
The evaluation of the impact of changes to A levels and GCSEs

AlphaPlus Consultancy Ltd

Introduction

AlphaPlus Consultancy Ltd was commissioned – originally, in March 2010, by the Qualifications and Curriculum Development Agency (QCDA), and then, from January 2011, by the Department for Education (DfE) – to evaluate the impact of changes to General Certificate of Education (GCE) Advanced Level examinations (A levels) and General Certificate of Secondary Education examinations (GCSEs). This research brief reports on three rounds of fieldwork with case-study centres and wider stakeholder groups and statistical analysis undertaken between spring/summer 2010 and autumn 2011.

Key findings

- The introduction of 'stretch and challenge' in A levels and the reduction from six to four units¹ have been welcomed by the majority of stakeholders. The decrease from six to four units at A level was seen as positive in terms of ensuring greater depth and breadth of study.
- The majority of centres felt that there was greater stretch and challenge in the new specifications at A2, but that this was not always equally reflected in the assessments. Stretch and challenge has been interpreted in a variety of ways by centres, and there continues to be a degree of uncertainty and ambiguity about what is involved. There was disagreement between and within subjects as to how best to deliver stretch and challenge, and, indeed, about the extent to which stretch and challenge was possible for all students.
- Teachers felt that they needed time to adjust their teaching strategies and that students needed time to develop new approaches in their learning in order to develop higher-level and independent learning skills.
- Progression from AS to A2 was considered by many case-study centres to be a larger jump than in the previous specifications. Analysis of examination data indicated that, for most of the

¹ Physics continues to have six units in the new specifications.

subjects looked at in this study, proportionally fewer students continued to A2 for 2010 completion (new specification) than had continued to A2 for 2009 completion (legacy specification).

- The plateauing of grades seen in the A level results in 2010 was thought to be due to a combination of factors: the challenges of the new specification and the impact of measures introduced by Ofqual for the 2010 A level series (i.e. placing an effective limit on the extent to which grades could rise or fall to ensure that the first candidates to take the new specification A levels examinations were not disadvantaged). From 2010 to 2011, the upward trend in average grades that had been seen up to 2009 was largely restored.
- The A* grade at A level is perceived by both teachers and students as recognising high-attaining students. Some universities now require an A* pass for certain courses.
- Although the updating of course content at GCSE is reported to have increased students' sense of motivation and their engagement with GCSE subjects, this positive effect has been somewhat counteracted by what is perceived as the increased focus in teaching and learning on the demands of the examination.
- There were some concerns about unitised assessment for GCSE, but views were mixed. Some stakeholders, including centres, thought that linear assessment promoted more in-depth and longer-lasting learning than unitised assessment, particularly in relation to the development of subject-specific skills; other centres liked to have the option of unitised assessment for students who learned better by having the opportunity to achieve along the way and to build on previous results.
- The consensus from centres and awarding organisations was that there is conflict between the need to gain the 'results' required for school performance targets for Key Stage 4 – using re-sits and early entry to maximise pass rates (e.g. at A*–C at GCSE), which is possible with unitised qualifications – and encouraging learning, development, coherence and a greater understanding of the subject.
- The overall grade distributions obtained in the new specification GCSEs in 2011 were worse than those obtained in 2010, a slight dip following steadily increasing grades since 2004. The

statistical data suggest the new GCSE specifications may be proving a little more challenging for boys than girls, even taking into account attainment differences in previous years of GCSE.²

- There was no consensus across or within centres and subject areas about the extent to which controlled assessment³ was an appropriate form of assessment for particular skills and knowledge. There were concerns that, rather than promoting in-depth independent learning, controlled assessment may only test the ability to learn content and regurgitate it.
- A wide range of approaches to controlled assessment is being implemented within and across centres, often depending on the subject being assessed and/or on the teacher. Awarding organisations have often interpreted Ofqual's regulations differently, so that there is sometimes variation in guidance for the same subject across the different awarding organisations.

Background and evaluation focus

At A level, the changes were introduced to all subjects except mathematics in September 2008. They included a move from six units to four for the majority of subjects, the introduction of greater stretch and challenge at A2, and the introduction of the A* grade. From September 2009, changes were introduced to GCSEs in all subjects except English, mathematics, ICT (information, communication and technology) and the sciences. Changes to GCSE English, mathematics and ICT were introduced in September 2010. At GCSE, controlled assessment and unitised assessment were common aspects of the new specifications.

