

5th Annual Conference in Mathematics and Statistics Service Teaching and Learning 2010
May 24th-25th 2010 – Institute of Technology Carlow

MSSTL10 - KEYNOTE - ABSTRACTS:

Penelope Bidgood (Kingston University)

“Issues in assessment when teaching statistics”

Students have different strengths and different approaches to learning so the assessment process should give opportunities for them to demonstrate their abilities and achieve the relevant learning outcomes. There are varied assessment strategies in statistics, whether in specialist or service courses. Reforms in statistical education at all levels place increasing emphasis on students' abilities to think and reason statistically using real data in appropriate contexts. The huge expansion in technology has given access to various data sources and advances in statistical software have greatly expanded the range of analyses that can be conducted almost instantaneously. Hence, students can be required to collect and analyse their own or other data; they can be set realistic problems to solve either individually or in groups; they can carry out simple experiments and simulations; they can focus on how to communicate the results of statistical analysis to a non-specialist audience either graphically, verbally or in writing; they can critique the study designs and analyses of others. Different methods of assessment are appropriate for different elements of the curriculum. This talk will discuss some issues in the assessment of statistics, drawing upon the author's experience in various projects over the years.

Sally Creighton (Open University)

“Assessment in the Open University and all that maths jazz”

This presentation, based around the author's experience of designing the new introductory course, Discovering Mathematics <http://www3.open.ac.uk/study/undergraduate/course/mu123.htm> at The Open University will include a miscellany of ideas linked to mathematics and assessment. It will touch briefly on the development of an offline system for the generation of randomised questions for use in formative and summative assessments within the University's Moodle-based Virtual Learning Environment and will consider more traditional methods of written assessment, but with a new slant. It will also briefly consider research papers on assessment and how they might influence our practice.

In particular, there will be musings upon the opportunities afforded to those of us privileged enough to be involved in the teaching and learning of mathematics and how can we promote our subject and its communication even more effectively.

Leslie Fletcher (John Moore's University, Liverpool)

"Open educational resources in maths support: where from, where are we now, where next"

Open educational resources (OER) are educational materials and resources offered freely and openly for anyone to use and under some licenses to re-mix, improve and redistribute. The UK Higher Education Academy is spending almost £9million promoting OER, aiming

- a. To encourage the sharing of learning resources between institutions, between academics and within communities of practice;
- b. To enable learning materials and resources to be shared universally - locally, nationally and globally - to support learning;
- c. To encourage development and uptake of tools and processes supporting the release of open resources that will enhance both productivity and relevance by being customisable and adaptable by both academics and students;
- d. To act as a marketing tool where students can view resources produced by an institution prior to applying to study there.

Leslie Fletcher was the project manager of the FETLAR project which promoted the availability and use of OER in maths support and first year service teaching. In his talk he will look at the lessons to be learned from this community's decades of sharing of resources, show what has been achieved by FETLAR and suggest what the next steps need to be taken in order to sustain these innovations."

Bill Lynch (Director, Curriculum and Assessment, NCCA)

"Changes in Assessment of Leaving Certificate –Ordinary Level Mathematics - under Project Maths - Implications"

This presentation takes a look at the changes in assessment being introduced under Project Maths, with a specific focus on Leaving Certificate Ordinary level. The first group of students from the 24 participating schools will sit a changed Paper 2 in June 2010, and there will be further changes in 2011 and 2012 following the introduction of the remaining phases to the syllabus changes.

The structure of examination papers will be different, with increased emphasis on problem solving in context situations, and there is a re-balancing of topics on the examination papers to reflect the syllabus changes. In addition, as the changes are introduced for all schools, there will not be a choice on the exam papers, which is intended to ensure that all candidates are faced with the same challenge and to discourage the practice of students leaving out some sections of the course (by narrowing down their choice of questions).

Some examples, drawn from the Sample Paper and a 'Mock' Paper which were prepared for the 24 schools, will be used to illustrate the types of questions that students will face, with comments on student answers to these.

The conference is being sponsored by the National Digital Learning Repository (NDLR) and organised under the auspices of IT Carlow's Teaching and Learning Centre, with additional sponsorship from the Irish Mathematical Society (IMS).



Teaching & Learning Centre



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