STRETCH AND CHALLENGE IN A-LEVEL EXAMINATIONS:
TEACHERS’ VIEWS OF THE NEW ASSESSMENTS

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Stretch and challenge evaluation

1 Executive Summary

The Government's stretch and challenge policy was intended to bring about broader and greater depth of study at A-level. This research investigated 27 teachers’ views of the need for, and implementation of, the ‘stretch and challenge’ policy in new, specimen A-level examination papers from the three English awarding bodies. Four focus groups were conducted in independent schools and sixth form colleges in Bristol, Hampshire and Greater Manchester. Participating teachers sometimes had responsibility for more than one subject (Box 1).

<table>
<thead>
<tr>
<th>Box 1 Subject responsibilities of participating teachers (frequency where &gt;1)</th>
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<tbody>
<tr>
<td>Accounting, Applied Science, Biology (3), Business Studies, Chemistry (3),</td>
</tr>
<tr>
<td>Computing (2), Curriculum responsibility, Design and Technology (4), Geography (3),</td>
</tr>
<tr>
<td>ICT (3), Mathematics (2), Physical Education (3), Physics (3)</td>
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For the stretch and challenge policy to be effective, changing students’ examination experiences would not be sufficient: it would have to have a backwash effect upon teaching practice. A review of the research literature on backwash found that high stakes testing could have positive and negative consequences upon teaching practice, although empirical evidence of backwash effects was sparse and often unspecific.

The focus groups were recorded and transcribed before coding with NVivo software. The main themes related to the structure of the focus group schedule: examination demands, pedagogy issues and assessment design. There was an over-arching theme relating to volume versus depth of study.

Teachers told us that the Curriculum 2000 A-levels did not always make the right kinds of demands upon students and did not reward the best students fairly. Participants’ scrutiny of the specimen examination papers highlighted changes that could be identified as being consistent with the stretch and challenge policy and teachers discussed how this would impact upon their teaching. They were eager to know what examiners wanted, so that they could wash it back. It was reported that examinations loomed over students’ learning experiences, causing stress and restricting their enjoyment and pursuit of subject matter and, in some cases, even affecting their performances in the examinations. The stretch and challenge policy was pushing at an open door, as teachers were generally of the view that the Curriculum 2000 A-level examinations were limited in terms of the nature of the knowledge and skills that they rewarded.

Although the signs from this research into teachers’ views of the specimen papers were generally encouraging, it must be borne in mind that the findings were based upon hour-long conversations between a small number of teachers. Implementation of the policy in teaching and learning was not
observed directly in the study. It will be important to monitoring whether the changes have the intended consequences.

2 Introduction

In recent years, some commentators have argued that A-levels do not stretch the most able students (eg Paton, 2009). To tackle such concerns, the Government introduced a policy that has become known as ‘stretch and challenge’ in the Education and Skills White Paper (DfES, 2005). New A-level examinations were introduced for first teaching in September 2009, which incorporated questions designed to induce more stretch and challenge in students’ examination experiences. This research investigated teachers’ perceptions of the new A-level question papers and their experiences more broadly of preparing students for A-level examinations.

In this introductory section, we outline the nature of the stretch and challenge policy and the guidance on its implementation of the policy. With a changed examination, we might expect teachers to change their teaching practices and it is highly likely that the Government expected the stretch and challenge policy to have this effect. As such, we introduce research literature on the complex relationship between assessment and teaching, which has come to be known as ‘backwash’.

2.1 Stretch and challenge policy

Paragraph 8.15 of the White Paper introduces the issue as follows,

“First, we want more stretch within A-levels. Because we make it a priority to preserve A-level as a qualification, with consistent standards over time, we will take a slightly different route to that proposed by the Working Group. We will seek the introduction of a new section in A-level papers covering AEA material. We will ask QCA to consider the best means of doing this across all A-levels, so that increased stretch and challenge are available to all students in all types of institution, and scholarship can flourish.” (DfES, 2005, p59 – 60)

Preceding this paragraph in the White Paper, there was a reference to the lack of discrimination in A-level grading and the ensuing problems for selection to Higher Education. But the stretch and challenge policy was not designed to solve that specific problem, as ‘greater differentiation’ was considered elsewhere in the White Paper and, ultimately, the decision to introduce an A* grade was designed to deal with the issue of differentiation. Ruth Kelly (2006), the then Secretary of State for Education and Skills, wrote that her primary purpose in introducing the stretch and challenge policy was to “ensure that our brightest A-level students … develop broader skills and knowledge than those currently required by A-level”. However, this was problematical because the policy could not be allowed to impact upon the grading of the examinations, given that the consistency of A-level standards over time was expected. Therefore, the policy was intended to increase the experience of difficulty for the students – stretching them, but not necessarily rewarding them differently.

It was intended that the stretch and challenge initiative would partly deal with criticisms that A-levels were too easy for the brightest students. However, there was reason to question whether A-level students really did experience the examinations as easy, given that few students scored very high raw marks on the Curriculum 2000 examinations (AQA, 2007). In some subjects, a small proportion of
students were awarded full marks in terms of module scores (uniform mark scores), but this was a function of the conversion of the original examiners’ marks into a credit system that made modular assessment structures feasible, ironing out the vagaries of changes in difficulty of the examinations (Taylor, 2007). On the raw mark scale, students did not typically score highly and therefore their experiences of the examinations must already have been challenging. For example, across 501 AQA summer 2007 A-level assessments, the average proportion of marks that had to be scored for a grade A to be awarded was 73%, leaving over a quarter of the raw mark scale available to challenge the brightest students.

