Lim (Deakin)

Roy Tasker (UWS)

Lachlan Yee (SCU)

Susan Turland (UTas)

Simon Bedford (Wollongong)

Glennys O'Brien (Wollongong)

**Minutes:**

1. **Further TLO to standards meetings 2013.**

May be some support from RACI for two more meetings.

**2. General discussion**

New OLT application has been submitted to extend TLO part of the Network but focussed on assessment. Roy: important to know what assessment is, can change teaching practices but need to change how we assess it. Very important work to do.

Susan: difference between collecting best practice and developing new items.

Roy: do we need to evaluate different forms of assessment? Really, we don't - we need to know what others are doing. Motherhood statements are not going to change student learning. What you assess is what you say is most important. How you assess depends how students learn. When looking at what chemistry graduates at different institutions can do and how they differ and how they are the same, need to compare assessment and need the detail.

MS: german degree has a huge amount of content that is not as emphasised in Australia to memorise.

Sharing items: Simon: everyone has to share everything in the UK for quality assurance. There are exemplar questions published. Mainly academics share things but there is also external examination so that institutions can be compared. Benchmarking tool, questions get peer reviewed. This has been going on for over a decade. Many unis have specialised courses so their questions not shared.

Problems of ownership or students taking the exam out and sharing on internet? Need more sophisticated questions with shades of grey in marking.

Lachlan: Has been approached to run HSC tutoring for chemistry covering certain topics. Does this happen at other unis? Full day covering a range of topics to help them prepare. Very unrelated topics:

·         titration using pH meter as well as or instead of indicator

·         ester production

·         AAS

·         analysis of phosphate, oxygen or nitrate content of water or other water quality testing.

·         latest information about bioplastics

·         flame tests

·         use of radioisotopes/ cloud chamber

First time at SCU. Routinely run at other unis.

MS: Gives good secondary - tertiary link - academics know what is going on at high school.

Roy: Helps school teachers and they attend as well - they see the way it is taught at uni. If there is a shortage of good high school chemistry teachers this is where they get ideas and how present the information. Contact Gary Dennis (g.dennis@uws.edu.au) and Trevor Bailey (t.bailey@uws.edu.au) here at UWS who have done sessions with HSC Chem students.

Lachlan: current engagement = titration comp, Nyholm lecture.

Kieran: did something similar in Armidale many years ago. It happens at UNSW as well. Need to consider workload. Six topics, each close to an hour to present so it takes the academic time to prepare. Need to take time to introduce topics and address misconceptions. Best to involve other people.

Lachlan: only chemist in the school. Maybe get research colleagues to help out.

Susan: Do they want practical demos?

**3. Ideas for final 6 months of the Network.**

Glennys: focus on TLOs - get as far as we can. Spreadsheet of members on website - push it as much as possible

Lachlan: anxiety about chemistry (discussed last year). many students haven't had science in high school and their anxiety impedes their learning. Has 100 surveys of data about students. Looking for funds to pay an RA to do data entry.

Glennys: also has survey data that has not been input.

Kieran: also has students with no science since grade 10.

Susan: also and mature age who haven't done science since high school 10 years ago.

Glennys: Can we have a small grant with criteria to support direct helping feedback to academic. ManCom can discuss next week.

Lachlan: intends to publish results, has ethical approval. Others at his institutions have surveyed education students who need to teach maths but have maths anxiety themselves.

Glennys: maths being taught as a process without maths concepts. Students have no feel for grand things, just buttons on calculator. Primary teachers scared of children who really understand.

Use of Youtube: MS: Youtube- QUT (Tim Dargaville) self made videos answering our own tutorial questions PLUS open Youtube that are suitable are recommended to students.

Lachlan: crash course chemistry is good, 10 min videos. Science educator makes them. vlog brothers Green. Current and contextualised.

**Next meeting:** Wednesday 27 March 4:30 eastern summer time, 3:30 pm Brisbane time.