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

Second interim report

Appendices

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1 First Interim Report: executive summary (July 2010)

1.1 Introduction to the first interim evaluation report

This report is the first of three reports to the Qualifications and Curriculum Agency (QCA) recording the impact of changes to GCSEs and A levels in England as part of the wider 11–19 education reforms. The full report, offers a baseline of statistical data for the overall impact study and reports on early indications of impact and issues based on the understanding, perceptions and attitudes of centre-based stakeholders, and of wider stakeholder groups, arising before the publication of results from the summer 2010 examinations. Final reporting will be in December 2011 after a full cycle of both qualifications.

The data for the first interim report has been collected at the end of a full-cycle of AS/A2, and two cycles of AS, before the summer 2010 examinations; data for GCSE has been collected towards the end of the first year of a two-year course. Current perspectives and perceptions of the impact of the changes by stakeholders, therefore, are based upon an emerging picture, and it is important to recognise that these may change in the light of increased understanding of the changes.

Nevertheless, the findings are significant in that they offer evidence-based insights into the initial and short-term impact of the changes to the A level and GCSE specifications on centres, students, awarding organisations and wider stakeholder groups. Studies such as this also provide researchers, educators and policy makers with evidence that charts the impact of implementing curriculum change over time and can help to inform future decisions. In this sense, the evaluation is both formative and summative.

1.2 Background to the changes and the evaluation

Changes to GCSEs and A levels are part of a wider programme of reforms across age 11–19 education, and in particular the age 14–19 phase. The overarching aims of the 14–19 reforms are that learners will achieve as highly as possible, want to progress further in education or training, enjoy learning and be confident and responsible citizens.¹ To achieve this, changes to A levels included the introduction of greater stretch and challenge, and a new A* grade. There were also changes intended to reduce the assessment burden: the reduction from six to four units at A level and, for GCSEs, unitisation, terminal assessment, the removal of coursework and the introduction of controlled assessment.

¹ Centre Research Study (2009) 14-19 reforms: QCA Centre Research Study, commentary on the baseline of evidence 2007-2008.

A level changes in all subjects, except mathematics, were introduced for first teaching from September 2008, and GCSE changes in all subjects except English, mathematics, ICT (Information, Communication and Technology) and the sciences were introduced for first teaching from September 2009. Changes to the qualifications were introduced just one year apart, so it is important to understand both their combined as well as their individual impact.

As changes to A levels and GCSEs are part of the wider reforms, the impact needs to be understood within this wider context, while specific changes to the qualification are also considered. There will be an impact on what, how and when young people are learning and where they progress to, the way this is managed in centres, and the impact of wider perceptions of other stakeholder groups in relation to issues such as perceived value of the qualifications.

The evaluation therefore focuses on two main themes:

- **Theme 1** – The impact of the changes to GCSEs and A levels as part of the wider 11–19 reforms
- **Theme 2** – The impact of changes to GCSE and A level specifications and assessments.

Within each of these themes the following sub-themes are looked at: participation, attainment, progression, teaching and learning, learner experience, management of assessment, management of change (centre behaviours and workloads) and stakeholder attitudes and perceptions.

The evaluation focuses on six subjects for each of GCSE and A level, which offer a sample of subjects across a range of curriculum areas: humanities, modern foreign languages, science, and more recent vocationally linked subject areas – media studies and health and social care.

Table 1: Qualifications and subjects covered in the evaluation

GCSE	A level
French	French
Spanish	Geography
Geography	Psychology
History	Physics
Media studies	Media studies
Health and social care	English literature

1.3 Data sources²

The interim report uses the following data sources:

- Awarding Body Data Archive (ABDA) (Awarding Organisation (AO) data supplied by QCDA)
- Official Statistics - Statistical First Releases (SFR) (from the DCSF Research Gateway)
- Joint Council for Qualifications (JCQ) ³
- National Pupil Database (NPD) (including Census, Pupil Level Annual School Census (PLASC) and exam results)
- Centre Research Study (CReSt) data (provided by QCDA from the CReSt project)
- literature Review
 - QCDA's Research Evidence Management System (REMS) database coded in NVivo
 - Enactment and impact of education science reform (EISER) report
 - CReSt reports
- case study data summary and raw data from 15 case study centres⁴
- wider stakeholder data summary
- AO and Ofqual document review.

² Out of scope for the first interim report: the list of qualifications and subjects covered within this report currently covers full GCSEs only and does not include short courses. Further Education (FE) colleges are currently included in this work as wider stakeholders – quantitative data sets and case studies do not include FE provision.

³ Please note that JCQ and the SFR data are in addition to the data sets identified by QCDA for this work. These have been included to fill identified gaps in the other datasets and allow a more complete statistical baseline to be developed to address the research questions.

⁴ For clarity when referring to the centres the following convention has been used to describe how many expressed a particular idea, thought or concern in relation to specific subject areas. For example, if the report states a 'minority' of French teachers this refers to teachers from between one and three centres. However, it should be noted that the semi-structured approach of the research instruments for the initial visits means that not all teachers or subject leads across the centres will have chosen to focus on the same issues – therefore it should not be assumed that references to a 'minority' implies others held different views unless this is specifically stated.

A level

Subject	No. of centres visited	'minority'	'half of centres'	'majority'
French	8	1-3	4	5-8
Geography	10	1-4	5	6-10
Psychology	7	1-2	3-4	5-7
Physics	6	1-2	3	4-6
Media Studies	5	1-2	3	4-5
English literature	8	1-3	4	5-8

GCSE

Subject	No. of centres	'minority'	'half of centres'	'majority'
French	8	1-3	4	5-8
Spanish	7	1-2	3-4	5-7
Geography	10	1-4	5	6-10
History	8	1-3	4	5-8
Media Studies	1	n/a	n/a	n/a
Health & Social Care	2	n/a	1	2

Two other data collection activities had been planned but did not go ahead due to continuing restrictions on this work since the general election in May 2010. These were:

- An online centre survey to measure centre perceptions of the changes to A level and GCSE specifications before results of the summer 2010 examinations.
- Observation of AO standardisation and awarding meetings to understand wider findings within the context of the standardisation and awarding processes and the maintaining of grading standards, given that the specifications and assessment had been changed substantially.

1.4 Methodology for measuring impact

Measuring impact in education can never be straightforward as it is subject to a number of factors – including changes in policy, wider curriculum change and changes in perspective on how a subject should be taught – as well as overlapping and interacting with wider social and economic change. A ‘theory of change’ approach to evaluation identifies theoretically how the intended impact of changes and the potential influence of different variables. The role of the evaluation is to measure to what extent the expected change does or does not happen and, most importantly, to understand why.

Figure 1 outlines the potential impact of changes to the A level and GCSE specifications and the many variables that may influence the change process.