For these reasons, a complementary study was conducted on students’ views of the challenge of the Curriculum 2000 examinations, as well as their views of the new stretch and challenge questions (Baird, Chamberlain, Royal-Dawson, Taylor and Meadows, 2009). The research investigated students’ perceptions regarding the need for the new policy, as well as how well students perceived it to have been implemented. Interviews were conducted with 39 high-achieving university students who had sat their A-level psychology and biology examinations in the previous summer. Findings indicated that students perceived differences in the question paper design of the new A-levels that might bring about more stretch and challenge. However, students reported having been stretched by the Curriculum 2000 A-levels and having studied very hard. These students sought to find out what they had to do to get marks in examinations, rather than learn about subjects per se. Students recognised that this was counter-productive to their learning at times, but highly strategic in terms of attaining high grades. However, students did not report a lack of challenge in the Curriculum 2000 A-levels: the challenge related to meeting the demands of the examination in a strategic manner. These findings relate to the Government's concerns about superficial approaches to learning and imply a need for change, but they also illustrated the pressure that students were under.

2.2 Implementing stretch and challenge policy

After a great deal of policy debate between various stakeholders, including an exchange between QCA and the government (Curnock-Cook, 2005; Kelly, 2006) and following piloting work, it was decided that different question styles would be incorporated into (A2) question papers in the second year of A-levels. The aim was to foster more extended writing, synthesis of study and less formulaic responding (see http://www.qca.org.uk/qca_10331.aspx). QCA advice indicated that the stretch and challenge questions should:

- Use a variety of stems in questions to avoid a formulaic approach through the use of such words as: analyse, evaluate, compare, discuss.
- Avoid assessments being too atomistic, connections between areas of content being used where possible and appropriate – there will not be a requirement to have overall coverage of all content area or dependence between the different sections which would mean failure on the first part of the question dooms the performance on following parts.
- Have some requirement for extended writing in all subjects except where this is clearly inappropriate (e.g. mathematics).
- Use a wider range of question types to address different skills i.e. not just short answer/structured questions. The use of open answer questions, questions based on case studies and stimulus materials were encouraged.
- Use improved synoptic assessment, asking candidates to bring to bear knowledge and the other prescribed skills in answering questions rather than simply demonstrating a range of content coverage.
QCA’s policy guidance indicated that stretch and challenge was related not only to demand, but to the predictability and atomisation of assessment. Awarding bodies were encouraged to consider the fundamental knowledge, understanding and skills required within their subject areas, and to incorporate questions in which candidates must demonstrate this knowledge and understanding. The aim here was that A2 assessment should reflect the “subject as a discipline” to a greater extent (QCA, 2006, p 2). The document also outlined the features which awarding bodies could expect to find in the responses of high-performing candidates; namely, that high-performing candidates, or candidates with ‘expert’ knowledge, should be able to appreciate the underlying nature of a task and not be distracted by a task’s surface-level features. Accordingly, high-performing candidates should be able to respond to novel situations which incorporate skills and knowledge that they have already developed in other contexts. Improved synoptic assessment would include questions which therefore allowed high-performing candidates to demonstrate this ability. Issues regarding the validity and reliability of synoptic assessment were also raised. For example, awarding bodies were reminded of the increased need for reliability when marking open-ended questions.

QCA noted that many of these requirements were already met, to some extent, in the Curriculum 2000 A-levels. The reduction in the number of units at GCE was expected to result in an increase in the number of question papers meeting the stretch and challenge requirements because the questions papers would, by necessity, have to assess a broader range of subject topics. Awarding bodies were not required to ensure that all questions in a paper met these requirements. However, it was the responsibility of awarding bodies to ensure that the weighting of stretch and challenge questions did not discriminate or reduce accessibility for less able candidates.

In addition to developing the new ‘stretch and challenge’ question papers, awarding bodies also played an essential role in providing teacher support for new assessment initiatives. The following provides a review of the support planned for the ‘stretch and challenge’ initiative by AQA, Edexcel and OCR - the three largest awarding bodies in England. It should be noted, however, that with respect to OCR and Edexcel, this is primarily a review of the support that had been initially planned following the introduction of stretch and challenge. In some cases, particularly with regards to meetings, it was difficult to verify whether this support has in fact materialised and in what form. Moreover, some of this support is scheduled to occur in the future. Teacher support information was collected from the main websites of AQA (www.aqa.org.uk), Edexcel (www.edexcel.com) and OCR (www.ocr.org.uk).

First, support offered by AQA consisted largely of free teacher support meetings which began in 2007, the year that the new specification specimen materials were accredited. Half-day meetings began in the summer term of 2007 and continue into the autumn term, with the aim of introducing the revised specifications and exploring the changes that were to be made. For all subjects, these initial teacher support meetings were followed with further, free full-day meetings in the spring, summer and autumn terms of 2008. These sessions explored the new specifications in more depth, with a focus on offering help and advice to teachers regarding teaching and assessment. A number of subjects, if not all, planned to hold further meetings in 2009. For example, five ‘Getting Started’ meetings to discuss the new GCE ICT specification, including the stretch and challenge initiative, were planned during the summer and autumn terms of 2009. Likewise, a series of meetings regarding GCE Geography have been planned. These meetings will present a brief summary of the new A2 specification, along with some general issues regarding delivery. It was also planned to present information regarding content, candidate preparation and strategies of assessment for each A2 unit, including coursework and fieldwork. Computer-based resources were also developed: some subjects, such as Media Studies, were provided with an on-line Teacher's Forum, intended to allow teachers to share their ideas and teaching practices relating to the new A-levels. AQA also launched its Enhanced Results Analysis
software (ERA) – a free on-line tool that allows teachers to analyse their results in detail. ERA can be used, for example, to compare a centre’s examination results with those of similar centres.

With regard to published material, initial teacher guidance material was made available in 2007. AQA-endorsed teaching and learning resources were then made available during 2008 through a commercial publisher. AQA planned the distribution of further resources, with the range of commercially-published material to be expanded and additional teacher guidance material, including exemplar student work, to be made available. It is planned to develop, in discussion with subject teachers, both hard-copy and on-line subject-specific material.

