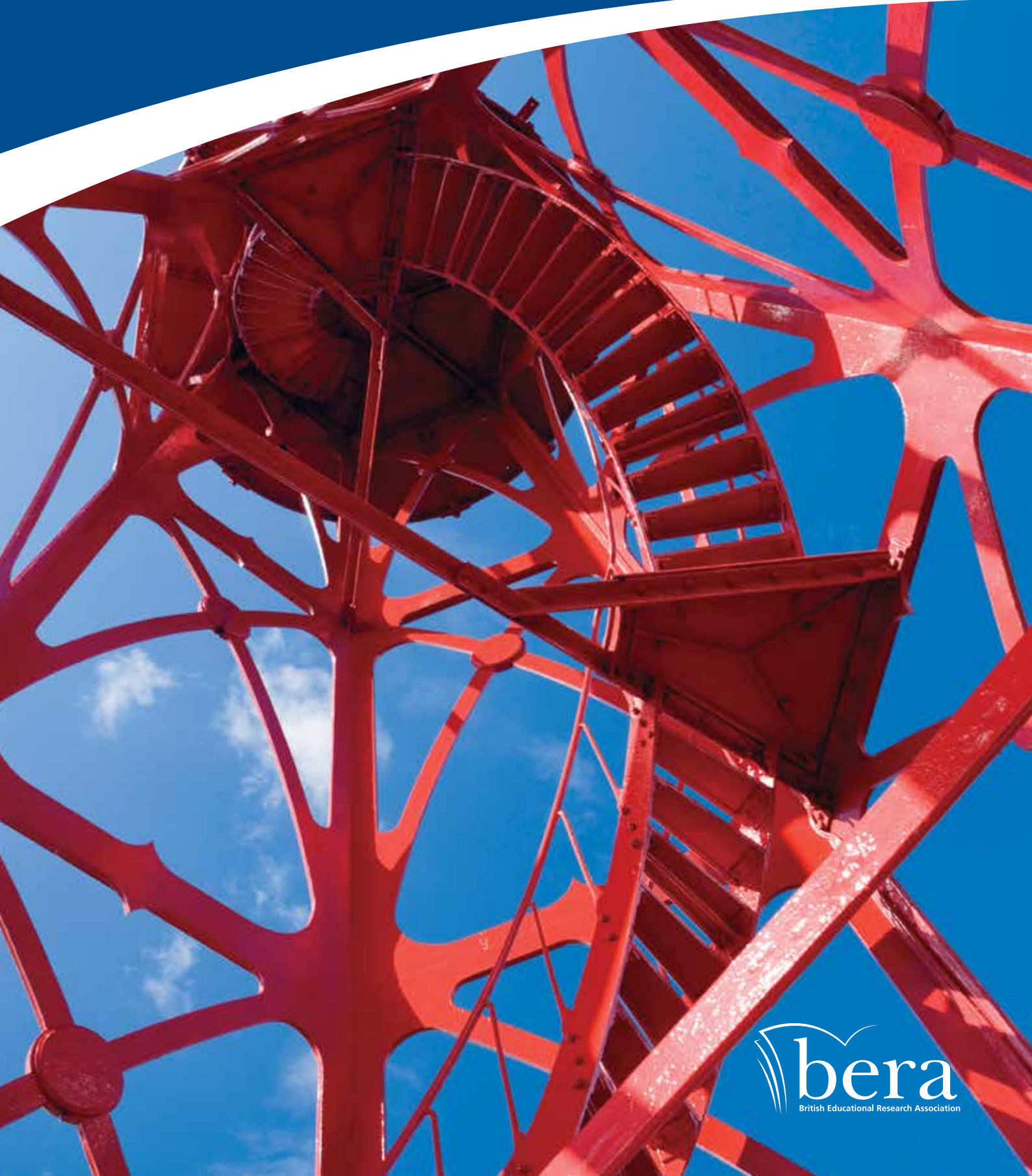


CAMBRIDGE ASSESSMENT RESEARCH
BERA Annual Conference | 2015



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CAMBRIDGE ASSESSMENT RESEARCH AT THE BERA ANNUAL CONFERENCE 2015



This booklet features information about the Cambridge Assessment research that is being presented at this year's BERA conference. At Cambridge Assessment, the reliability of our assessments stems from evidence-based and research-led approaches to all products, services and new developments. We have the largest research capability of its kind in Europe with more than 110 researchers across the group.

Our researchers conduct and publish authoritative research in order to validate, improve and develop our assessments and services, and to influence thinking and policy on educational assessment nationally and internationally. The results of our research are widely published in well-respected major refereed journals such as *Review of Educational Research* and *Assessment in Education*, as well as being presented at seminars and conferences. We also have our own publications, *Research Matters* and *Research Notes*.