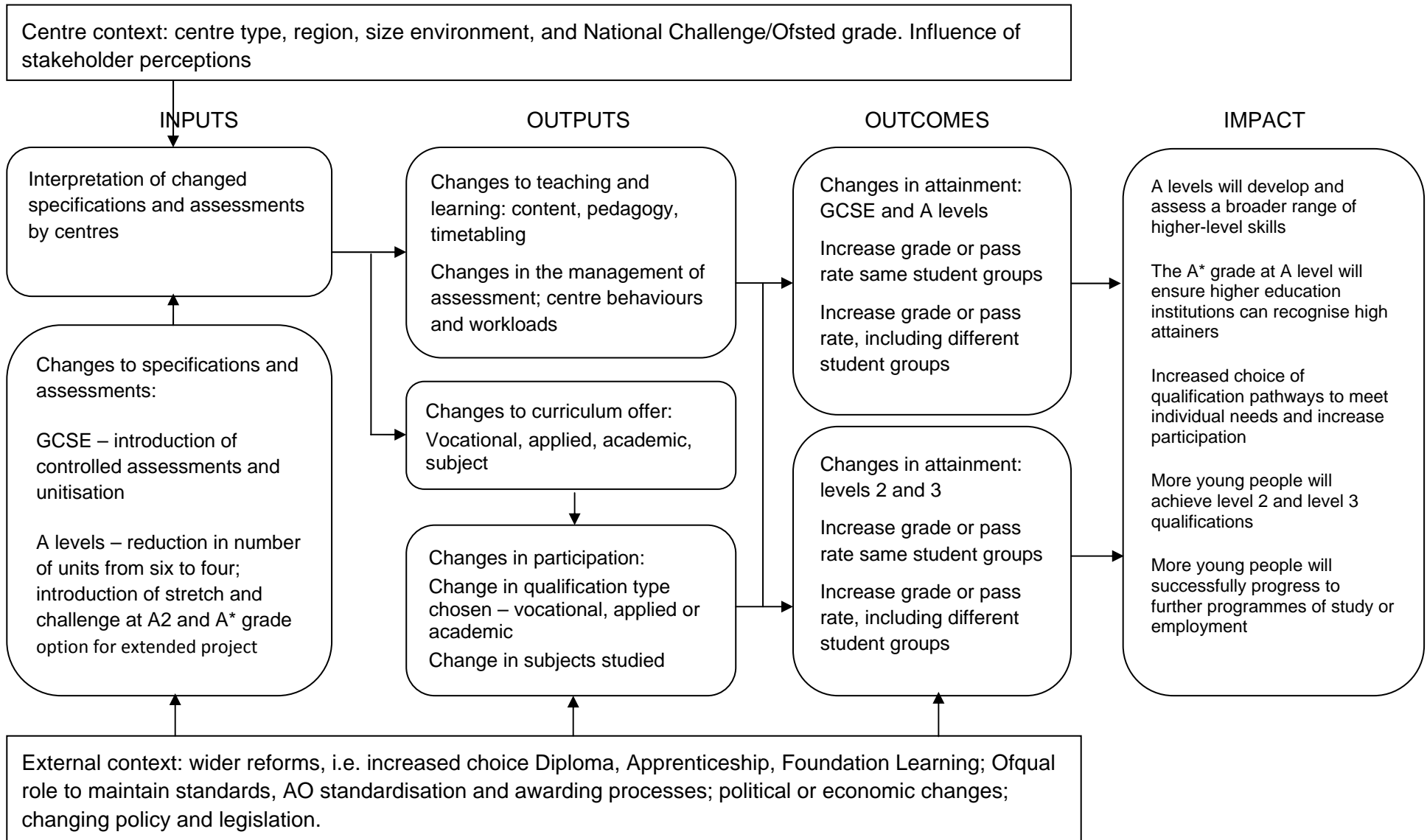


Figure 1: Theory of change v1: intended impact of changes to GCSEs and A levels based on the literature review.

The evaluation therefore looks at changes in participation, attainment and progression. It has developed a statistical baseline before the changes to A levels and GCSEs, which will allow the identification of changes in patterns of participation, attainment and progression as data for the new qualifications becomes available. The baseline has been developed from the national datasets described above and AO data and is a rich source for future analysis.

Awarding organisation and Ofqual documentation has been reviewed by subject experts. The review of the AO documentation follows the logical development process of the revised qualifications:

- The original qualification criteria and the resulting AO specification(s).
- The revised subject criteria for each qualification and the responding AO specification(s).
- The sample assessment materials, along with relevant mark schemes.
- Any other qualification-specific AO guidance material aimed at teachers and learners.

Identifying the changes that have been made to individual specifications, the impact these may have for particular student groups and the possible outcomes of these, is needed in order to fully understand the impact of this variable.

A literature review has been used to define the wider context (the wider reforms and related projects) for this report. The review considered in particular:

- The perceived or actual need to change GCSEs and A levels, which influenced the particular changes made.
- The changes that have taken place and why these particular changes were chosen
- What is known already about the impact of the changes.

It therefore summarises the context for the evaluation work within the wider reforms, including:

- Synthesising and referencing key documents from the range of other research and evaluation projects relating to the reforms and how they relate to our work
- The expected outcomes and impact of other aspects of the reforms.
- The existing body of knowledge specific to GCSEs and A levels.

Findings from the CReSt baseline data have been included where relevant and have influenced recommendations for future research.

To gain greater insight into how the changes to the specifications affect centres, 15 case study centres have been identified and the first of two visits has been undertaken. This longitudinal study will identify change over time and offer an understanding of the short-term and long-term impact of the new specifications and how this impact interacts with changes from the wider reforms. This study is also a unique opportunity to understand the impact of substantial curriculum change generally, one that has not been undertaken since Curriculum 2000. Data has been collected from student, parent and teacher focus groups and interviews with senior leadership teams, subject leads and examinations officers from May to July 2010.

Early attitudes and perceptions of wider stakeholder groups were recorded from eight interviews, which included subject and professional associations, workforce development agencies, trade unions and further education representative organisations. Interviews will continue throughout the evaluation and will include employers and HEIs as the study progresses.

1.5 Evaluation findings

1.5.1 Stakeholder perspectives on the changes

The case study centres, together with the wider stakeholder groups interviewed, offer perspectives on how the changes to the specifications might be presenting themselves nationally, in terms of observed or expected impact on participation, attainment, progression, teaching and learning, management of assessment and centre behaviours.

1.5.2 Interpreting the changes to specifications

The changes to the specifications at A level can be categorised into four components:

- Amount and level of content
- Range and order of skills
- Nature of assessment, i.e. the types of question or task
- Approaches to marking and grading.

The subject expert review of the A level specifications reported a considerable variation of issues across the various subjects. The changes appear to have resulted in a consistent application of stretch and challenge at A2, which has facilitated progression from AS to A2. Subjects with significant changes in knowledge and skills (such as media and geography) have taken the opportunity to update the content coverage, and thereby to increase their relevance and appeal to learners.