The support provided by Edexcel was mainly in the form of updated revision and study guides. Alongside the standard revision material, the new Edexcel study guides contained practice stretch and challenge questions. At A2, these questions were provided with extended answers, to give students and teachers an understanding of the kind of responses that would be expected. Teachers of Edexcel qualifications should also receive a copy of e-Spec, a CD-rom with specimen and support material for the new GCE specifications. Other support was being offered in the form of teacher support meetings. For example, meetings were being held to provide subject-specific feedback from the new AS assessments. Other, often half-day, meetings were held to provide support for each module of the new specifications, with the support and materials provided at these meetings differing between subjects. Those wishing to attend these courses were required to pay a fee. Edexcel also provided more general forms of support, such as its ResultsPlus service, which provided information about student performance on an examination, overall and at question level. Support was also provided through its Ask the Expert service, where queries could be answered directly through a Senior Examiner or Moderator, or through its free on-line professional training and development seminars.

OCR’s plans for support for the introduction of stretch and challenge resembled those of AQA, in that OCR held a series of free half-day ‘Get Ready’ training events during the autumn of 2007. These meetings aimed to provide teachers with an overview of the new specifications and could be followed up by full-day ‘Get Started’ events in spring 2008. The full-day meetings would examine the specifications in more depth and include some consideration of their delivery. OCR had worked with 46 teachers to develop and publish support materials which were freely available on the OCR website. These materials included schemes of work with topic outlines, activity ideas for both the classroom and homework, and reference lists of resources. The materials varied somewhat between subjects; for example, in addition to those listed above, the support materials for GCE Biology included high and medium marking scheme band ‘candidate style’ answers for each unit.

Regarding ‘stretch and challenge’ specifically, OCR’s approach stemmed from its consideration of stretch and challenge to be the “recognition of existing practice, rather than the introduction of a new initiative” (http://www.ocr.org.uk/qualifications/1419changes/alevels/stretch_challenge.html). Innovative teaching ideas, opportunities to stretch and challenge students, and opportunities to use ICT were marked by icons within the general support materials. OCR also planned to support teachers through the availability of a Customer Contact Centre and e-communities which facilitated discussion with other teachers. Local network meetings were also proposed for some subjects.

To summarise, a wide range of teacher support activities were produced by the awarding bodies for the new A-levels (Box 2). Naturally, not all of these initiatives were specifically targeted at the stretch and challenge policy, as the policy was accompanied by other changes for which teachers needed
support. Next, we turn to what is known in the literature about the impact of assessments upon teaching practices.

**Box 2  Teacher support activities offered by the Awarding Bodies for the new A-levels**
- Free teacher support meeting programmes
- Additional teacher support programmes (fee-paying)
- Specimen question papers
- Exemplar ‘candidate style’ responses
- Revision and study guides for students and teachers
- Schemes of work
- Access to senior examiners
- Establishing self-supporting teacher networks
- Availability of awarding body staff to answer queries
- Analyses of examination results

### 2.3 Backwash effects of testing

Students’ A-level learning experiences mainly occur in their self-study and their interactions with teachers in schools and colleges. The examination experience alone is not likely to change dramatically students’ perceptions of sitting A-levels. For the stretch and challenge policy to have its intended effects the new assessment styles will have to cause changes to teaching and test preparation of students – a process known in the literature as backwash (Alderson and Wall, 1993; Bailey, 1996; Cheng and Curtis, 2004) or measurement-driven-instruction (Popham, 1987). Through the rest of this paper, we use the term backwash, which

> "occurs when a high-stakes test of educational achievement …influences the instructional program that prepares students for the test"

(Popham, 1993; cited by Chapman and Snyder, 2000, p460)

Alderson and Wall (1993, p120 - 121) provided a list of 15 hypotheses as a means of clarifying the construct of backwash, which are given below. Not only does this quotation seem to be aligned with the rationale behind the stretch and challenge policy, it highlights the complexity of the concept of backwash.

> “(1) A test will influence teaching. This is the Washback\(^1\) Hypothesis at its most general. However, a second partly different hypothesis follows by implication from this first one, on the assumption that teaching and learning are related, but not identical:

> (2) A test will influence learning.

Since it is possible, at least in principle, to separate the content of teaching from its methodology, then we need to distinguish the influence of a test on the content of the teaching from its influence on the methodology. Thus:

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\(^1\) ‘Washback’ is used instead of ‘backwash’ in some of the research literature.
A test will influence what teachers teach; and
A test will influence how teachers teach; and therefore by extension from (2) above:
A test will influence what learners learn; and
A test will influence how learners learn.

However, perhaps we need to be somewhat more precise about teaching and learning, in order to consider how quickly and in what order teachers teach and learners learn. Hence:
A test will influence the rate and sequence of teaching; and
A test will influence the rate and sequence of learning.

Similarly, we may wish to consider explicitly both the quality and the quantity of teaching and learning:
A test will influence the degree and depth of teaching; and
A test will influence the degree and depth of learning.

If washback relates to attitudes as well as to behaviours, then:
A test will influence attitudes to the content, method, etc. of teaching and learning.

In the above, however, no consideration has been given to the nature of the test, or to the uses to which scores will be put. Yet it seems not unreasonable to hypothesize:
Tests that have important consequences will have washback; and conversely
Tests that do not have important consequences will have no washback.

It may be the case that:
Tests will have washback on all learners and teachers.

However, given what we know about differences among people, it is surely likely that:
Tests will have washback effects for some learners and some teachers, but not for others."