The impact of the changes was considered under three themes:

- stakeholders' perceptions of the new GCSEs and A levels
- the impact of the changes on teaching and learning
- the impact of the changes on centre behaviour and management of change (including assessment).

² The data considered for A level and GCSE results is provisional, and includes only limited information about the candidates themselves. So the trends observed in this report could be due to changes in the demographic or prior attainment composition of the candidature in 2011 compared to 2010, or changes in patterns of re-sitting for example, rather than changes due to modifications to the examinations. However, the fact that key aspects of the candidature do not tend to change unpredictably from year to year means that the conclusions in the report can be drawn with a degree of confidence.

³ Controlled assessment is a new form of internal assessment of the work of a course, replacing coursework. The purpose of controlled assessment is to assess those aspects of a subject that cannot be easily assessed by external examination. These aspects include research, planning, investigation, analysis, collaborative working, and presenting ideas and arguments supported by evidence. Controlled assessment is designed to encourage a more integrated approach to teaching, learning and assessment, and to enable teachers to confirm that students carry out the work involved. There is no controlled assessment for mathematics.

The initial round of data collection during 2010 concentrated on six GCSE subjects (French, geography, health and social care, history, media studies and Spanish – for which new specifications were introduced in September 2009) and on six A level subjects (English literature, French, geography, media studies, physics and psychology). A change of focus⁴ following the DfE's take-over of the contract for the evaluation has meant that, at GCSE, data was collected for English/English language and mathematics (for which new specifications were introduced from September 2010) instead of for health and social care and media studies. At A level, data was collected for history instead of media studies.

Methodology

The following data sources were used for the evaluation across the three reporting phases:

- Centre research study (CReSt) data (provided by QCDA from the CReSt project)
- Literature review: QCDA's research evidence management system (REMS) database (March 2010)
- Awarding body data archive (ABDA) – awarding organisation data supplied by the Office of Qualifications and Examinations Regulation (Ofqual)
- Official statistics – published statistical first releases (SFR) – from the DfE Research and Statistics Gateway
- Joint Council for Qualifications (JCQ) data
- National Pupil Database (NPD) – including census, pupil level annual school census (PLASC) and examination results
- data from 17 case-study centres – including interviews or focus groups with senior leadership teams, heads of department, subject teachers, examination officers, and students
- interviews with 19 wider stakeholder representative groups⁵ and 35 responses to an online survey from 29 English higher education institutions (HEIs)⁶
- awarding organisation and Ofqual document review (updated in 2011 to include new subjects)⁷

⁴ English and mathematics, the new GCSEs added to the evaluation, are included in the national curriculum for Key Stage 4 (2007). The change of focus at GCSE and A level was made at the request of the DfE, to reflect the coalition government's interest in the 'core' subjects.

⁵ Employers, subject and professional associations, FE representative organisations, trade unions, workforce development agencies and awarding organisations.

⁶ An invitation to take part in an online survey was sent to 103 HEIs in England and followed up with reminder emails and telephone calls; Supporting Professionalism in Admissions (SPA) also promoted the survey at one of their events and in a newsletter. Response rate of 27% from the original 103 HEIs invited – one additional HEI also responded.

- centre online survey data – 44 centres responded in total (6.4% response rate): 19 completed responses to the senior leader questionnaire, 97 responses from 41 different centres to the subject-specific questionnaires.

Summary of findings

Stakeholders' perceptions of the impact of changes to A levels on teaching and learning

Stretch and challenge

The introduction of 'stretch and challenge' in A levels and the reduction from six to four units⁸ have been welcomed by the majority of stakeholders. Teachers felt that A2 English literature, geography, psychology, history and French were more challenging, and they considered them better preparation for higher education –for example, in the way they encouraged independent learning. There were some exceptions in terms of specific skills development for a subject – for example, some geography teachers felt that there was not enough emphasis on the research skills required for university study. The views were more mixed for physics, depending in part on where students were progressing to and how the subject related to their choice of further study. The decrease from six to four units at A level was seen as positive in terms of ensuring greater depth and breadth of study.