Generally, the changes appear to uphold or to increase the academic rigour that underpins the A level. This, coupled with the extra indication of achievement that the A* will bring, suggests that the qualification should continue to be effective both for entry to employment and for progression to HE.

With GCSEs, although there has been some updating of content, changes are mainly reported in terms of changes to assessment and how this is managed. Controlled assessment and unitisation appear in the case study centres to be having an impact on the skills required by students. Such changes relate to the sequential nature of learning and the logistics of managing the controlled assessments and marking. The AOs have taken the opportunity to update their content to ensure that their qualifications remain up to date and engaging for a primarily teenage audience. In general, the content coverage is a little less prescriptive than previously, although this is balanced to an extent by a greater degree of prescription in the controlled assessment tasks.

There are other changes in qualifications at GCSE that may have a large impact on particular learners, such as the move in media studies from a two-tier to a single-tier paper structure. This

means that there are subject-by-subject variations that will be of interest, and variations between the AOs that will be investigated further during the case study and ongoing data reviews.

What is clear from the review of the GCSE material is that AOs operate within a commercially aware and competitive environment: material is generally clear and well supported, often with information on how to 'switch' from your existing AO. There is a large amount of support and guidance for GCSE centres, with an equally large amount of material offered for purchase, often via publishers in direct participation with AOs. As Ofqual seeks to provide criteria that are more open in relation to content, allowing learners to explore a subject following their own interests, there is a possibility that the 'uncertainty' that this presents will become an opportunity for AOs to exercise an increased degree of control over the curriculum content.

Case study centres reported changing AO for particular subjects, so changes reported may also reflect different AO approaches rather than just reflecting the change in the specifications.

1.5.3 Participation

The aim of the reforms collectively is to encourage a greater number of young people to continue in learning and achieve more by the age of 19. The goal currently is, by 2020, for 90% of young people to achieve level 2 (5 A*–C GCSEs equivalent) and 70% to achieve level 3 qualifications by the age of 19.⁵

Within the case study centres there has been fluctuation in participation in particular qualifications and/or subjects, both in terms of numbers and student profile, although it is difficult to tell whether this is directly linked to changes in specification or to other reasons – for example, a specific teacher inspiring changes to teaching and learning within a department or a subject being positively promoted. At A level the overall offer of subjects is sometimes narrower and more specialised, closing down options for students who are unwilling or unable to travel to access other subjects.

Opportunities for participation to AS level are often driven by factors such as selection criteria e.g. GCSE grades required for progression. A minority of case study centres reported increasing their minimum entrance grades in psychology and English literature, where students with less than a B grade at GCSE traditionally struggle with the transition from GCSE to AS. It is early days to report confidently on the extent to which the new GCSEs at C grade or below are likely to prepare students better for AS level study.

The AS subject choices learners make have not really changed. However, fewer students now continue with all their chosen subjects to A2 level. Students increasingly 'play safe' and drop subjects in which they have not achieved the desired grade in the AS examination. Increasingly, students tend to be opting for whatever subjects they perceive as 'easy' based on their earlier

⁵ DCSF 14–19 Reforms Policy Objectives and Strategy.

experience of learning a subject. This previous experience of learning a specific subject – and especially the negative or positive impact of teachers, is seen as an important factor in learners' choice. Feedback on the new specification courses (positive or negative) from students who have been through the course recently also affects students' choices. The same is true for GCSE, but other factors such as the way in which 'option' choices are offered in a particular centre usually means certain subject combinations are not possible.⁶

1.5.4 Attainment

There is a general expectation that there will be some disruption to the relatively steady pattern of attainment seen previously.⁷ All the subject expert reviewers flagged this up and it reflects the overall pattern of responses from case study centres. It also reflects the concerns of some of the wider stakeholders. Case study centres have predicted a change in attainment for both most-able and less-able students.

Across both GCSE and A-level and the six subjects used for this evaluation, there is evidence to suggest that without strongly supportive teaching strategies for less-able students, the gap between most-able and less-able may increase, especially at A2. These predictions are based on actual results at AS level and expected results for A2. Overall AS attainment levels for KS5 candidates declined slightly in 2009 (53.8% obtaining grade A-C in 2009 compared to 54.1% in 2008).⁸ For the full candidature, including older candidates, attainment levels rose slightly (58.1% obtaining A-C in 2009 compared to 57.8% in 2008).⁹ There was some variation between subjects. Controlled assessment at GCSE was expected to have an impact on less-able students who previously benefitted from the developmental aspect of coursework and opportunities for feedback.¹⁰

Assessments at A level have become less predictable, which, together with a lack of exemplar assessments, has meant that teachers have been less certain about what to expect in the A2 examinations this summer and less confident about whether they have prepared students sufficiently.

There was little evidence of case study centres being focused on students achieving an A* grade – although this may change later if universities are seen to be using it to make offer decisions next year. It was perceived that an A* was easier to achieve in more 'objective' subjects, such as mathematics.

⁶ Timetabling may impact on student choice of option subjects e.g. a timetable slot may mean that a student can study history or geography but not both.

⁷ Full details of attainment over time are contained in the main report and appendices.

⁸ Official Statistics (SFR) – full details are contained in the main report and appendices.

⁹ Joint Council for Qualifications (JCQ) data – full details are contained in the main report and appendices.

¹⁰ Additional footnote for this Second Interim Report - Further investigation for the final report will seek to determine whether this is an actual drop in attainment for year 12 candidates in 2009 or a change in AS unit/ qualification cash-in behaviour.

1.5.5 Progression

There was no consensus within subject areas across the case study centres about the impact of the changes on progression from GCSE to AS, or AS to A2, or A level to higher education (HE) study. Whilst some teachers and subject leads were clearly seeing stretch and challenge, independent learning skills and team work as an integral part of the new specifications, which would help the transition from school to higher education, other centres were interpreting the specifications very differently.

There was a fairly consistent message coming through from centres that the gap between GCSE and AS made it hard for students to cope at AS level. In the subject expert review of the specifications, overall the reviewers reported that the changes to the specifications were likely to support progression from GCSE to AS, although there were a few concerns about the lack of opportunity to develop fieldwork skills in geography. Progression should be monitored as students complete their new specification GCSE courses next year and progress to AS in September 2011.

In half the subjects, case study centres report there have been fewer students progressing from AS to A2 since the new specification came in. The decrease has been most dramatic in psychology, where the introduction of a science focus in the subject has led to only about half the student cohort carrying on. French and geography have also seen a reduction in students progressing from AS to A2. There have been no significant changes in the other three subjects in the case study centres.

1.5.6 Teaching and learning

The changes to GCSE and A level specifications suggest that there are likely to be concomitant changes made in approaches to teaching and learning. These need to address the higher-level skills associated with stretch and challenge aspects of the new A level specifications and the different generic skills often required for controlled assessments compared with coursework at GCSE.