The complexity of the above definition is also reflected in the empirical research literature. In their 1993 review of the international literature on language testing, Alderson and Wall concluded that there was little evidence to support the claim that tests influenced teaching and therefore that, the existence of backwash had yet to be established. This observation was reiterated by Bailey (1996), who further stated that there was relatively little empirical evidence to determine the exact nature of backwash, its mechanisms, what constituted positive or negative backwash, and how to foster the former and limit the latter. Although Cheng and Curtis (2004) claimed that this picture had changed, with a greater emphasis being placed on empirical research into backwash, the authors cited relatively limited evidence, at least in terms of specific backwash effects. More recently Rea-Dickens and Scott (2007) stated that there was little research into backwash effects in national curriculum testing in England. Despite the reported lack of research and explicit empirical evidence, the literature reflected a general acceptance that backwash exists in some form. Alderson (2004) noted that, although more research attention had been paid to backwash in recent years, it mainly reinforced the acceptance of backwash as a phenomenon of testing, rather than discovering the specific mechanisms by which backwash occurred.
Much of the research into the effects of backwash related to language teaching in schools, particularly teaching English as second or foreign language in, for example, Japan, China, and Taiwan (e.g., Andrews, Fullilove, and Wong, 2002; Bailey, 1999; Choi, 2008). Results of such high stakes assessment are relied upon to inform the need for educational change, with these results considered to be critical agents of reform and necessary to demonstrate whether the intended change has occurred (Cheng, 1999). For example, Qi (2005) reported a study which focussed on the introduction of a writing task within a national English test in China. This study found that, although English writing was taught and practised in schools, the teaching methods differed markedly to those intended by the test developers. Additionally, both teachers and learners concentrated on the testing situation and what they had assumed were the test markers’ preferred answers.

Although Qi’s study showed a clear negative backwash effect, other research has shown that high stakes tests can have a more positive influence on teaching and learning. Stecher, Chun, and Barron (2004) conducted a survey in Washington State to determine the effects of a programme of assessment-driven reform on the teaching of writing. Teachers reported making changes to the allocation of time, their emphasis upon different aspects of the subject content and their teaching practices. However, within that framework, teachers also reported spending more time on subjects that were tested than on non-tested subjects. Furthermore, the core of writing instruction continued unchanged from before the introduction of the new tests. Therefore, while the new tests and standards appeared to influence teaching practices, it also had the effect of narrowing that teaching to cover only aspects of the subject that were tested. Taken together, these studies provided evidence for positive and negative backwash effects, corresponding with Stobart’s argument (2003), that assessment always has consequences and that our primary task is to ensure that they are as constructive as possible.

The research described above links with Alderson’s (2004; see also Shohamy, 2007) view that, as tests are often used for curriculum guidance and innovation, it could be said that politicians and education authorities have some responsibility for the characteristics of any backwash. However, Alderson highlights the notion that backwash is less about policy, curriculum and test development, and more about what takes place in classrooms. For example, although tests will have some impact on teaching content and materials, they will have less influence on the methods that individual teachers use. It is therefore vital that attention is paid to teachers’ motivations and beliefs about teaching and learning, their training and professional development, and their understanding of the rationale for a test and the form that the test takes (Alderson, 2004). This, in conjunction with Alderson and Wall’s (1993) above list of backwash hypotheses, emphasises the importance of classroom events and that testing can have a powerful effect, both positive and negative, on what happens in the classroom. Stretch and challenge policy is but one of many current policy initiatives and it could be claimed that the Government are also trying to change teaching practice by, for example, introducing Masters level teaching qualifications and by producing materials and recommendations on formative assessment in schools.

In her review of the effects of the introduction of the National Curriculum in the UK, James (2000) concluded that the pressure on teachers and schools to perform was not inadvertent and should be considered a form of intentional backwash arising from high stakes testing. This was reflected in a number of studies that found that high stakes language tests, to varying degrees, had been used to enact education policy and reform (Qi, 2005, 2007; Shohamy, 2007; Stecher et al., 2004). However, Spratt’s (2005) review of backwash from exams on teaching and learning concluded that backwash was not necessarily automatic, nor a direct effect of exams, and that teachers had a crucial role in determining the type and intensity of backwash effects. Reflecting Rea-Dickens (2004) view of
teachers as agents, Spratt found that the beliefs, attitudes, education, teaching experience and personalities of teachers were major factors influencing backwash effects. However, these conclusions were not fully representative of the mixed findings to be found in the empirical literature, with some studies finding only superficial or limited backwash effects on teachers’ perceptions and practices (e.g., Cheng, 1999, 2004; Wall, 2000).

Chapman and Snyder (2000, p460) went further in their examination of the changes often sought by education policy makers and the following quote is reminiscent of the current stretch and challenge initiative.

“In general, the change governments seek is to raise the cognitive complexity of students’ thinking and problem solving processes by concentrating the questions on the application of knowledge rather than information recall. Often, then, the changes to the test concentrate on item format rather than content, per se.”

In addition, Chapman and Snyder stated that, although testing could improve instruction, success was not assured. The generation and provision of contingent support and resources can improve teaching and learning depending, of course, on how that support and those resources are used. Spratt (2005) cited a number of studies that found that teachers’ attitudes towards an assessment were affected by teacher training toward specific exams, access to and familiarity with support materials, the provision of exam support materials and customised teaching materials, and their understanding of and identification with the rationale or philosophy underlying the exam. Wall (1999, cited in 2000), in describing her earlier research in Sri Lanka, found that teachers had identified similar factors affecting the success of an innovation. Issues raised included a lack of teacher support material and teacher training, not enough time to cover the syllabus, poor exchange of information and expertise, and few rewards for teachers to modify their approach to teaching. Wall found that, despite the fact that teachers professed positive attitudes towards a test and the materials it was based on, this did not necessarily result in changes in their fundamental beliefs about teaching or in their teaching practices. Clearly, research on backwash effects will be affected by the educational culture, including historical approaches to teaching and learning, as well as teacher autonomy. Thus, it was not surprising that different effects were found in the literature.

In summary, despite the mixed research findings as to the effectiveness of backwash generally, there were a number of factors that were claimed to have had a strong influence on backwash. Foremost was the potential for teachers and teaching practices to mediate the relationship between the test and students’ learning. Within this relationship lay teachers’ attitudes and practices, neither of which could easily be changed to suit a particular assessment innovation. It is clear from the above discussion that research into teachers’ perceptions of the stretch and challenge policy implementation could make an important contribution to the success of this initiative.

