

- 1 Foreword : Tim Oates
- 1 Editorial : Sylvia Green
- 2 Critical Thinking a tangible construct? : Beth Black
- 5 Difficulties in evaluating the predictive validity of selection tests : John F. Bell
- 10 Using Thinking Skills Assessment in University admissions : Joanne Emery and John F. Bell
- 14 Factors affecting examination success at A-level : Carmen L. Vidal Rodeiro and John F. Bell
- 19 A-level uptake: 'Crunchier subjects' and the 'Cracker effect' : John F. Bell, Eva Malacova, Carmen L. Vidal Rodeiro and Mark Shannon
- 25 Discussion piece: The psychometric principles of assessment : Professor John Rust
- 27 Is passing just enough? Some issues to consider in grading competence-based assessments : Martin Johnson
- 31 The Psychometrics Centre at Cambridge Assessment : Professor John Rust
- 32 Research News

If you would like to comment on any of the articles in this issue, please contact Sylvia Green. Email:

 $Research {\it Programmes} @ cambridge assessment.org.uk$ 

The full issue and previous issues are available on our website

www.cambridgeassessment.org.uk/research

## Research Matters : 3

A CAMBRIDGE ASSESSMENT PUBLICATION

## Foreword

I am pleased to introduce the third issue of Research Matters, which again seeks to stimulate debate and information exchange on matters central to assessment. Although many of the issues and lines of work described here will subsequently appear in articles in refereed journals, Research Matters provides a means of bringing them together into a single volume, allows early sight of key findings, and provides updates on developments germane to the assessment community. Indeed, Research Matters has begun to have an impact in its own right. The special issue on Aspects of Writing raised the profile of that work and led the government to commission an extension of the research. This reinforces the importance of dissemination. It is one thing to get the research done, but that is only half the task; genuine impact only comes through effective dissemination and the debates and exchanges which go with it. And in line with those who suggest that genuine change only comes when people begin to feel dissonance - feeling uncomfortable with the way things are - this edition of *Research Matters* does not seek to avoid controversy. John Rust's exploration of the application of the principles of psychometrics throws into relief the unhelpful nature of tribalism within assessment and measurement. Principles of measurement are fundamental to assessment, and false oppositions within the assessment community only impede development. I hope you find the items which drill down into marking and assessment of interest, and that the items which spark controversy and reflection open up lines of communication between different members of the assessment community.

Tim Oates Group Director, Assessment Research and Development

## Editorial

In this issue we report on topics ranging from the construct of Critical Thinking to the factors affecting examination success at A-level. In the opening article, Beth Black considers some of the literature on the definitions of Critical Thinking from philosophical and psychological perspectives. This is followed by two articles related to admissions tests. In the first of these John Bell considers the complexities involved in evaluating the predictive validity of selection tests. In the second article Joanne Emery and John Bell continue a discussion from *Research Matters*, Issue 1, on the difficulties of assessing high attaining candidates. This discussion takes place in the context of Thinking Skills Assessment.

The next two articles focus on A-level examinations and in the first of these Carmen Vidal Rodeiro and John Bell discuss factors that affect success at A-level based on information from different databases. This research was presented at the annual conference of the British Educational Research Association in September. The second article on A-levels, by John Bell, Eva Malacova, Carmen Vidal Rodeiro and Mark Shannon, discusses the claim that students are opting for allegedly easier subjects at A-level. In his article on psychometric principles Professor John Rust outlines the fundamental principles by which the quality of assessments are judged and in his second article he describes the work of the Psychometrics Centre at Cambridge Assessment.

Martin Johnson's article considers the question of grading in competence-based qualifications in the light of recent national and international moves towards developing unified frameworks for linking qualifications. This article is a summary of an extended paper on grading issues currently in submission to the *Journal of Further and Higher Education*. We finish with 'Research News' which includes details of the new Statistical Reports Series as well as conference and seminar information.

Sylvia Green Director of Research