If you would like to comment on any of the articles in this issue, please contact Sylvia Green – Director, Research Division. Email: researchprogrammes@cambridgeassessment.org.uk

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Research Matters : 20

A CAMBRIDGE ASSESSMENT PUBLICATION

Foreword

This issue marks ten years of *Research Matters* – a period which has seen huge changes both in the qualifications landscape in England, and in international developments in assessment. Regulation in England has escalated in its complexity and reach, whilst in almost all nations, policy aspirations increasingly have centred on the outcomes of the large international surveys of educational attainment. Both of these tendencies have the risk of myopic preoccupation. Regulation necessarily is partial, otherwise the regulator becomes the de facto qualifications provider. The big international surveys focus on serial cross-sectional studies of certain ages, and have very specific measurement focus – specific expressions of knowledge, skills and understanding. Undue preoccupation with regulation and the surveys means that large areas of assessment theory, practice and development run the risk of being neglected. But it is essential that assessment research continues to support wide curriculum interests, that the economic and social function of assessment continues to be examined and developed, and that constant improvement and innovation in assessment is promoted. Looking back over the issues of the past ten years, it is heartening to see articles which engage fully with this wider agenda. *Research Matters* hasn't neglected regulation and transnational comparison; issues of standards-setting and standards-maintenance have been repeatedly examined, while the methods and findings of international comparative work have been extensively scrutinized. While some pundits have lamented the decline of evidence-based policy, I believe that the last ten years has seen exactly the reverse: an increase in demand, from policy makers and advisers, for well-grounded assessment research. Policy will most likely always tend to consider a wider range of interests and influences than solely the push from research, but many aspects of recent developments in national assessment and public examinations have been heavily research-driven. Removal of levels from national assessment, development of more dependable accountability measures, refinement of coursework in GCSE and GCE – all have been heavily influenced by well-grounded research. *Research Matters* has played a key role in getting summaries of research out early into the public domain, enhancing debate and development in assessment. With an international circulation list of 1,000+, we hope that it continues to support a rich, broad, and forensic discussion of key matters of method, analysis, equity and development.

Tim Oates, CBE *Group Director, Assessment Research and Development*

Editorial

Following the recent launch of Cambridge Mathematics, most of the articles in this 10th anniversary issue focus on Mathematics in a range of contexts. In his article, Gill investigates whether the equivalencies between qualifications assumed by the Universities and Colleges Admissions Service (UCAS) tariff are reasonably accurate or whether predictions could be improved. His findings have interesting implications for the way in which the current tariff measure could be improved. In the first of the Mathematics themed articles, Darlington compares and contrasts the mathematical skills required to answer examination questions from four different post-16 Mathematics qualifications. This research addresses some of the concerns raised in relation to preparedness for undergraduate study and the comparability of relevant qualifications.

Vidal Rodeiro, Sutch and Zanini continue the Higher Education theme. With the introduction of new qualifications, the withdrawal of some and the reform of others, their work sheds light on how current qualifications are used by young people to progress to HE in the UK. Rushton and Wilson consider transition from GCSE Mathematics to A level Mathematics or employment. They discuss the dual-purpose of the GCSE qualifications and the challenges that this poses in relation to skills that are necessary in different contexts. Given the current reforms taking place in Mathematics qualifications in the UK, they also consider the potential for alleviating problems in transition.

Munro's article on Statistics and Mechanics introduces an international perspective to the comparability of Mathematics qualifications. This research highlights differences between the A level (Mechanics and Statistics) and similar qualifications in other jurisdictions. International comparability has been a focus in the current UK reform programme and this work has implications for employers and universities who include Mathematics qualifications for recruitment and admissions purposes.

The final article continues the international theme with an analysis of the *Trends in International Mathematics and Science Study* (TIMMS) 2011. Zanini and Benton explore the link between teaching styles, curriculum and Mathematics achievement. They also address the issue of the taught curriculum and its assessment rather than the programmes of study which may not be taught.

Details of Cambridge Mathematics can be found at www.cambridgemaths.org/

Sylvia Green *Director, Research Division*