

Mathematics and Statistics Regional Newsletter Auckland Region – Brenda McNaughton

Information for teachers of mathematics and statistics in secondary schools | Term 3 | July 2012

North Shore, Central 1, Central 2, South 1, South 2, South small schools & Kura, East, West Clusters Reflections, Problems, Plans, Resources and Dates

Term 2 report:

Term 2 has been very busy on the PLD front in Auckland: as well as cluster meetings of middle leaders we've had the AMA HOD day, Numeracy US workshop, NZQA best practice workshops for L2 standards, NZQA best practice workshops for Numeracy Unit Standards, and the AMA Saturday morning. **Thanks so much** to those middle leaders who presented at any of the above. Sharing your resources, experiences and expertise is invaluable for those who are able to attend and your willingness to do this for the good of Mathematics teaching in our region (for free!) is much appreciated.

Facilitating Mathematics clusters over the last two terms has been an interesting and enriching experience for me. I've appreciated everyone's willingness to share their ideas, resources, tasks and moderation reports for the benefit of everyone in the cluster. There are huge differences in the needs, experiences and resourcing between the Auckland clusters.

Although feedback about needs has been very different between cluster groups, here is a brief summary of the themes that have come up this term (in order of popularity):

1. Sharing of tasks, teaching resources and experiences implementing standards alignment was seen as the most empowering aspect of cluster meetings. The following were commented on about sharing and networking:

- hearing other schools' rationale for altering assessment tasks or teaching programs
- being able to resolve doubts that arise from needing to consult multiple documents (and websites) for answers
- getting reassurance that you are **not alone** in working the multiple requirements of NZC into your classrooms and school PLD programs
- and finding out first hand from other schools about Achievement Standards (AS's) that **your school hadn't opted to do** this year or last

2. With regard to AS Tasks:

- Many teachers felt that although they had been trained in teaching Mathematics (and some more recently in formatively assessing in Mathematics classrooms) they had not all been trained in **assessment writing** and the particular demands of this – especially for high stakes assessment.
- As alternative tasks, written by other schools, were shared (along with decisions around why they'd been written in that way) many teachers fed back that they wanted PLD in task writing. There was also a general feeling that using TKI tasks, without modification, was disadvantageous for students. Some indicators of this were schools who had used these tasks, prepared students for them and then had 100% failure rate.
- There were also multiple pleas for schools, who purchased tasks (or use NZAMT tasks), **NOT TO give these to students to take home** as this made them of little use for neighbouring schools.

National contact details

Northland

Sandra Cathcart
The University of Auckland
Faculty of Education
Phone: 027 555 4660
Email: s.cathcart@auckland.ac.nz

Auckland

Brenda McNaughton
The University of Auckland
Faculty of Education
Phone: 027 555 4679
Email: b.mcnaughton@auckland.ac.nz

Waikato, Bay of Plenty, Gisborne, Hawkes Bay

Jim Hogan
The University of Auckland
REAP Central
73 Titiraupenga St, Taupo
Phone: 027 461 0702
Email: j.hogan@auckland.ac.nz

Taranaki, Manawatu, Wairarapara, Wellington

Anne Lawrence
University of Otago
Phone: 027 450 4212
Email: anne.lawrence@otago.ac.nz

Nelson, Christchurch, West Coast

Karen Barks
University of Otago
Phone: 027 232 2737
Email: karenbarksnz@gmail.com

Otago, Southland

Noel Johnston
University of Otago
Phone: 021 277 6664
Email: noel.johnston@otago.ac.nz

3. L2 Stats:

- Teachers found the L2 Statistics AS's the most difficult to practically assess as the PLD needs of teachers, the teaching resources creation/modification for students, the clarification of success criteria, the marking of student work, and the internal moderation of this marking all created significant challenge.
- Concern was also raised about L3 Stats changes and the need for PLD around these for middle leaders so they could go back to their schools and run PD with staff teaching this and preparing resources for 2013 (teacher only days provided by schools before AMA days at the end of the year)

4. Option booklets:

- Many schools who had submitted courses for 2013 option booklets wanted information about L3 AS (this will happen towards the end of Term 3 and in Term 4 as standards are still being worked on and Secondary Teaching and Learning Guides are being updated for Level 8).
- Teachers also wanted clarification about possible changes to the UE subject list so that a 'Mathematics' course that used AS from Calc and Stats in L3 would count as a UE subject (**this has yet to be announced – should be coming during term 3!!**)

5. Moderation:

- All cluster groups fed back concerns about getting feedback from moderators. After discussion most groups felt that as middle leaders, we need to shape the interpretation of standards and write teaching programmes and assessment tasks that fit with our own interpretations (after reading supporting documents – NZC and SSTLG's). If we can send down this rationale in writing with the internal tasks we will help moderators understand why decisions had been made around setting the task and marking it.