3 Methodology

Four focus groups were conducted to investigate teachers’ views of the stretch and challenge policy and whether it had been implemented in the specimen question papers. Additionally, the research sought to ascertain how teachers expected the changes in assessment to affect their teaching practices and students’ learning experiences. Finally, teachers’ needs, with regard to support from awarding bodies and QCA, were investigated.
A focus group methodology was selected as a method for several reasons. First, focus groups allow for the collection of rich, detailed information, and are suitable for dealing with complex issues such as those presented by the stretch and challenge initiative. Teachers have a detailed understanding of the effects of changes to assessments and curriculum and they are more likely to share that detailed understanding amongst colleagues than in one-to-one interviews with researchers. Accordingly, teachers may simplify their responses when talking to a researcher in comparison to when talking to another teacher and hence it was hoped that discussion with other teachers would increase the openness, depth and detail of responses.

Second, discussion between teachers was more likely to direct the debate towards teaching issues, whereas discussion with a researcher, particularly a representative of an awarding body, might have encouraged discussion towards individual awarding body performance or more political issues regarding assessment generally. Again, it was considered that discussion between teachers would help maintain the research focus in the discussion. Similarly, rather than holding focus groups with teachers from one subject area, it was considered preferable to have participants from a range of subject areas in order to encourage comparisons and discussion of the different effects of stretch and challenge for different subjects.

3.1 Participants

Opportunity sampling on the basis of geographical location was used to initially select potential participants, resulting in eight schools and colleges being invited to participate in the research. A recruitment letter was sent to the Head Teacher (Appendix A), which outlined the purpose of the research, and the methodology, as well as offering incentives of teacher release vouchers for the centre and book tokens for the participating teachers. The four centres who responded positively composed the final sample.

The following provides information regarding the four centres and 27 participants involved in the study. Approximately half of the participants were female and there was a mix of age groups. Eight of these participants were teaching in independent centres, and 19 were teaching in comprehensive sixth form colleges. All information regarding centres was gathered from the centres' websites and inspection reports by Ofsted or the Independent School Council. Large centres were included in the research, all of which had very high pass rates at A-level (of at least 95% and sometimes 100%).

3.1.1 Hampshire sixth form college focus group

The participants for this focus group came from a comprehensive sixth form college located in Hampshire. The area had low unemployment, with a high proportion of the population in managerial/professional occupations. A high proportion of students went on to Higher Education. Students often came from one of the college's partner comprehensive schools, although part-time courses for adults were also offered to a large number of students. The most recent Ofsted report rated the college as good or better on all aspects. The focus group consisted of eleven teachers from a variety of subject areas: accounting, design technology, physical education, chemistry, mathematics, biology, ICT, geography, and business studies. One teacher had a senior management position, and was responsible for the curriculum matters.
3.1.2 Manchester sixth form college focus group

The participants for this focus group came from a sixth form college in Greater Manchester. Many of the students at this college came from areas with a low socioeconomic status and most of the college’s partner schools had low achievement rates at GCSE. The majority of students at the college were studying for A-levels qualifications, with a high proportion of students at the college progressing to higher education. The most recent Ofsted report rated the school as outstanding on all aspects. The focus group consisted of eight teachers from several subject areas: physics, chemistry, biology and applied science, PE, computing, IT and geography.

3.1.3 Manchester independent school focus group

The participants for this focus group came from an independent school in Greater Manchester. The centre selected students based on an entrance examination. Most students had attended independent schools previously, with the majority of pupils belonging to families whose parents had professional occupations. The majority of students at the school progressed to higher education. The focus group consisted of five teachers, of the following subjects: geography, physics, design and technology, chemistry and biology.

3.1.4 Bristol independent school focus group

This school was an independent, selective school in Bristol. Students at the school traditionally came from a wide range of backgrounds in terms of socioeconomic status. The most recent inspection report considered that it provided a good education with high academic standards. This focus group had to be re-scheduled due to school closures caused by snow. Three teachers participated in the focus group and the subjects taught by these teachers were physics, physical education, computing, ICT and mathematics.

3.2 Procedure

The recruitment letter was followed up by a telephone call to seek agreement to participation and arrange an appointment. It was requested that, where possible, teachers representing the subjects identified by QCA be included in the focus groups (art and design, design and technology, electronics, physics, chemistry, biology, ICT, geography and physical education). All participating teachers taught A-level or were responsible for A-levels to some extent. The focus groups took place between January and March 2009, at a time when the first AS module examinations for the new A-levels were being administered. At this point, it was considered that examinations would be salient in teachers’ minds. Further, teachers would be preparing students for the old-style A2 examinations which would be set for the last time in summer 2009. It was hoped that teachers would therefore also be likely to engage well with issues about how they might adapt their teaching to the new style of examinations.

Before the focus groups began, participants were informed of the purpose and aims of the study. Participants were also asked to complete a consent form (see Appendix B), which stated that they were happy for data to be collected, analysed and distributed in the manner specified. They also gave their consent for the focus groups to be audio-recorded and transcribed. Participants were made aware of the ethical protocol: all data would be made anonymous, that they would not be identifiable in any resultant reports, and that they could withdraw their data at any time, for any reason. After the study, participants were also provided with contact details for the project research team and were informed about the complaints procedure.
The discussions lasted between thirty minutes and an hour. Two researchers attended each focus group, with one taking the role of facilitator and the other acting as an observer. In total, four researchers were involved in the focus groups, with one researcher facilitating three of the focus groups and observing the fourth. While the observer took field notes, the facilitator’s role was to guide the discussion, requesting elaboration or directing the conversation as necessary (Krueger and Casey, 2000). A focus group schedule was used which prompted the facilitator to introduce the stretch and challenge policy, establish the subjects taught by the participants and give time for scrutiny of the specimen question papers. Next, the discussion was guided around the topics of teachers’ views on whether more stretch was needed in A-levels, identification of differences in the specimen question papers, reflections on how this would impact upon their teaching practices and finally what support teachers would like (Appendix C). Specimen question papers from AQA, Edexcel and OCR supplied as stimulus materials. The subjects used were art and design, biology, chemistry, design and technology, drama and theatre studies, electronics, geography, ICT, physical education, physics and psychology, with teachers looking at the question papers which were the closest to their subject area. The original intention was to use stimulus material flexibly and for teachers to be provided with question papers when the need arose in the discussion, rather than at a specific point stated in the schedule. However in the first focus group, it was found that teachers often found it very difficult to answer questions without having seen the question papers. Accordingly, in subsequent focus groups participants were provided with the question papers prior to the main discussion.