The demands of the assessment, including particular styles of question, create greater challenges for students in terms of examination technique. This has an impact on what is taught and how it is taught: teachers in the case study centres report more time working on practice examination papers and questions. In most instances teachers who were asked during the case study visits about possible changes to teaching and learning talked about their impact in terms of preparing students for the new assessment demands. At both A level and GCSE teachers were trying to identify the assessment requirements in both subject content and skills. Where there was uncertainty about the amount of course content to teach or greater flexibility in choice of topics, teachers were reporting playing safe and depending heavily on the AO-approved textbook to guide them in deciding what needed to be covered.

Case study centres appear to have different opinions, depending on subject areas and AO specification, about the effect of the decrease in the number of units on time available for teaching and learning, how the course is structured and the impact this has on the development of higher-level skills.

Greater emphasis on independent learning is generally seen as positive and an element which is stretching and challenging students by encouraging them to work in more exploratory and autonomous ways. This is particularly felt to be the case where course content is no longer seen to be knowledge driven but skills driven. In such instances, teachers feel that a new emphasis on activities like decoding research, looking at more abstract problems, dealing with different conceptual issues and viewpoints, as opposed to learning facts and regurgitating them, have all been positive, but challenging, changes to their specifications.

However, in relation to both A levels and GCSEs there are concerns about how well prepared students were to work in a more independent way and the level of support needed to develop the necessary skills. In A level assessments teachers reported that the focus on higher-level skills does not always appear to be transposed into the assessment questions and the mark schemes do not always ask for or credit independent thought and investigation. Controlled assessment in GCSE requires different underlying generic skills, which students, especially less-able students, may struggle with.

A level centres reported that it is easier to stretch and challenge students when there are real opportunities for more independent learning, especially when these allow students to make choices and negotiate areas for their own study – something which coursework does, according to the centres. In one case study centre, however, A level French teachers were concerned that, although the mark schemes had been (incongruously) tightened up, the new topics on the specifications had made the subject less demanding, making it difficult to stretch and challenge students.

Many teachers also thought that synoptic units at A level had created opportunities to stretch and challenge students. Teachers feel that these units promote deeper, more conceptual and more holistic thinking and, in turn, prepare students better for higher education. The lack of exemplar questions from particular awarding organisations, however, has not helped centres prepare students for exactly how they should draw their knowledge together in the exam.

Teachers cited greater emphasis on independent and investigative learning, greater flexibility in choosing course content, more-engaging topic choices or areas of thematic study and greater emphasis on the application of knowledge and skills rather than just learning a body of knowledge as factors that have promoted positive changes in the way courses are taught and delivered. According to teachers, these factors have promoted the use of more student-centred approaches to classroom delivery.

A unitised approach at GCSE was thought to create more opportunity for teaching and learning in controlled chunks and, in the opinion of one case study centre, to increase student motivation: students were able to enjoy a sense of success on completing a piece of work whilst also seeing it as part of the bigger picture – ‘I think there’s something to be said for getting them working harder. If you’re a good teacher you’ve got your class sorted out and working hard and, once they’ve done it, they’ve done it, so you can move on to something else rather than ... coursework sort of drip feeding, you’re still working on it months afterwards, and it’s a nightmare.’

The new specifications seem to give students at the top end more opportunity for stretch and challenge but they also provide the opportunity for easier differentiation for the top and weaker students, as there is less breadth but greater depth. The new specifications seem to provide the opportunity to develop individual skills, such as research and thinking skills, better than the previous specifications.

1.5.7 Management of assessment

As discussed above, assessment is perceived as driving teaching and learning and has developed a culture of working towards the test (‘am I going to be tested on this?’). Students and teachers have become outcome-driven, which some see as negative and unmanageable.

However, teachers from a number of subjects at A level – namely English literature, geography and psychology – believed that changes to the assessments had led to a greater focus on the application of skills and knowledge. Teachers feel that, whilst this is a challenge to teach, this is a good thing as these skills, they say, are of a higher order and are, consequently, more ‘academic’ and better preparation for higher education. In AS and A2 physics, however, teachers feel the examinations are now less demanding, citing the example of students no longer needing to learn even key equations.

Many A level teachers expressed concern that there is not enough time in the exams for students to respond in an exploratory way. Many felt that this is not in the spirit of the new specifications, which promote a more exploratory approach, value originality of thought, and give less emphasis to the regurgitation of facts. In a similar way, some teachers felt that the narrow style and choice of questions in the examination was against the spirit of their specifications. Conversely, some teachers said that the more-open style exam questions allow for greater originality, individuality of thought and creativity.

Generally, teachers lament the loss of coursework units in some subjects at A level, which many teachers saw as a useful tool to motivate and reinvigorate students and to stretch and challenge them through differentiated work, and which both teachers and students appear to like for the way in which they promote a degree of independent study. Where there is coursework it is seen by many as a new challenge but one that comes with some benefits. Teachers often feel, for instance, that coursework adjusts the focus of their role from transmitter to facilitator and tutor. They also feel

that it allows them to provide individual scaffolding and support for weaker students, so that they may get marks 'under their belts' before the examinations, whilst challenging the more able students to extend and develop their skills fully.

Teachers sometimes reported a conflict between the ideas of 'depth' and 'breadth': examination mark schemes demand depth, whilst specifications, course coverage and the nature and time allocation of examination questions demand breadth. Added to this, the extra time teachers feel they need to give to practising examination technique makes covering a breadth of material even more challenging.

The way in which re-sits will be managed at A level and GCSE are potential areas of concern. The change from six to four units at A level means that many centres are concentrating on June assessment windows. This allows less opportunity for re-sits, and makes it more difficult for teachers to revisit course material with individuals when the rest of the class has moved on.

GCSE teachers in general seem to feel that AO regulations on controlled assessment are unclear, creating considerable scope for error – something which workforce development agencies interviewed also reported.

The majority of case study centres liked being able to choose when to hold the controlled assessment but many were concerned by the implications this flexibility had on resources. There was a widespread feeling that the AOs had not considered these issues within the departmental or wider school context.

The majority of centres, although pushing controlled assessment into the second year, were taking the opportunity for students to sit unit assessments early. There was a sense that they were giving it a trial run as there is now an opportunity for re-sits in year 11. A number of potential issues were reported by the case study centres:

- Students' readiness to take units in year 10 – there were concerns about the extent to which the students had had sufficient time to develop the skills and understand the content. This was reported in terms of both cognitive and intellectual 'maturity'.
- The logistics of managing a potentially high number of re-sits.
- The cost implications of re-sits.
- The need for a centre-wide policy to agree how re-sits will be managed and funded.

1.5.8 Management of change

Teachers thought that the introduction of controlled assessment at GCSE eases the burden for students who now have less coursework to do at home, and eases the overall exam burden by spreading assessment out for students, which generally they saw as positive.

Controlled assessment at GCSE improves the situation with coursework marking, removing the endless drafts and re-drafts and the need to chase up missing pieces. Certain subject teachers,

however, still expressed concerns over workloads: in French, for example, the workloads for teachers involved in the marking process had increased significantly.