Prior to the examination results in summer 2010 for the new-specification A levels, centres had been concerned that there would be a negative impact on students' grades because of what they saw as the greater challenge of some of the new specifications, and because of the uncertainty about how this would be assessed in practice. The cause of this concern, in part, was that centres were not always aware of the role that Ofqual and the awarding organisations had played in ensuring that the first students to take examinations under the new specifications were not disadvantaged. Lack of familiarity with the new specifications and assessments meant that teachers felt less able to predict how the examination questions would assess and reward performance.

A clear distinction was not always made between opportunities for stretch and challenge within teaching and learning – i.e. the higher-order skills developed within the course itself – and how these skills are to be assessed and evidenced in responses to examination questions. Stretch and challenge has also been interpreted in a variety of ways by centres, and there continues to be a degree of uncertainty and ambiguity about what is involved. The stakeholders interviewed had mixed views on the extent to which the new specifications had made a difference – and, if they had made a difference, on the degree to which this had been recognised and the need for change understood. Drawing on findings across the three rounds of fieldwork, however, the majority of centres felt that there was greater stretch and challenge in the new specifications at A2, but that this was not always equally reflected in the assessments, possibly as a result

⁷ The review of the awarding organisation documentation follows the logical development process of the revised qualification: the original qualification criteria and the resulting awarding organisation specification(s); the revised subject criteria for each qualification and the responding awarding organisation specification(s); the sample assessment materials, along with relevant mark schemes, and any other qualification-specific awarding organisation guidance material aimed at teachers and learners.

⁸ Physics continues to have six units in the new specifications.

of the different ways in which awarding organisations can introduce stretch and challenge. There was also disagreement between and within subjects as to how best to deliver stretch and challenge and, indeed, the extent to which stretch and challenge was possible for all students.

The structural aspects of the changes to the majority of A levels (except physics, which continues to consist of six units), the organisation of content and the mode of assessment (for example, course work or external assessment) were not necessarily perceived as encouraging greater stretch and challenge. What was important was the effect structural changes had on the teaching and assessment of higher-level skills. Many geography teachers, for example, considered that the removal of the coursework element had reduced the level of stretch and challenge because it had been through coursework that students developed the fieldwork skills required for university study. Centres often discussed stretch and challenge in the context of A levels in terms of developing independent learners. Here the mode of teaching and learning was an important factor, but a high level of teacher input and initial support was needed if the student was to develop the underpinning skills (such as research skills) required.

The specifications criteria require that A2 assessments must include appropriate demand by:

- the use of a variety of stems in questions
- ensuring connectivity between sections of questions
- requiring extended writing in all subjects (except where it had been agreed with the regulatory authorities that this was inappropriate)
- using a wide range of question types to address different skills
- including synoptic assessment.

Awarding organisations have, accordingly, introduced stretch and challenge in one or more of a number of ways:

- in the qualification syllabus (for example, by increased content or by placing more emphasis on higher-order skills/concepts)
- by making changes to the assessment objectives and/or relative weightings
- in the paper setting (in the form of amendments to the nature of the questions/tasks)
- in the marking criteria
- at the grade-awarding process.

The different approaches depend in part on differences in the nature of subjects and the way skills and knowledge are organised. For example, in modern foreign languages knowledge, understanding and skills are closely linked, and synoptic assessment promotes stretch and challenge.

Differences of opinion across subjects on whether the 'application' of subject skills and knowledge created greater stretch and challenge were largely expressed in terms of the methods of enquiry for a discipline.

For example, for physics the greater emphasis on 'application' was thought by some teachers to have lessened the more important basic principles of the discipline that come with learning and understanding equations and more-complex mathematical problems. For other centres 'application' had proved too challenging, and they had changed to a different specification that was considered more accessible for their students. Teachers felt that they needed time to adjust their teaching strategies and students needed time to develop new approaches in their learning in order to develop higher-level and independent learning skills.

Independent and synoptic learning and understanding are often considered more 'difficult' because they may introduce new ways of thinking and ordering knowledge. How much additional time students require to master these 'higher-level' ways of thinking about their subject clearly depends on their starting point and what they are used to. Additionally, independent learning approaches need, initially at least, to be scaffolded and supported, which is labour intensive for teaching staff. This was particularly evident in the extended project qualification, which required considerable staff resourcing, but which was also widely reported to be of benefit to student and staff development, with wider stakeholders, including HEIs, recognising the benefits of the qualification.