We also host a programme of events which bring together researchers, thought leaders, academics, policy makers and assessment professionals to debate big education topics that impact assessment around the globe.

To find out more and register for these events, and to sign up for regular updates please visit our website www.cambridgeassessment.org.uk

Upcoming events in 2015:

- | | | |
|--------------|-----------|---|
| 21 September | Cambridge | Dr E D Hirsch on 'Equity, attainment and core curriculum' (lecture) |
| 1 October | Cambridge | 'The validity of England's accountability data' by Rob Coe (seminar) |
| 29 October | London | 'Gender differences: the impact of secondary schooling – boys or girls, who's winning?' (conference) |
| 9 November | Cambridge | 'Real Finnish Lessons – Extracting policy learning from the debate about Finnish educational improvement' with Gabriel Heller-Sahlgren and Tim Oates, CBE (seminar) |

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INTRODUCTION



SYLVIA GREEN
Director, Research Division

Cambridge Assessment has supported the BERA annual conference for many years and during that time our researchers have presented papers and posters regularly. Like BERA, we believe that educational research plays a vital role in the continuous improvement of educational and assessment policies and practices. Each year the BERA conference provides a valuable opportunity for researchers to come together, to share their work and to discuss and debate across many educational themes. One of the strengths of the conference is that it brings together people from many disciplines.

Educational assessment continues to attract a great deal of attention and coverage. At Cambridge Assessment we work to inform assessment debates and to influence thinking in many educational contexts. Our aim is to ensure quality through rigorous research so that users can have confidence in our assessments. Our research teams contribute to the comprehensive conference programme with their presentations that cover a variety of assessment issues. This year the presentations from Cambridge Assessment focus on a range of themes from the motivations underpinning topic choice in History qualifications to an investigation into a new method of standardising essay marking. We look forward to seeing you either at one of our presentations or at our exhibition stand in the South Dining Hall.

PRESENTATIONS



SIMON CHILD

SESSION: Tuesday 15
September, Session 1,
11:30 – 13:00

AUTHORS: Simon Child,
Ellie Darlington and Tim Gill

An investigation of the motivations underpinning student and teacher topic choice in History qualifications

History is one of the most popular subjects in compulsory and further education in the UK. Interestingly, there is no currently accepted body of knowledge that forms a prerequisite for the study of History at university. This lack of consensus has resulted in exam boards offering choice within the structure and content of their History qualifications. This paper aims to address two research questions:

1. What historical topics do students study in History qualifications?
2. What motivations underpin the selection of these topics?

First, a statistical analysis was conducted of candidates' unit and topic choices for AS and A Level History qualifications offered by a national exam board. Secondly, a questionnaire was developed that asked heads of History departments ($n = 89$) about their schools' A Level History unit and topic choices, and their motivations for making these selections.

There was a preference for Modern History topics, compared to Medieval and Early Modern History topics. The two most common motivating factors underlying teachers' choices of units and topics were found to be teacher expertise and perceived student engagement. These motivations were deemed significantly more important by state school teachers, compared to independent school teachers. There were also differences between school types in terms of how their heads of department rated the importance of the curriculum support offered via resources.

These findings are discussed with reference to the recent qualifications reform in the UK, and in relation to History students' transitions from school to university.



**CARMEN VIDAL
RODEIRO**

SESSION: Tuesday 15
September, Session 1,
11:30 – 13:00

AUTHOR: Carmen Vidal
Rodeiro

An investigation into the numbers and characteristics of candidates with incomplete entries at AS and A Level

From 2015, the AS Level will be de-coupled from the A Level and will become a standalone qualification. This move has raised concerns, as without a direct link to A Levels, the new AS Levels could reduce participation in subjects such as Mathematics or languages. It has also been argued that the current AS Levels are valued by universities and can encourage pupils from disadvantaged backgrounds to continue their studies.

This research aimed to understand the numbers and types of students who start but do not complete their AS and A Levels. Its outcomes add to the debate surrounding the AS and A Level reform and could help to anticipate changes in the uptake of the new AS Levels.

The key findings of this work are:

- In the three subjects investigated (Biology, Psychology and English Literature), the majority of the students certificated in both AS and A Levels.
- Students who dropped subjects from AS to A Level had a worse result for the AS part than students who continued to achieve the A Level.
- Early interest in a subject (e.g. at GCSE) increased the likelihood of obtaining an A Level rather than just an AS Level.
- There was no association between the type of school and the likelihood of students dropping out from Psychology or English Literature. In Biology, however, students in independent schools and sixth form colleges were more likely to drop out from AS to A Level than students in state-selective schools.