All teachers expressed concern about the amount of change required but a number of them realised that things would become easier once systems were in place, and there was a structure for the school to operate in. The controlled assessment, and particularly the re-sits, was perceived as a huge management issue, which required a centre-wide strategy. Currently management of change is to some extent focused at subject-team level, and the changes to GCSEs are seen as one of many initiatives being implemented.

Wider stakeholders interviewed suggested that A level teaching is often isolated from wider curriculum developments and fails to take full advantage of the opportunities to build on changes further down the school. Within the case study centres there was emerging evidence from a few of the case study centres to suggest that wider curriculum decisions in schools influences the way A levels are taught: the wider introduction of BTEC qualifications in one school was felt to have a positive impact on how students across the school were being taught. The influence of specific members of staff 'rejuvenating' the curriculum lower down the school was reported in certain case study centres.

There is some evidence to suggest that case study centres have investigated, or intend to investigate, offering BTEC qualifications instead of or as an alternative to GCSEs and A levels. One case study centre reported that they had decided to opt for the BTEC for certain subjects, rather than to offer both, in order to overcome perceptions that BTECs are the poor relation. Another centre had already opted for BTEC in health and social care, as the group of students most attracted to the subject were more likely to benefit from the development offered through coursework rather than controlled assessment.

Centre behaviours will be driven in part by student needs but there was an awareness that what would be most likely to affect centre decisions would be if vocational qualifications were to suffer a loss of equivalence in school performance tables and associated funding.

1.6 Summary and conclusions

1.6.1 The impact of changes to A level and GCSE specifications

The findings here offer significant, evidence-based insights into the initial and short-term impact of the changes to the A level and GCSE specifications on centres, students, awarding organisations and wider stakeholder groups.

Centres' expectations of how their A2 students will perform in the examinations, ahead of the results coming out, for example, reflect the way in which the changes have been communicated to centres and how these changes have been interpreted at a local level. In this sense the evaluation is both formative and summative.

Perceptions of the likely impact of the changes, particularly where they concern 'stretch and challenge', also reflect the tensions that may arise in relation to maintaining curriculum and examination standards. The prime objectives of maintaining grade standards over time and across different specifications within a qualification type¹¹ necessarily become more problematic, and concerns amongst stakeholders more likely to arise, at times of curricular change.

Anxieties about the impact on students' attainment may be more acute where the grading process is only partially understood. One of the recommendations of the Tomlinson inquiry (2002)¹² was that action was needed over time to simplify the awarding arrangements. The complexity of the system, and the lack of transparency within it, was affecting perceptions about its reliability and fairness. Tomlinson argued that this might partly be rectified by more-intensive efforts to provide accessible information about the grading process and the options open to students. Nevertheless, although the actual outcomes might accurately reflect students' achievements, he was not hopeful that the system as it stood was ever likely to attract 'the levels of public and professional understanding which would prevent recurring confusion and dissatisfaction'. Certainly there was evidence in the responses received in this evaluation that the potential for misunderstanding, confusion and dissatisfaction noted by Tomlinson continued to exist.

During the four years of preparation, Ofqual and its regulatory partners have put in place a number of measures to address such concerns and to promote fairness and consistency within the examination system. These have included conducting a detailed scrutiny of the individual specifications, agreeing the principles to be followed during the awarding process, ensuring consistency of approach across the awarding organisations, and publishing a revised Code of Practice.

However, early indications of an overall drop in AS attainment has increased speculation that A level attainment will go down in terms of the level of grade that can be awarded.

All case study centres felt it was too early to understand or predict the full impact of changes to the GCSE specifications. However, for the evaluation there is much to be learned from initial centre reactions to the changes and how these are being managed.

Although many GCSE case study centres had opted to take controlled assessment in year 11 and had therefore not experienced it first hand, there were concerns that it will affect the attainment of less-able students and also students who would previously have achieved a 'C' grade – case study centres reported that they now expect to see more 'D' grades awarded.

It is possible that a change from the female-dominated success in coursework at GCSE will be seen. Coursework often benefitted girls who are conscientious and willing to revisit work to get the desired grades – and it was suggested that males may do better in controlled assessments.

¹¹ Ofqual (April 2010), *GCSE, GCE, principal learning and project code of practice*, para 6.2

¹² Mike Tomlinson (December 2002), *Inquiry into A Level Standards, Final Report*, para 22

Both from the case study centres and the wider stakeholder groups interviewed there is a perceived lack of information about and support from AOs on how controlled assessment is conducted. Most case study centres think there is likely to be widespread discrepancy in the way controlled assessment is conducted – not that there will be malpractice but that centres will use any potential loopholes or grey areas to the full to get the best results for their students.

Many case study centres saw unitisation at GCSE as a positive move which allowed students to see success in bite-size chunks, whilst maintaining the bigger picture. There were, however, concerns that students may be put into examinations in year 10 for which they were not ready. This is likely to lead to a large number of re-sits, which will affect the timetabling of other subjects, and have cost implications for centres. Most of the case study centres reported that they do not have a current re-sit policy in place for GCSE. The number of exams being taken, together with the need to manage controlled assessment, is having an immediate impact on timetabling decisions on wider curriculum activities such as field trips.

1.6.2 The impact of the changes as part of the wider 11–19 reforms

At both GCSE and A level, participation is controlled in part by the options offered by the centre. League tables and funding are major influences on strategic decisions relating to curriculum offer. Future moves away from vocational qualifications to A levels and GCSEs are more likely to be due to loss of equivalence in the league tables and associated funding rather than the preferences or needs of students. Perceptions of other qualifications by universities will also play a role. A levels are still seen as the predominant route to university study and centres are waiting to gauge the impact of the A* on higher education offers as well as perceptions of qualifications from across the reforms (e.g. Diploma).

The focus within most case study schools was predominantly on general qualifications, and this reflects the national picture. However, there was a move in at least three of the case study centres to offer more BTEC equivalents in traditionally academic subjects such as science. One head teacher expressed concerns about the rigour of assessment for BTECs, as the school rather than the AO chose the coursework sample, which led the head to wonder whether this might affect equivalence.

The focus in centres at present is mainly on managing the immediate content changes and assessment timescales and resulting additional short-term heavier workloads. It is too early to see clearly the impact on centre behaviours as a whole, and changes may be a result of further external decisions about the curriculum. The changes to A levels and GCSEs are seen as part of a continuum of change at present, and managing this is an ongoing process. Generally, the impact specific curriculum changes have on strategic thinking in centres filters up from subject teams. This involves development, reflection and evaluation. Case study centres report that the current sense of constant change allows little time for the necessary evaluation and reflective process to take

place. The uncertainty surrounding other recent initiatives (such as the Diploma) was also expected to affect future decisions made and the curriculum offer made.

2 Research questions

Revised focus and approved research questions

Overall focus: To what extent have the changes to A levels and GCSEs impacted on teaching and learning and on the management of assessment?