Coursework

Although teachers considered coursework a burden, in terms of their workload, they also felt it offered assessment (with a formative and summative element) that supported development. Subject teachers, heads of department and students suggested that A level coursework performance was a better indicator of a student's ability than written examinations. Physics apart, the majority of A level students' subject- and non-subject-specific comments suggested that they would wish to retain coursework as part of the assessment regime.

Progression

Progression from AS to A2 was considered by many case-study centres to be a larger jump than in the previous specifications. During the 2011 follow-up visits for English literature, history and geography, for example, those who responded thought that the AS was preparing students less well for A2 than before. Analysis of examination data indicated that, for most of the subjects looked at in this study, proportionally fewer students continued to A2 for 2010 completion (new specification) than had continued to A2 for 2009 completion (legacy specification).

Student engagement

The majority of the heads of Key Stage 5 reported in autumn 2011 that there was generally greater engagement in the new A levels. Overall, they considered this was less to do with specific content and more to do either with the development of skills or with the structure of the course.

Grade outcomes at A level

Two important caveats need to be placed on the findings from the statistical data:

- summer 2011 data is for entries rather than for candidates – this may mean that the effects of re-taking (the entire qualification) cloud information about overall outcomes

- no data is available yet for candidate characteristics, so it is impossible to separate out whether any changes in attainment are due to changes in the assessment or to changes in the candidature, or are affected by both.⁹

In general, entries at A level appear to follow the existing trends and not to have been greatly affected as yet by the introduction of the new-specification awards.

For all new-specification A level subjects in 2011, entries have decreased very slightly since 2010 (down from 703,000 to 696,000), following four previous years of increasing numbers since 2007.¹⁰ However, there are variations from subject to subject, with entries for physics, for example, increasing.

Between 1996 and 2009, A level attainment in most subjects broadly followed the same improving trend (an average increase of 0.06 of a grade per year, with short-term declines from the trend at times of specification change), and since 2003 entries have also been increasing in most subjects.

In 2010, when the first awards of the latest specification change were made, attainment saw a plateauing of grades following the long period of increase (a decline from the prior trend similar to, but smaller than, when previous changes to curricula had been made). When all new specification subjects were combined, the same proportion of students obtained the A grade in 2010 (including those awarded the new A* grade) as had received an A grade in 2009 (24.6%), while from 2003 to 2009 an average of 0.7% more students received an A grade year on year.

Considering the new specification A levels as a whole, the plateau effect seen in the A level results in 2010 appears not to have been repeated in 2011. From 2010 to 2011, the upward trend in average grades that had been seen up to 2009 was largely restored. Whether this is because the 2011 cohort had higher prior attainment at GCSE than their 2010 counterparts cannot be determined until NPD data becomes available (from March 2012). For the four individual subjects considered, however, there are variations from this overall trend, as might be expected.

The plateauing of grades at A level seen in the 2010 results did not fully reflect the perceived increased level of challenge that teachers had reported before the results from the summer 2010 examinations became available. Many teachers had expected to see a drop in grade outcomes after the change of specification, especially at A2. In the event, the plateau in grades is likely to be due to a combination of factors: the challenges of the new specification and the impact of measures introduced by Ofqual for the 2010 A level series (i.e. placing an effective limit on the extent to which grades could rise or fall to ensure that the first candidates to take the new specification A levels examinations were not disadvantaged).

This presents awarding organisations with a dilemma. Strong guidance from Ofqual to use predictive matrices¹¹ for annual GCSE and A level awards based on prior attainment data increases the emphasis at

⁹ Data about candidates would enable the effects relating to the candidature's demographic and prior attainment characteristics to be separated from effects relating to the assessment, and allow investigation of whether candidates of different backgrounds or prior attainment have been affected differently by the new specification.

¹⁰ Since students of school age (i.e. 16–18) are of most interest for the evaluation, the numbers are based on the SFR data.

grading on attainment data from the previous year's cohort and so may over time compromise the criterion-related element¹² which currently forms part of grading decisions at A level and GCSE. Additionally, such a move towards grade outcomes comparable with those in previous years would also be likely to prevent GCSE and A level grades increasing in future as a result of improvements in teaching and learning, as such improvements could be interpreted at grading as 'grade drift' (i.e. teachers becoming familiar with the new requirements rather than improvements in teaching and learning *per se*).