The audio recordings from the focus groups were transcribed verbatim by a transcription company. Participants were asked to state their names and subject areas on the recording to facilitate the identification of individual speakers’ contributions and to distinguish viewpoints from different subject areas. However, it did not always prove possible to identify the voices in the recordings, so information about individual speakers is not always provided in the Findings section.

3.3 Analysis

The qualitative data were transcribed verbatim and analysed using dominant theme analysis; one of the more straightforward qualitative analysis techniques for applied social research (Maxwell, 2005). This involved several readings of the transcripts, while searching for and checking the validity of dominant themes. On later readings the participants’ comments were coded using NVivo software. Some codes were produced from the memos provided by the focus group facilitators and others were generated in response to the data. Coding was conducted by one of the facilitators and then a validation process was undertaken by circulating the findings to all of the facilitators for comment. The dominance of a theme was defined by its extensiveness – the degree to which similar comments were made by several people – and the strength of feeling for a particular topic. Extensiveness was partly defined by the frequency of occurrence of a code (Figure 1). Participants’ comments are used below to illustrate each theme.

4 Findings

An over-arching theme arising from the discussions was that of breadth, versus depth of study and three main sub-themes associated with the question areas on the focus group schedule were apparent in the coding. The sub-themes were broken down further into 11 codes. In total, 149 excerpts of the dialogue were coded. Frequencies for each theme and code are shown in Figure 1 and each of the three main sub-themes is considered in turn below.
Figure 1 Codes (and frequencies)

4.1 Demands of A-levels

The message from most of the teachers was that A-levels were already stretching and that the changed examinations might be too daunting for students. Currently, they reported, students were very hard-working and anxious about their examinations, to the extent that some, otherwise able, students could not cope with current pressures. In contradiction to these comments, many teachers said that getting a grade A was readily within the reach of a bright student who worked hard. However, many teachers also said that the stretch was in terms of volume of study, rather than depth or higher order thinking skills. As such, the stretch and challenge policy was consistent with many of the comments made. The following exchange between teachers was typical of teachers’ views generally and indicated that there were subject-specific differences.

“I think sometimes at the moment they’re stretched by volume rather than thinking skill.”
Female teacher

“I’ll agree with that.”
Male teacher

“I think maybe in maths there’s a bit of both.”
Second male teacher

In mathematics and physical education, at least some of the teachers said that students were already challenged. For physical education, the challenge came from the diversity of skills that students had to display across a range of areas, such as anatomy, psychology and history.

Many of the teachers’ comments were in keeping with the need for the stretch and challenge policy. The opportunity to re-sit examinations was one of the ways in which the Curriculum 2000 examinations allowed students (and teachers) to maximise grades. However, across many subjects, teachers spoke about students not being rewarded for displaying skills that went beyond those expected, as the following quotations from different centres demonstrated.

“I don’t … I think the scope is there for them to stretch and challenge themselves but they’re not going to get rewarded for it necessarily.”
Design and technology teacher
“I think in my subject area I’d go a step further than that and I think that A-level actively discriminates against the most able students. I don’t think the most able students are necessarily the people who get the highest grades. I think there’s too much recall, there’s too much information which is, you know, we have significant amounts where they need to be able to regurgitate definition … which are fairly insignificant really.”

Chemistry teacher

“But I have found that sometimes with the IT that those who actually do put the effort in and put in you know, in the higher mark questions, are putting in the extra technology type answers, the up to date stuff, and because they are not always in the marker scheme if you get a weaker marker then they’re not going to acknowledge that there’s things that are there. So you are almost telling your students to dumb down in order to get the mark, or I tell them to do both.”

ICT teacher

Relatedly, some teachers stated that the examinations did not discriminate well at the top end of the performance range, as the following quotations indicated.

“They certainly don’t differentiate at the top end. There are people getting As who are absolutely fantastic and there are people who are getting As who are pretty good, and they all come out with the same grade, so in terms of stretching people beyond … at the very top end, no I don’t think they do.”

“I think that some people who are coming out with straight As worked very hard for those and I think sometimes when the press are going on about how easy it is to get an A in this day and age it’s a bit unfair on how much work they’ve done but I think you can be not as good and still come out with straight As.”

“I wouldn’t say that they were too easy. But I’m not sure they distinguish very well at the top level, or as I said, I think sometimes the marking is not really looking for something clever, its being a bit arbitrary.”

ICT teacher

Some teachers protested that Independent Schools were the source of complaints that A-levels were too easy and raised issues of class, as well as the need to teach to a wide ability range. However, others said that they believed that the stretch and challenge policy would benefit all ability groups at A-level. As outlined in the introduction of this report, the stretch and challenge policy was not designed to make A-levels harder, but to challenge students more. Teachers told us that the Curriculum 2000 A-levels did not always make the right kinds of demands upon students and did not reward the best students fairly.

4.2 Pedagogy

Teaching-to-the-test was described in detail by many of the teachers, with marking schemes and stem words being explained to students. Examination preparation was seen as an important part of teachers’ responsibilities. During this transition period, teachers were clear that they needed to know what examiners would be looking for in the new marking schemes, to ensure that they were in a position to prepare students appropriately. Repeatedly, teachers commented that the place for stretching students was in pedagogy, not in the examination, as the following quotation typified.
“It's about, ultimately, tuning it up, delivering stretch and challenge in the classroom, not in the examination. I think it's too late then.”  