Theme 1: Stakeholders' perceptions of the new GCSEs and A levels

Theme 2: The impact of the changes on teaching and learning

Theme 3: The impact of the changes on centre behaviours and management of change (including assessment)

Theme 1: Stakeholders' perceptions of the new GCSEs and A levels

1.1 What are stakeholders' attitudes to, and understanding of, changes to A levels and GCSEs and perceptions of the impact of the changes in terms of

- depth and breadth of subject specific skills and knowledge developed
- generic skills development
- preparation for progression?

1.2 To what extent are there potential or actual barriers as a result of the new specifications and assessments as perceived by stakeholders in terms of:

- implementation of the qualifications at centre level
- challenges for development and design for awarding organisations
- issues relating to the status of the qualifications?

Theme 2: The impact of changes on teaching and learning

2.1 To what extent are the new specifications and assessments bringing about changes to teaching and learning, which encourage:

- the development of depth and breadth of subject specific skills and knowledge
- opportunities for higher-level generic skills development e.g. synoptic learning/ higher-level thinking skills/ level of conceptualisation etc
- increased participation and engagement with the subject
- improved preparation for progression in the subject or related subjects, or for work
- improved attainment: in terms of improved grades, stretch and challenge?

2.2 To what extent has there been an impact on time needed for teaching and learning in terms of:

- impact of changes to content and skills development required
- impact of amount and type of assessment on teaching and learning time
- change to amount of self-directed study by students?

Theme 3: The impact of changes on centre behaviours and management of change (including assessment)

-
- 3.1 What is influencing centre choice of specification e.g. unitised or linear, choice of awarding organisation in terms of:
- benefits/ challenges perceived by particular centre contexts
 - appropriateness for specific student cohorts or just particular groups
 - overall curriculum choice
 - timing and frequency of assessments
 - patterns of candidate entry?
- 3.2 To what extent has there been any additional management and resource burden for centres in terms of:
- introduction of controlled assessment to replace coursework (GCSE)?
 - reduction in coursework and introduction of controlled coursework in some subjects (A level)?
 - impact on amount of teaching time
 - the number and frequency of resits
 - staff development required.
- 3.3 What has been the impact of changes on staff workload at centres?
- What is the impact on teachers' lesson preparation time?
 - What is the impact on preparation time for assessment for teachers and learners?
 - What is the impact on workload for exams officers and senior leadership teams (SLTs).

3 Methodology

3.1 Centre-based case study data

3.1.1 Centre sample

A stratified random sample of 25 schools was initially identified by QCDA using EduBase, proportionate to the relative numbers in the population as a whole. The strata used were:

- type of centre by region
- phase of education
- school size
- urban/ rural.

Schools that already had a heavy project burden were filtered out prior to sampling. The combination for the search criteria meant that to get a small enough random sample, post-16 education and independent schools were initially excluded.

A further search, with the age criteria filter removed, identified a much larger sample of providers but did include middle schools and a wide range of post-16 education centres. This sample was used to select a purposive sample from the sixth form colleges and independent schools, identifying one each of urban/rural schools and looking to balance the regional split within which the North East with only one centre appeared proportionally under-represented.

After initial contact, further centres were invited to take part to rebalance the stratification and to ensure that selected centres were most likely to give the depth of data required for the subjects covered e.g. inclusion of a language academy with particular expertise in teaching and learning modern foreign languages. A final sample of 15 centres was identified for the first round of data collection.

Two centres were unable to accommodate the evaluation team for the second round of data collection (centres 3 and 4). The centres were replaced by an FE college and a secondary school. Table 2 below gives a breakdown of case study centre characteristics for the 2011 round of data collection.

Table 2: Breakdown of case study centre characteristics for second round of data collection (2011)

Centre No.	Type of School	Selective /non-selective	School Category	Region	Age Range	Gender of intake	Ofsted rating
1	Secondary	Non-selective	Foundation School / Comprehensive	South East	11 - 18	Mixed	1
2	Secondary	Non-selective	Community	North West	11 - 18	Mixed	3
5	6th Form College	Non-selective	Sixth Form College	Yorkshire & Humber	16 - 19	Mixed	1
6	6 th Form College	Non-selective	Sixth Form College	West Midlands	16 - 19	Mixed	3
7	Secondary	Non-selective	Comprehensive	South East	11 - 18	Mixed	3
8	Secondary	Non-selective	Comprehensive	Yorkshire & Humber	11 - 18	Mixed	2
9	Secondary	Non-selective	Community	South West	11 - 19	Mixed	1
11	Primary & secondary	Selective	Independent	East of England	4 - 19	Mixed	Good (ISI)
12	Secondary	Non-selective	Community	East of England	13 - 18	Mixed	2
13	Secondary	Non-selective	Community	West Midlands	11 - 18	Mixed	2
14	Secondary	Non-selective	Community	East of England	13 - 18	Mixed	1
15	Primary & Secondary	Selective	Independent	South East	3 - 18	Girls	Outstanding (ISI)
16	6 th Form and FE College (offer GCSEs)	Non-selective	Community	South East	16 - 19	Mixed	2
17	Secondary (inc 6 th Form College)	Non-selective	Community	East Midlands	11 - 18	Mixed	3

3.1.2 Case study sample coverage

Roles and numbers of each role included during GQ evaluation case study centre visits in spring 2011.

Table 3: Subjects and roles included during second centre visit spring 2011

Centre number	Senior Management Team	GCSE English/ English language	GCSE French	GCSE Spanish	GCSE geography	GCSE history	GCSE mathematics	A-level English literature	A-level French	A-level geography	A-level history	A-level physics	A-level psychology	Number of Heads of Subject Interviewed	Examination Officer	Total number of staff interviewed	Student focus group
1		✓	✓				✓	✓	✓					3		3	
2			✓	✓					✓					1		1	
5	Vice Principal							✓	✓	✓	✓	✓	✓	5	1	11	6 x A2
6	Two Area Programme Managers (sciences and humanities)								✓	✓			✓	3		5	1 x A2
7	Assistant Head	✓	✓	✓	✓		✓	✓	✓	✓		✓		5	1	12	1 x A2; 1 x GCSE
8	Head of Sixth Form		✓	✓	✓				✓	✓		✓		2		4	1 x AS; 1 x A2
9		✓	✓		✓	✓	✓	✓	✓	✓	✓			5		5	1 x A2; 1 x GCSE
11	Head teacher, Deputy Head, Head of Middle School, Director of Studies	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		6		20	
12	Deputy Head											✓		1	1	3	1 x A2; 1 x GCSE
13	Deputy Head	✓			✓	✓	✓	✓		✓	✓			4	1	6	1 x A2; 1 x GCSE
14			✓	✓	✓	✓			✓	✓	✓	✓		4		4	2 x GCSE
15	Head teacher															1	
16		✓		✓				✓	✓		✓		✓	2	2	7	1 x A2
17	Head teacher		✓	✓					✓					1		2	

Roles and numbers of each role included during GQ evaluation case study centre visits in May/ June 2010.

