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ViSA – Variety in Statistics Assessment

Summary

We describe the launch of a new international project that is designed to collect examples of a wide range of different assessment methods from tertiary level statistics teachers worldwide. Following calls for contributions, the material sent to us will be refereed, presented in the form of a virtual conference and compiled to produce a book.

Introduction

It is widely recognised that it is beneficial to employ a variety of methods when assessing students. Since students have different strengths and different approaches to learning, the assessment process should give them opportunities to demonstrate their abilities and achieve the relevant learning outcomes. Also, different topics in statistics can require different assessment regimes. However, even for identical topics, non-specialist students of statistics specialising in a range of other subjects can require different teaching techniques, and consequently will need different assessment methods.

With these issues in mind, the ViSA project, which is funded by the Royal Statistical Society Centre for Statistical Education (RSSCSE) under the auspices of the UK Higher Education Maths, Stats and OR Network, aims to gather accounts of recent successful experiences in assessment of statistical learning at tertiary level, from around the world. Gal and Garfield’s book [1] addressed similar issues, although it covered all levels of education, whilst here the focus is tertiary level, which has seen many changes in the student intake and assessment methods in the last 10 years. The main focus of ViSA is a virtual international conference, with refereed proceedings to be published as a book in 2009.

Background

The discipline of Statistics is ideally suited to providing a wide variety of assessment opportunities. For example, students can be asked to collect and analyse their own 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.

Over the last 20 years, we have seen extraordinary advances in the field of multimedia computer technology and communications. The Internet has brought the world to our desktops, affording an almost boundless resource. Statistical software has greatly
expanded the range of analyses that students can conduct almost instantaneously and this too has affected the assessment process.

**Call for materials**

If you have an innovative or tried-and-tested successful approach in assessing statistics learning that you would like to share, then think about making a contribution. Some themes, by no means exhaustive, are: using different media in assessment; experiment-based assessment; survey-based assessment; using real data; individualising assessment tasks. You may also want to contribute from a particular subject viewpoint, such as the STEM (Science, Technology, Engineering, Mathematics) subjects, or Business, Economics, Health or Psychology. We are expecting a broad range of experiences that reflect what actually happens in Statistics assessment in universities and tertiary colleges. Contributions that include critical discussion of the assessment process, ideally relating this to research studies, will be particularly welcome.

In the first instance, we are asking for abstracts, of up to 500 words, to be submitted electronically, by 16th March 2008, to p.bidgood@kingston.ac.uk. During April 2008, selected authors will be invited to submit full papers, with a final submission date in September 2008. These papers will be peer refereed and authors will be invited to take account of the referees’ comments in the usual way. Final versions of papers will be due at the end of March 2009. Published authors will receive a free copy of the book of the referred proceedings.

**Planned activities**

Other activities associated with this project include a presentation at the MSOR/CETL Conference in Lancaster in September 2008. This presentation will reflect the findings of a working group from the Undergraduate Mathematics Teaching Conference which was held in Birmingham UK in December 2007 (http://www.umtc.ac.uk). Also, it is anticipated that the Association of Statistics Lecturers in Universities (ASLU) Conference in 2009 will be dedicated to the ViSA project, with selected contributors presenting their work either in person or through video link. Other regional meetings may also be organised from time to time. A website and electronic discussion forum will be set up on the RSSCSE web site at http://www.rsscse.org.uk/activities/visa.

Potential contributors may like to read Flavia Jolliffe’s paper (2) presented at a recent IASE satellite meeting.

**References**