Throughout the two years of the new specification A levels, the difference in levels of performance between females and males has remained largely unchanged: females consistently achieve higher grades.

A number of centres commented on the rise in numbers of A level students re-sitting examinations in the hope of achieving a higher grade. Students generally welcomed the opportunity for re-sits, with the majority believing re-sits should be allowed in any circumstance. The statistical data indicates, however, that re-sitting may often not result in a better grade outcome.

The A* grade at A level is perceived by both teachers and students as recognising high-attaining students. Some universities now require an A* pass for certain courses.

Stakeholders' perceptions of the impact of changes to GCSEs on teaching and learning

The evaluation has had to consider the four GCSEs with specification changes in 2009 (French, geography, history and Spanish) separately from changes to English and mathematics (changed for first teaching in 2010). In part, this is because of the different timing of their implementation and the degree to which changes to English and mathematics have 'bedded in' compared with the other GCSEs; but it is also because English and mathematics are high-stakes qualifications (as a result of school 'floor-targets') and 'gate-keeper' qualifications for student progression. Assessment of English and mathematics, therefore, is usually the focus of intensive monitoring and a range of strategies for ensuring students reach the required grade. This is not to suggest, however, that a similarly robust approach is never adopted in relation to other subjects.

¹¹ At A level, awarding decisions take account of candidates' GCSE outcomes as a measure of prior attainment to provide predicted likely outcomes of A level results (GCSE outcomes for the current and previous year's A level cohorts are compared). These prediction matrices are used to guide examiners in setting grade boundaries.

¹² Some assessments aim to measure precisely what a candidate can or cannot do, in terms of a set of performance standards. Such assessments are called criterion-related. Other assessments aim to put students on a scale of performance from the strongest to the weakest, without necessarily specifying precisely what each part of the scale corresponds to in terms of performance criteria – these are norm-referenced assessments. The A level and GCSE awards combine elements of both. Ofqual's work around maintaining standards aims to deal with the choice between prioritising comparable outcomes (essentially a norm-referenced approach) and comparable performance (essentially a criterion-referenced approach) in the first and subsequent years of new specifications:

*The **comparable outcomes** perspective implies that grade boundaries should be fixed so as to take account of any deficits in ... examination performance which are unique to the first cohort of candidates. On the other hand, the **comparable performance** perspective entails an acceptance that candidates' results in [the first year of a new specification] should suffer because for this reason they did not produce performances comparable to those which would have been achieved by candidates [in the previous year].*

Cresswell, M. J. (2003) Heaps, prototypes and ethics: the consequences of using judgements of student performance to set examination standards in a time of change. University of London Institute of Education

Student engagement

Although the updating of course content is reported to have increased students' sense of motivation and their engagement with GCSE subjects, this positive effect has been somewhat counteracted by what is perceived as the increased focus in teaching and learning on the demands of the examination. With English, there is general concern among teachers that the amount of content is leading to less depth of study and that, in some instances, students are not being required to read complete texts. And with mathematics, there is a range of opinions on the degree of stretch and challenge for students of differing abilities. For example, a few centres felt there was insufficient challenge for higher-attaining students.

Unitised assessment

There were some concerns about unitised assessment for GCSE, but again views were mixed. Some thought that linear assessment promoted more in-depth and longer-lasting learning than unitised assessment, particularly in relation to the development of subject-specific skills; others liked to have the option of unitised assessment for students who learned better by having the opportunity to achieve along the way and to build on previous results.

Some stakeholders considered that unitised assessment, with its opportunities for re-sits and early entry, coupled with pressure on centres and students to get results, was at odds with the value placed on synoptic assessment and on the development of skills rather than a narrow knowledge-based approach to subjects. The consensus from centres and awarding organisations was that there is conflict between the need to gain the 'results' required for school performance targets – using re-sits and early entry to maximise pass rates (e.g. at A*–C at GCSE), which is possible with unitised qualifications – and encouraging learning, development, coherence and a greater understanding of the subject.

Controlled assessment

A wide range of approaches to controlled assessment is being implemented within and across centres, often depending on the subject being assessed and/or on the teacher. Awarding organisations have often interpreted Ofqual's regulations differently, so that there is sometimes variation in guidance for the same subject across the different awarding organisations. This has resulted in considerable variation in the amount of support that teachers believe they can give their students in the preparation stage of controlled assessment.