Table 4: Subjects and roles included during centre visit spring 2010

Centre number	School/centre type	Institution type	Senior Management Team	GCSE media/art & media	GCSE French	GCSE Spanish	GCSE geography	GCSE health & social care	GCSE history	A-level English literature	A-level French	A-level geography	A-level media	A-level physics	A-level psychology	Number of heads of subject interviewed	Teacher focus group	Total number of staff seen	Student focus group	Examination officer	Parent focus group
1	Foundation School Comprehensive	Secondary		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	1	✓	7	x2 groups (GCSE and A-level)	✓	
2	Community School	Secondary		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	7	✓	7	x2 groups (GCSE and A-level)		✓
3	Community School	Secondary			✓	✓	✓		✓	✓	✓			✓		5		7	x2 groups (GCSE and A-level)	✓	
4	Voluntary Aided (non-denominational, non-selective comprehensive school)	Secondary	Head of sixth form (A-level) and assistant head (GCSE & A-level)	✓	✓	✓	✓		✓	✓	✓			✓		8	✓	12	x1 group (mixed GCSE and A-level)	✓	✓
5	Sixth Form college	16+	Vice principal (A-level)							✓	✓	✓		✓	✓	2	✓	7	x1 A-level	✓	
6	Sixth Form college	16+								✓	✓	✓	✓	✓	✓	4	✓	5	x2 A-level		
7	Comprehensive	Secondary			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	7		14	x2 GCSE		
8	Comprehensive	Secondary	Head of 6th form (A-level)		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	7		9	x1 GCSE	✓	

Centre number	School/centre type	Institution type	Senior Management Team	GCSE media/art & media	GCSE French	GCSE Spanish	GCSE geography	GCSE health & social care	GCSE history	A-level English literature	A-level French	A-level geography	A-level media	A-level physics	A-level psychology	Number of heads of subject Interviewed	Teacher focus group	Total number of staff seen	Student focus group	Examination officer	Parent focus group
9	Community School	Secondary			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	7		7	x2 GCSE		
10	Community School	Secondary			✓	✓	✓		✓		✓	✓				2		10	x2 GCSE	✓	
11	Independent school	Primary & Secondary			✓	✓	✓		✓	✓	✓	✓		✓		6	✓	6			
12	Community School	Secondary	Head teacher (GCSE & A-level)															1			
13	Community School	Secondary					✓	✓				✓	✓			3		4		✓	
14	Community School	Secondary	Head teacher (GCSE & A-level)															1			
15	Independent school	Primary & Secondary	Head teacher (GCSE & A-level)/ governor															1			

3.2 Centre online survey data

3.2.1 Participating centres

A breakdown of centres that responded to the centre online survey by key characteristics can be found in Table 5 below.

Table 5: Centre online survey centre characteristics table

Type of Centre	Number of centres in each category re: inspection range	Ofsted or equivalent inspection range
Secondary School	6 x Community	1
	3 x Community	2
	3 x Community	3
	3 x Community	4
	2 x Foundation	2
	1 x Voluntary Aided	1
	1 x Voluntary Aided	2
	1 x Voluntary controlled	2
Academy	1	1
	1	None found
Independent School	7	1
	2	2
	2	3
Sixth Form College	2	None found
FE College	2 x General	2
	1 x Specialist	1
Pupil Referral Unit	2	2
Total number of centres	40	

4 Statistical data

4.1 A level overall grades

These tables use SFR data which does not disaggregate for English literature – therefore ‘English’ here relates to all A level English qualifications.

A mean grade score has been calculated to enable change in grades over time to be analysed.

Analysis for ‘all new specification subjects’ includes all subjects for which 2010 was the first year that A level candidates completed the new specification. This applies to all A level subjects except mathematics and further mathematics.

4.1.1 Calculation of mean grade score

Mean grade score combines proportions of candidates achieving each grade in a subject into a single grade score for the subject. The higher the grade score, the better the candidates did overall. It is calculated by assigning a weight to each grade and multiplying that weight by the number of students achieving the grade. In the calculations in this report, A and A* grades are weighted as 5, B as 4, C as 3, D as 2, and E as 1. All other grades (U, X) count zero.

In this report, the main interest is in time series information, comparing performance for the first year of results for the new A level specifications with previous years on the old specifications. With the A* only introduced in results for 2010, this presents potential problems with comparison, so it is combined with the A grade as far as weighting is concerned.

There are other approaches to combining grades to produce a grade score – for example UCAS use a non-linear scale to increase the weighting associated with the top grades. Value assumptions of this nature would be inappropriate for this work, so a simple linear scale is used.

4.1.2 All subjects SFR A level - mean grade score

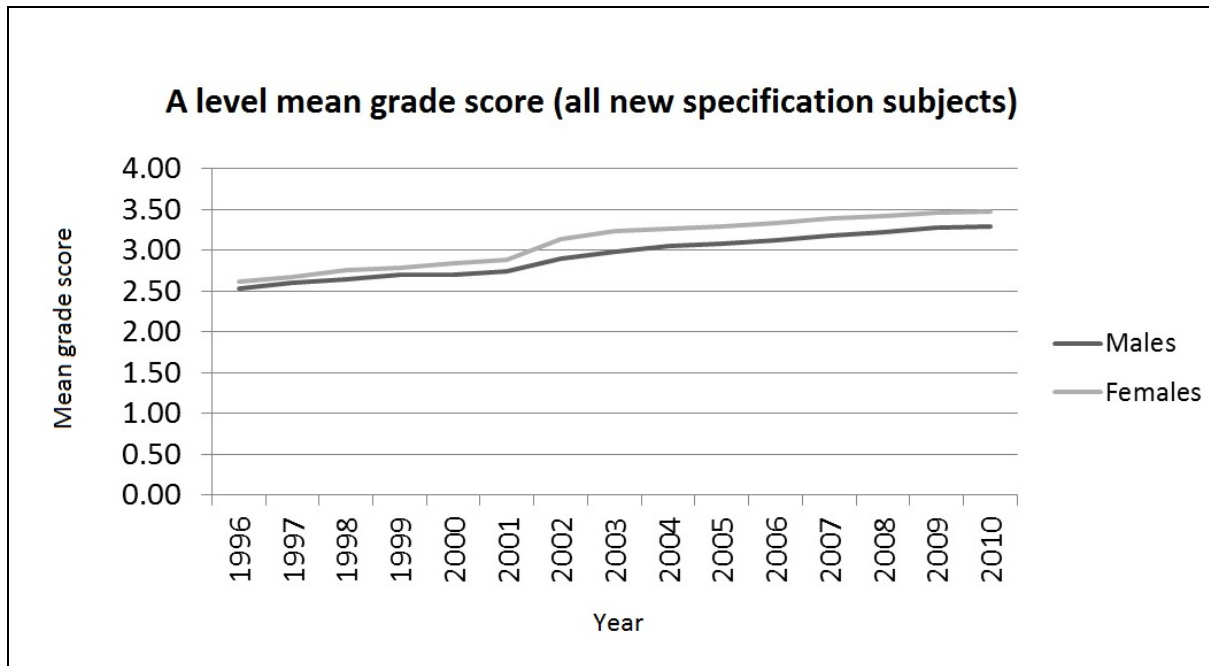


Figure 2: A level all subjects (except mathematics and further mathematics) mean grade score (1996-2010) (SFR)