MAGDA WERNO

SESSION: Wednesday 16
September, Session 3,
09:00 – 10:30

AUTHORS: Magda Werno,
Prerna Carroll, Frances Wilson
and Filio Constantinou

The implications of the reformed Ancient Languages curriculum at GCSE: Teachers' perceptions

As part of the current educational reform in England, the General Certificate of Secondary Education (GCSE) is undergoing substantial changes which affect subject content, level of demand, and assessment. In contrast to the current emphasis on literature in Ancient Languages (AL) pedagogy, the reformed GCSE will have an increased focus on language and grammar and include the reintroduction of English to AL translation. Although translation will be an optional element of assessment, the inclusion of this skill could have a significant impact on teaching practice, pedagogical focus, and subject difficulty with implications for AL provision.

This study investigated the impact of the proposed changes on teaching and learning of AL at GCSE using focus group methodology with experienced Latin and Classical Greek teachers. The study explored teachers' perceptions on curricular and pedagogical issues in relation to the changes implemented to AL curriculum and their wider implications. The data were analysed using an inductive thematic approach.

The results of this study indicated that the reintroduction of inverse translation is likely to present new challenges for teachers and students, including an increased level of subject and examination demand, as well as having implications for subject content, teaching time, and pedagogical practice in AL classrooms. These factors could potentially have a detrimental effect on the uptake of AL which may ultimately threaten the position of the subject within the curriculum and result in schools opting to discontinue the AL provision. Ways of addressing the new challenges and implications for the wider curriculum reform are discussed.



TIM GILL

SESSION: Wednesday 16
September, Session 3,
09:00 – 10:30

AUTHORS: Tim Gill,
Carmen Vidal Rodeiro and
Nadir Zanini

Students' choices of institution and subject in Higher Education

In recent years, there has been an increase in the Higher Education (HE) options available to students in the UK. Given that the choice of HE institution and field of study is crucial for students' future careers it is important to understand the process by which students choose.

Most studies published in this area focus on the relationship between students' characteristics and participation in HE. Very little research has been carried out to directly model participation and choice in the UK, particularly at the level of institution and subject. The aim of this research was to answer the following questions:

- Which attributes of HE institutions and courses (e.g. prestige, subject, distance from home) determine students' choices, once individual characteristics of students are controlled for?
- How do these attributes interact with the individual characteristics?

A dataset provided by the Higher Education Statistics Agency was used for this research. The analysis was undertaken using a conditional logit model, which assumes that students compare the expected utilities from different alternatives (defined by HE institution and course) and choose the one that gives the highest.

We found that the prestige of the institution and the subject area played an important role in students' choices. Furthermore, distance from home was a very important factor and it interacted with individual characteristics, subject and prestige of the institution. This is a cause for concern, as socio-economically deprived students may have less choice because they are less willing (or are not able) to travel as far.



MARTIN JOHNSON

SESSION: Wednesday 16
September, Session 5,
15:45 – 17:15

AUTHOR: Martin Johnson

Reading between the lines: exploring the characteristics of feedback that support examiners' professional knowledge building

A feature of some current assessment systems which involve human markers is a move towards remote standardisation for examiners. One challenge for this model is that examiners may have to align their marking judgements on candidate responses with those of more senior examiners in the absence of any face-to-face interaction.

Feedback messages that pass from more to less senior examiners are an important part of the way that examiners learn to apply a mark scheme. Pilot observations for the current study suggest that examiner feedback messages are a particular form of extended learning discourse, and that this has implications for the analytical methods chosen to explore it.

The current project involved 20 examiners from across three subject areas in a UK-based examination board. Transcripts of all of the remote feedback messages that passed between the examiners ($n = 559$) were captured and analysed using an innovative approach. The chosen approach integrated elements of Conversation Analysis, Discourse Analysis, and Corpus Linguistics methods.

The study outcomes provide evidence of the way that the examiners use linguistic features to construct common ground with each other, and use this as a basis for constructing mutual understanding in their interaction. The outcomes of the analyses outline some of the characteristics of feedback that support professional knowledge building between examiners in the absence of face-to-face contact. The study also considers some of the theoretical and technological challenges to professional knowledge building through remote interaction.



JESSICA MUNRO

SESSION: Thursday 17
September, Session 6,
09:00 – 10:30

AUTHOR: Jessica Munro

The assessment of creativity and innovation in Design and Technology

There is extensive debate as to what creativity and innovation mean in the education context. Although both terms are commonly referred to in curricula and assessment documents across the European Union, they are rarely defined. Consequently, it is debatable whether either concept can be validly or reliably assessed, particularly within the constraints of high-stakes examinations such as the General Certificate of Secondary Education (GCSE) in the UK. This has implications for the assessment of traditionally 'creative' subjects such as Design and Technology.

This study investigated existing definitions of creativity and innovation and compared the different models of assessment currently used in Design and Technology related qualifications in the UK and in five international jurisdictions. Five attributes of creativity and innovation were identified, all of which can be directly assessed and are not specific to the discipline. Whilst no UK specification currently defines either concept, elements of these five attributes were identified in existing assessment at GCSE.

