

School of Engineering and Physical Sciences James Cook University Townsville 4811, Australia

Brief Minutes

Meeting of concerned teachers and parents. Mathematics and Science at High School

Townsville: JCU Douglas Campus: Building 17 room 101 24th May 7 pm

Organised by Professor Peter Ridd and Dr Shaun Belward School of Engineering and Physical Sciences

25 Attendees

(1) In common with his talk in the Cairns meeting, Prof Peter Ridd spoke about problems with assessments and EEI's. In particular the difficulty in implementing the non marks based assessment and the gross length of time associated with EEI's. He is also worried that Physics and Chemistry have become almost defacto English classes due to the over-reliance on writing tasks for assessment. He stated that there seems to be a large number of teachers and parents who have significant issues with the present Queensland Studies Authority syllabi and assessment policies especially in Mathematics B and C, Physics and Chemistry.

He stated that previous efforts to get the QSA to change had not been successful but that with a new government in power it was worthwhile having another try

(2) Dr Belward spoke about the particular problems facing first year mathematics lecturers especially due to the fragility of the algebra of most of the students.

Discussion amongst the meeting participants continued for about 40 minutes and there was general agreement that teachers were experiencing considerable difficulties implementing the assessment methods.

The discussion focused on EEI's and the following comments were made

- Take too much time
- Students don't know basics behind EEI
- Students dread EEI's, teacher dread EEI's, parents dread EEI's, but tutors love EEI's
- Students need a lot of maturity to do EEI's
- Teachers have no idea if student actually did the EEI
- Some boys can't wait for exams but dread EEi's because of poor organisational skills

- ERT are actually optional
- Basic knowledge used for EEI is not learnt unless there is also an exam

Other comments related to the QCE. For example some students are dropping out of maths b to maths A to get the required sound for the QCE

One teacher commented that the national curriculum was about one year level higher than QLD

We also have an acute shortage of maths teachers.

Agenda

This is one of three meetings in Townsville, Cairns, and Brisbane organised by Prof Peter Ridd and a group of concerned teachers academics and parents.

There seems to be a large number of teachers and parents who have significant reservations regarding the present Queensland Studies Authority syllabi and assessment policies especially in Mathematics B and C, Physics and Chemistry.

These reservations relate to the time consuming assessment tasks and assessment criteria that many find difficult to interpret. In addition, for the sciences there is in many cases an over-emphasis on time consuming assignment tasks and a not enough time spent on traditional problem solving or systematic teaching of content. Assessment criteria suggest that the ability to write well has become more important than the ability to do Physics and Chemistry. In addition considerable anecdotal evidence indicates that the extended experimental and written tasks are often not providing the motivational stimulus to students which was the original intention of these assessment tasks.

(1) Communications with the QSA so far. Prof Peter Ridd: Why there is an excellent chance that we can get things changed. (10 minutes)

Possible goals

- Influence the QSA to modify the present syllabus to make it easier and less time consuming to implement and give less emphasis on written tasks.
- Influence the QSA to take account of the views of teachers, and other stake-holders such as universities, when implementing the assessment of the national curriculum.
- Make sure that we keep the good things that have come out of the recent changes.
- Get the QSA to present the theoretical justification for some of their changes and provide cold hard data showing the extent to which what has been implemented has worked. If our system leads the world, where is the data to show this?
- Attempt to get the unions to take the main load in negotiating with the QSA regarding workloads which have increased significantly under the new curriculum and assessment regime.
- Obtain data on teacher satisfaction with the recent changes, and on teacher movements away from teaching these subjects.
- Convince the new education minister, Dr John Paul Langbroek, that there are problems that need fixing.
- (2) A view from the first year University teachers. What first year lecturers want? Shaun Belward (10 minutes)
- (3) Panel Peter Ridd, Shaun Belward(40 minutes)

Ideas from the floor

We would like a robust discussion with teachers and parents.