6. Pathways:

- Many schools were concerned about courses for lower ability year 12 students who would not be engaged in a course that only offers NCEA L1 credits (maybe because students had already gained 80 L1 credits). No easy answer to this except to offer a course with L1 and L2 credits?

7. Literacy issues were very common as concerns and strategies for reading and writing (to communicate thinking) were discussed. These were most obvious for Stats AS but were not restricted to these.

NZMATHS Forum - <http://nzmaths.co.nz/plc>

This is a place to post questions that relate to any of the aligned standards. Feel free to answer other teacher's questions or wait for one of the standards writers or Maths facilitators to answer.

L3 AS and restricted entry courses at University of Auckland – on the 20th July I am presenting a summary of L3 AS to interested parties in the Mathematics and Engineering Faculties at UoA (3pm in Science Building, room 303-B07). The purpose of this meeting is to try to get some sense from them about whether they will change entry requirements to specific L3 AS rather than a generic Merit/Excellence endorsement from Mathematics. The next newsletter will give feedback on this.

Updates to SSTLGs – these have been updated with lots of new links/material/ideas for Level 8 Achievement Objectives (AO's). These are going through a final checking process and should be up at the end of July.

SecQual 20th June

"Many of the new achievement standards assess similar outcomes to existing standards. Where two standards assess the same outcome they are mutually exclusive, and credits from only one can count for an NCEA certificate or a certificate endorsement or course endorsement. This same rule applies to other qualifications on the New Zealand Qualifications Framework to which standards can contribute."

MCAT 2012 important dates coming up

- 1 July - Candidate entries for AS 91027 included in data submission to NZQA.
- Inform candidates of the assessment date.
- Ensure the 2012 Assessment Specifications have been read.

August

- 1 Aug - Check all candidate entries for AS 91027 are included in data file submission to NZQA.
- 3 Aug - Deadline for schools to advise NZQA of nominated day for MCAT and number of booklets required.

Cluster Organisation

Below are the lists of schools in the wider Auckland region that have responded to me that they'd like to be involved in Mathematics clusters. Dates, times and venues are also listed for the next round of cluster meetings. The focus of these meetings will be around preparing for L2 external examinations and/or unpacking the L3 AS. Where time is limited to only a couple of hours there is no way that a thorough unpacking of standards, AO's and exemplar tasks can be done. In these cases, opportunity will be given to share L2 tasks/L1 moderation and L2 externals will be the focus. A brief summary of L3 changes will be given.

Central 1	Central 2	North Shore	East
Wed 8 th August 1pm – 3:30pm @ UoA	Thurs 26 th July 1:30 – 4pm @ Dio	Fri 27 th July All day @ WBHS (venue tbc)	Wed 1 st August 3:45 – 5:30pm @ BDSC
Mt Roskill Grammar School Epsom Girls Grammar School Mt Albert Grammar School Marcellin College Northcote College Onehunga High School Dilworth School Marist College One Tree Hill College Hebron Christian College	Diocesan School for Girls Avondale College Auckland Girls Grammar School Auckland Grammar School St Peters College St Mary's College Western Springs College ACG St Cuthberts College Waiheke High School St Pauls College	Rangitoto College Carmel College Birkenhead College Westlake Boys G.S. Westlake Girls G.S. Albany Senior High School Glenfield College Takapuna G.S. Rosmini College Long Bay College Kristen School Hato Petera College	Botany Downs Howick College Sancta Maria College Macleans College Edgewater College Ormiston Selwyn College Pakuranga College Glendowie College Sacred Heart College
West	South sml schools & kura	South 1	South 2
Tues 17 th July 3:45 – 5:30pm @ GBHS	Tues 31 st July 4pm – 5:30 @ Aorere Col.	Tues 31 st July 4pm – 5:30 @ Aorere Col	Wed 15 th August 2pm – 5pm @ Rosehill Col
Greenbay High School Massey High School Kelston Boys High School Kelston Girls High School Rutherford College Henderson High School Lynfield College Waitakere College Liston College St Dominics College	Mangere Kura Piripono (Otara) Puau Te Moananui-a-kiwa Al-Madina Zayed Ambury Riding School Auckland Seventh Day Adventist High School	De La Salle College Sir Ed. Hillary Colegiate Southern Cross Otahuhu College Papatoetoe Mangere McAuley Tangaroa Aorere Tamaki College	James Cook High School Tuakau Papakura Waiuku Rosehill Wesley College Alfriston College Manurewa High School Pukekohe High School