Physics teacher

This was consistent with comments from students (Baird et al., 2009), but there must be questions over whether students’ and teachers’ approaches would change without use of assessment as a leverage device, given their highly strategic approaches to the examinations.

During the focus groups, teachers scrutinised the new-style specimen examination papers and discussed the changes and how they would affect their teaching. It was already apparent that teachers were considering how to build in synoptic approaches to all of their A2 teaching by, for example, holding lunchtime workshops and giving more ‘stretching’ coursework. The following quotation from a science teacher indicated concern about the possibility of competing ‘challenges’ across subjects.

“… try a challenging lunchtime workshop and they are not going to eat until 4 o’clock at this rate you know. And I’ve noticed that I’m clashing and they say ‘Oh, I can’t do that because I’ve got a Law workshop’ or ‘I’ve got a science workshop’.”  

Science teacher

Teachers also mentioned the introduction of the extended project, which they considered was a good way of stretching and challenging A-level students.

4.2.1 Teacher support requests

Whilst there was a recognition that some support had been provided by awarding bodies, teachers were not always aware of everything that was on offer. Further, there was a general view that fewer free teacher support meetings had been provided than in past rounds of examination reform. Additionally, some comments related to the general costs of preparing for the new A-levels. Textbooks and teacher materials, subscriptions to publisher’s electronic support facilities and so on were seen as expensive and teachers claimed that they did not have budget increases to support this. Issues of variability in quality were also raised in relation to teacher support events and textbooks. A backlog of past papers had abounded for the Curriculum 2000 examinations and teachers felt acutely the need for more examples of the new-style examinations, with detail on the marking schemes and application of those marking schemes to example student work (Box 3).

Box 3 Teachers’ support requests

- More examples of marked ‘student’s’ work with examiner commentary
- More specimen papers with mark schemes
- Inset courses and courses with opportunities to meet staff at other institutions
- Somebody to speak to – a subject link person

4.3 A-level assessment design

Often teachers spoke of the difference between AS and A2 examinations in Curriculum 2000, distinguishing the A2 examinations as being more challenging and less related to the learning of facts. One teacher mentioned that she had been looking at a student forum over the preceding weekend, and many comments had been posted regarding the difficulty of transition from AS to A2 study. Curriculum 2000 examinations were not uniform within a syllabus or a subject, so we need to be
careful of drawing generalisations about aspects of their design. Moreover, changes to the design of the examinations could have been borne of the stretch and challenge initiative, or a concurrent policy drive, such as changes in the number of modules or the increased use of electronic marking (which affects the structure of questions). Very specific comments were made in relation to changes in design of the question papers, few of which were generalisable. Nevertheless, many teachers saw changes to some question papers involving the use of more extended answer questions, requirements to make links across the course material in new ways and the use of context. However, some teachers said that in the question papers that they scrutinised there were many factual recall questions and short-answer questions which would counter the stretch and challenge policy.

5 Discussion

Teachers’ views about the A-level examinations were in keeping with the thrust behind the stretch and challenge initiative. Although teachers did not generally see the *Curriculum 2000* examinations as too easy, many welcomed the introduction of discrimination in the form of an A* grade and the notion that more stretching elements would be introduced. However, teachers believed that the *Curriculum 2000* A-levels had already placed a lot of demands upon students – the question was whether these were entirely the right kinds of demands. Our education system encourages students to keep their eyes on the prize, rather than study for self-development and love of the subject, as the following quotations from teachers indicated.

“And they are learning, whether we like it or not, that education's about taking exams when in fact it's not.”

“I think students … take on trust that their teachers know what's best and they will work accordingly. I really do believe that. You know – they're professional learners, aren't they?”

Teachers were hungry to know what examiners wanted, so that they could wash it back and the potential for both positive and negative consequences of backwash were evident. Whilst performative and even formulaic approaches to teaching and learning were reported, teachers were clearly highly motivated by the examinations. However, teachers reported that examinations loomed over students’ learning experiences, causing stress and restricting their enjoyment and pursuit of subject matter, in some cases even their performances in the examinations. Openness and professionalism was demonstrated in the manner in which teachers readily embraced the ideas behind the stretch and policy initiative – the policy was pushing at an open door, as teachers were aware that the *Curriculum 2000* A-level examinations were limited in terms of the nature of the knowledge and skills that they rewarded.

Changes to the style of the examinations were perceived by the teachers in this study and some considered that these changes would produce the kind of stretch and challenge that was intended by the policy. Awarding bodies had only three months in which to produce the specifications, specimen papers and marking schemes (Baird and Lee-Kelley, 2009), so it would not have been surprising if the mechanisms by which stretch and challenge would be introduced had not been well considered or implemented. One teacher, who was also a senior examiner, commented that design of the question papers had moved on since the specimen papers were written, which is to be expected given the timescales under which the new A-levels were developed. Monitoring whether the changes have the
intended consequences will be important. Although the signs from this research on teachers’ views of
the rapidly-compiled specimen papers were generally encouraging, it must be borne in mind that the
research was based upon conversations between a small sample of teachers lasting an hour.
Implementation of the policy in teaching and learning was not observed directly.

Curriculum 2000 A-levels brought many advantages to the education system: they allowed students
to monitor their progress through their courses which in turn helped them to select which subjects to
focus upon in the A2 year, they motivated students to apply themselves throughout the two years of
A-level study and there was relative clarity regarding the kinds of knowledge and skills that were
rewarded. Yet, in setting out the hoops that students have to jump through so clearly and regularly,
obstacles were inadvertently created to providing the scope for learning more broadly and in greater
depth. One school who participated in this research did not allow students to sit AS examinations in
January of their first year of study, thereby allowing students more time to develop their knowledge
and skills. Perhaps the objectives of the stretch and challenge initiative would be better met by
considerations not only of the design of the question papers, but of the structural arrangements for the
examinations. Fewer modules constitute the new A-levels: typically now four modules compared with
the previous six. These changes to the number of modules might go some way towards fostering
breadth of study, as students are likely to have to learn about bigger chunks of the specification for
each module examination than would have previously been the case.