Additionally, all of the international qualifications investigated refer to creativity or innovation but these concepts are rarely directly assessed. The use of internal, teacher designed assessment is common, and the UK is unique amongst the jurisdictions investigated for its emphasis on external, written assessment. These findings have implications for the assessment of Design and Technology as, if creativity and innovation are to be directly assessed, it is essential that there is a common understanding of these concepts in order to ensure both reliability and validity.



JACKIE GREATOREX

SESSION: Thursday 17
September, Session 6,
09:00 – 10:30

AUTHORS: Jackie Greateorex,
Tom Sutch, Magda Werno,
Jessica Munro and Karen Dunn

Investigating a new method for standardising essay marking using levels-based mark schemes

Standardisation is a procedure used by awarding bodies to increase marking reliability, by teaching examiners to judge each script against a mark scheme. However, research shows that people are better at comparing two objects than judging each object individually. Consequently, Oxford, Cambridge and RSA (OCR, a UK awarding body) proposed investigating a new procedure, Ranking Standardisation, where script quality is judged in comparison to other scripts rather than against a traditional mark scheme.

This study investigated the marking reliability produced by Traditional Standardisation and Ranking Standardisation. The research consisted of a marking experiment followed by examiners completing a questionnaire. In the control condition current procedures were emulated as authentically as possible within the confines of a study. The experimental condition involved ranking the quality of essays from the best to the worst and then assigning individual marks.

After each standardisation condition the examiners marked 50 essays from an AS Level History unit. All participants experienced both procedures, and marking reliability was measured by the differences between individual examiners' marks and the definitive marks. Additionally, questionnaire responses were analysed to gain an insight into examiners' experience of both conditions.

The Traditional Standardisation produced statistically significantly more reliable marking, whilst the ranking procedure involved a complex decision-making process. Therefore, the Ranking Standardisation is not suitable for use in public examinations in its current form. However, at the extremities of the mark range, where research has shown that marking tends to be least reliable, Ranking Standardisation produced slightly more reliable marking.



VICTORIA CRISP

SESSION: Thursday 17
September, Session 6,
09:00 – 10:30

AUTHORS: Victoria Crisp

Validity and comparability of assessment: how do these concepts relate?

Validity has been (and still is) extensively theorised. Whilst definitions of validity vary and discussions continue over whether certain concerns should be a part of the concept, there is no denying the importance given to this key principle of assessment and there is a wealth of literature to draw upon. That literature tends not to deal with comparability as a key issue or to have addressed how these two concepts relate to each other. This may, in part, be because the USA has tended to lead theorisation of validity, yet the USA educational context perhaps naturally raises fewer (or less complex) comparability questions and challenges compared to the UK. In England we have a historical context where a number of different awarding bodies run different versions of the same qualification which are considered equivalent. Thus, comparability is an important concept.

The aim of this work is to theorise how comparability relates to current mainstream conceptions of validity, including whether comparability should be considered a part of validity, or a separate concept. Existing literature on validity and comparability were reviewed for any overlap which might support the construction of a combined theory.

This work aims to identify the appropriate location of comparability within validity theory. In the English assessment context there is a growing emphasis on the provision of validity evidence for public examinations. Existing frameworks for conducting validation studies tend not to address comparability issues. The current exploration will support the addition of comparability to such validation studies.



**JACKIE GREATOREX
FILIO CONSTANTINOU**

SESSION: Thursday 17
September, Session 6,
09:00 – 10:30

AUTHORS: Jackie Greateorex,
Lucy Chambers, Filio
Constantinou and Jo Ireland

Piloting a method for comparing the examination question paper demands over sessions and/or between time zones

England operates a pluralistic assessment system as examinations are provided by multiple examination bodies rather than a single one. This creates the need for ensuring that the different examinations available for a given subject are of equivalent standards. This is essential if the assessment system is to be deemed just.

To contribute to the debates around the comparability of examinations, this study sought to pilot a method for comparing the cognitive demands which different examinations pose on candidates. The method involved using a scale of cognitive demands (CRAS) in conjunction with Thurstone paired comparisons. This method has been used successfully in the past for comparing the demands of vocational examinations, namely, examinations which assess primarily practical skills (e.g. teamwork skills, ability to work with customers). Building on this research, this study attempted to investigate the extent to which this method could also be used in the context of traditional academic qualifications. The qualification which constituted the focus of this research was Cambridge IGCSE Geography.

Six examiners were invited to participate in a three-stage process which involved comparing different examination papers of Cambridge IGCSE Geography sat in two different years and across three different time-zone bands. This paper reports the results of the research and provides evidence for the effectiveness of the method as a means of comparing the cognitive demands of academic qualifications such as Geography.

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