Concern was expressed that some teachers are using strategies, even if often unwillingly, to help students to get the best grade, and that these undermine the validity of the controlled assessments in terms of the knowledge and skills that are meant to be assessed. Examples of strategies include running practice assessments that change little in the 'real' assessments and modern foreign language teachers setting more controlled assessments than required and choosing the best for each individual student.

Most centres do not feel that the management of controlled assessment is a problem, although this was not always the case and it continues to be an issue for some centres more than others. About half of the centres to have previously found that the scheduling of controlled assessments involved a significant added management burden now reported that they were coping well or satisfactorily with the issue. The remaining half thought that the challenge of fitting controlled assessments into the school calendar was becoming a more serious issue with the increased number of departments involved. It is accepted that the introduction of controlled assessment is one of a number of changes that may increase teachers' workloads initially, but usually only in the short term. Teachers of modern foreign languages, however, reported that they expect their workloads to remain heavier in the longer term because of specific requirements to do with organising

and conducting controlled assessment. Staff at all levels expressed the need for guidance on best practice in the management of controlled assessment.

Most teachers liked the opportunity that controlled assessment gives to choose topics and contextualise the tasks for their students. However, there was no consensus across or within centres and subject areas about the extent to which controlled assessment was an appropriate form of assessment for particular skills and knowledge. There were concerns that, rather than promoting in-depth independent learning, controlled assessment may only test the ability to learn content and regurgitate it.

Students of history and geography were the most positive about controlled assessment, students of Spanish and French the most negative. History and geography students liked being able to use their research notes during the controlled assessment task. The majority of students also stated that they liked the fact that controlled assessment did not take place in the main school hall, where they sat external examinations, and that it was therefore less stressful.

Meeting targets

There is evidence from many of the case-study centres to suggest that the focus on school performance measures is a strong driver for centres to ensure students meet target grades. In many cases this means that teaching and learning is driven by the assessment regime. There is evidence to suggest that some teachers and students will not consider specific content and/or skills that are not expected to be assessed as a priority, but rather as an indulgence. In some centres, however, the focus is less narrow, with centres embracing the change and challenge presented.

Choice of specification

Choice of specification was reportedly determined by several factors, including the appropriateness for the needs and aspirations of students, consistency with the nature of the subject, and familiarity with the awarding organisation.

Grade outcomes at GCSE

As for A level, two important caveats need to be placed on the findings for GCSE:

- summer 2011 data is for entries rather than candidates, which may mean that the effects of re-taking (the entire qualification) cloud information about overall outcomes
- no data is available yet for candidate characteristics, apart from gender.

Nevertheless, on the basis that there is no reason to suspect major changes in re-sitting behaviour (in GCSE qualifications not units) since 2010, or that the 2011 year 11 cohort is significantly different in terms of trends in prior attainment or other important characteristics from the 2010 and previous cohorts, it is possible to draw some tentative findings:

- The overall grade distributions obtained in the new specification GCSEs in 2011 are worse than those obtained in 2010, a slight dip following steadily increasing grades since 2004. While the outcomes for females plateaued in 2011 compared with 2010, the outcomes for males fell (by around 0.06 of a grade on average).

- Overall grade distributions have plateaued for all candidates in GCSE French and geography, and decreased a little for GCSE history and Spanish.
- The overall grade distributions for male entries have got significantly worse for all four new-specification GCSE subjects under consideration: French, geography, history and Spanish. These changes are not seen for English and mathematics, for which specifications had not changed in summer 2011. In addition, for the four new-specification subjects, the gap between girls' and boys' grades (girls performing consistently better over time in each subject) widened in 2011.

This suggests that:

- The new GCSE specifications are proving a little more challenging for boys than girls, even taking into account attainment differences in previous years of GCSE.
- A similar plateauing effect (slightly more pronounced, in fact – a small dip in GCSE grades in 2011) is observed to that seen for A level in 2010, suggesting that Ofqual's revised guidance to awarding organisations has had the effect of maintaining similar overall grade distributions in a situation where grades might otherwise have been expected to get worse. It should be noted that this last conclusion can be confirmed only by more-detailed analysis of a wider range of new-specification qualifications, coupled with consideration of candidates' prior attainment for the years before and after the specification change.

Additional Information

The full report can be accessed at <http://www.education.gov.uk/publications/>
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This research report was commissioned before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DFE).

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.