Viewed optimistically, the changes that have been made as part of the stretch and challenge initiative
will have the intended backwash effects and A-level students’ learning experiences will be enriched.
Certainly, these findings indicated that change was needed in the nature of learning encouraged by
Curriculum 2000 A-levels. Surely, though, it would be worth considering the alternate possibility from
the outset – that more needs to be done to encourage deeper study. It is hoped that this research will
stimulate debate about what else could be done to improve students’ A-level learning experiences.
Broad debate would be needed, as it would be structurally impossible for any single senior examiner
and even for an awarding body to change the assessments single-handedly. Increasingly, our
assessment systems have been centrally controlled (Tattersall, 2007) and fundamental changes
would have to be negotiated, at very least with QCDA, Ofqual and DCSF.

6 Acknowledgements

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Curriculum Authority, as part of their evaluation of the introduction of the stretch and challenge policy
for A-level examinations. Students’ views on the new A-level questions were investigated in a
separate study (Baird et al, 2009).

7 Disclaimer

The views expressed in this report are those of the authors and are not necessarily endorsed by the
Assessment and Qualifications Alliance, the University of Bristol or the Qualifications and Curriculum
Authority.
8 References


Appendix A  Centre recruitment letter

Stag Hill House
Guildford
Surrey  GU2 7XJ
Tel: 01483 606 506
Fax: 01483 300 152
www.aqa.org.uk
Direct Line: 01483 556 308
E-mail: xtremain@aqa.org.uk
adaly@aqa.org.uk

3 December 2008

Dear ,

In response to the criticism that A levels are not challenging enough, the Department for Education and Skills have proposed a number of changes to the A level syllabi, including the introduction of new, more difficult questions on A2 papers. These questions aim to stretch the very able students while maintaining accessibility for lower ability candidates. The questions will be made challenging in a number of ways, such as requiring candidates to produce a piece of extended writing, make connections between different areas of content, or respond to a case study or other stimulus material.

These changes are being introduced for teaching from September 2008, and AQA and the University of Bristol are currently running an evaluation of this scheme on behalf of QCA. As part of this evaluation, we are holding several focus groups in order to obtain teachers’ views on the effects of the introduction of this new stretch and challenge policy. The findings from these focus groups will be used in the development of appropriate teacher training and support materials for the new syllabi.

We are writing to ask if you would be willing to participate in an after-school focus group, with the offer of three AQA teacher-release vouchers for each participating centre, as well as book tokens for the individuals taking part. This is an opportunity for your teachers to voice their views and concerns regarding the new syllabi and we would greatly appreciate your input. Ideally, we would like one teacher from each of the following subjects: D&T, Electronics, Physics, Chemistry, Biology, ICT, Geography and PE. We will be using video and audio equipment to record the focus groups, however, we would like to assure you that information will be rendered anonymous as soon as possible after collection. Furthermore, any data collected during this project will not be made available in an attributable form to any third party outside the AQA Research and Policy Analysis Department, nor will any information be used for any other purpose than that outlined above.

We will ring you in the week beginning 15th December to confirm whether or not you would like to take part in the study. If you have any questions about this project, please contact myself or Katherine Tremain.

Yours sincerely,

Dr. Anthony Daly
Senior Research Associate
Appendix B  Consent form

A-level Stretch and Challenge
Research Project

CONSENT FORM

I (name) ………………………………………………………………………………………………………………………………

agree to take part in the above research project. I give my permission for any data I supply to be audio-recorded and transcribed for data analysis purposes. I understand all data collected will be anonymised and any resultant reports will not identify specific individuals. I also understand I may withdraw from the research at any time without giving a reason for doing so.

Signed (participant)……………………………………… Date…………………………

Signed (researcher)…………………………………….. Date…………………………
Appendix C  Focus group schedule

Introductions (3 minutes)
- Introductions – who we are, ask participants to fill out name places. These should be placed on the table or on the floor by the participant’s chair.
- Outline purpose of research; explain that research commissioned by QCA, who will use the findings to develop recommendations for teacher support materials for the new GCE specifications.
- Outline their rights as participants; data will remain confidential, participants will be made anonymous, right to withdraw data at any point.
- Ask them to fill out consent forms. Provide contact details of researchers.
- Outline some guidelines for the focus group:
  - all views are of interest; do not wait to be invited to speak
  - try not to talk over each other (for the recording)
  - group discussion – researcher is mainly an observer
  - no right or wrong views
  - discuss practicalities (hour long session)

Stimulus material (5 minutes)
- Use poster to explain Stretch and Challenge initiative:
  - aims of stretch and challenge
  - new approach to questioning; e.g. encouraging extended writing
  - implementation; different for different subjects, first teaching September 2008

Group discussion (60 minutes)
- Switch on tape recorders. Ask participants to state their name and subject department (to help distinguish between voices in the transcription).
- **Stimulus question**: Do you think that second year A level students need to be stretched more?
  - **Prompt**: Are A levels currently too easy?
- Hand out specimen question papers.
- **Stimulus question**: What do you think students will have to do differently?
- **Stimulus question**: What do you think you will have to do differently to help them
- **Stimulus question**: What (if any) support from awarding bodies would be helpful?

Probing techniques
- Ask in general if others in the group share the same opinion.
- Repeat some, or all, of the question.
- Ask for group’s thoughts/more details on a particular point that has been made.
- Use expectant silences to allow the group time to reflect further on the issue.
- Highlight differences in views and encourage the group to explore and explain them.

Closing (2 minutes)
- Ask if participants have any further comments.
- Thank participants for taking part.
- Switch off tape recorders.