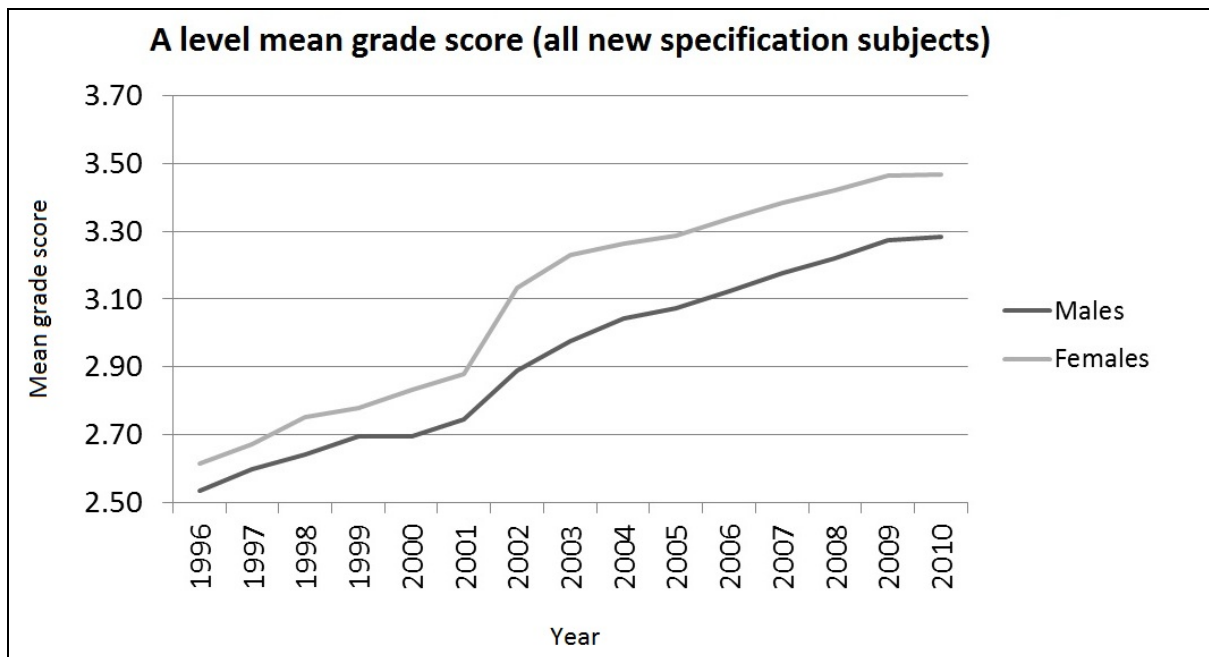


Figure 3: Zoomed version of Figure 2 (A level all subjects (except mathematics and further mathematics) mean grade score 1996-2010 – SFR)

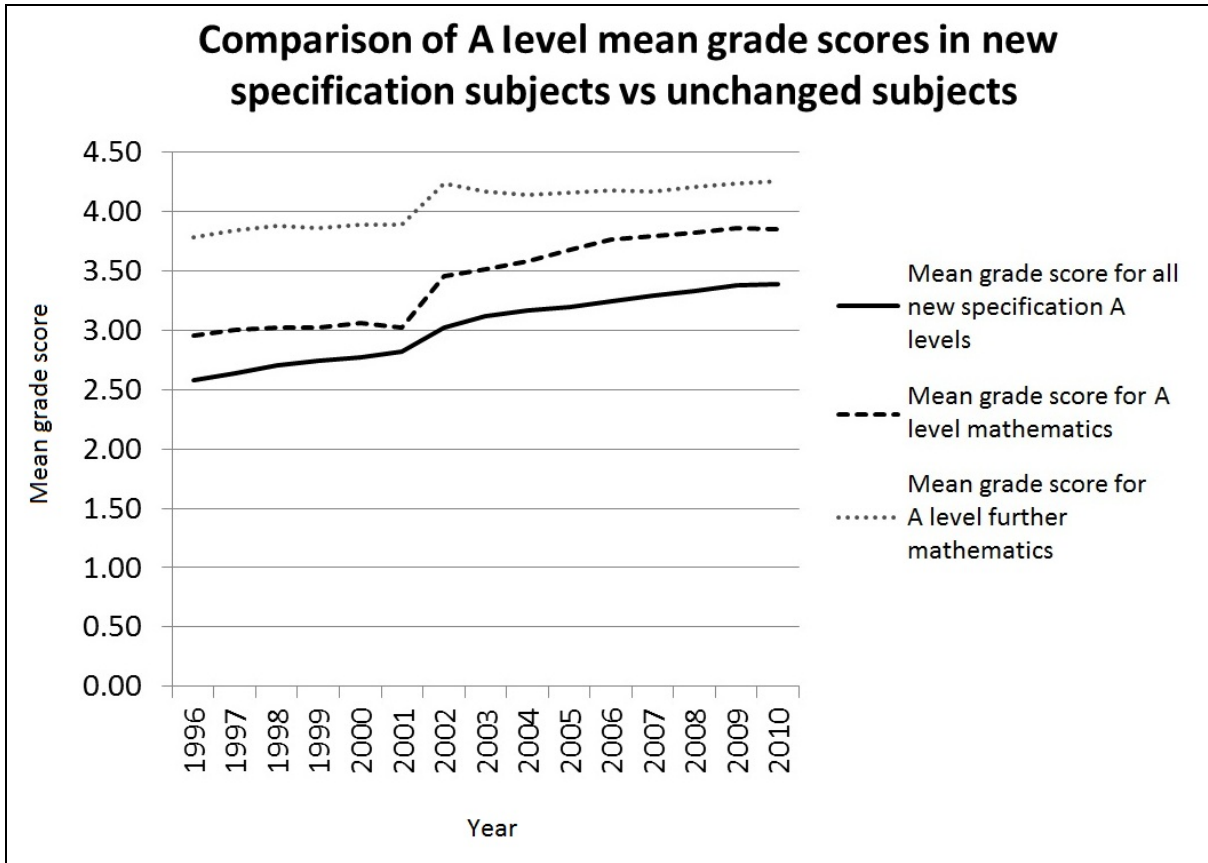


Figure 4: Comparison of A level mean grade scores in new specification subjects vs unchanged subjects (mathematics, further mathematics)

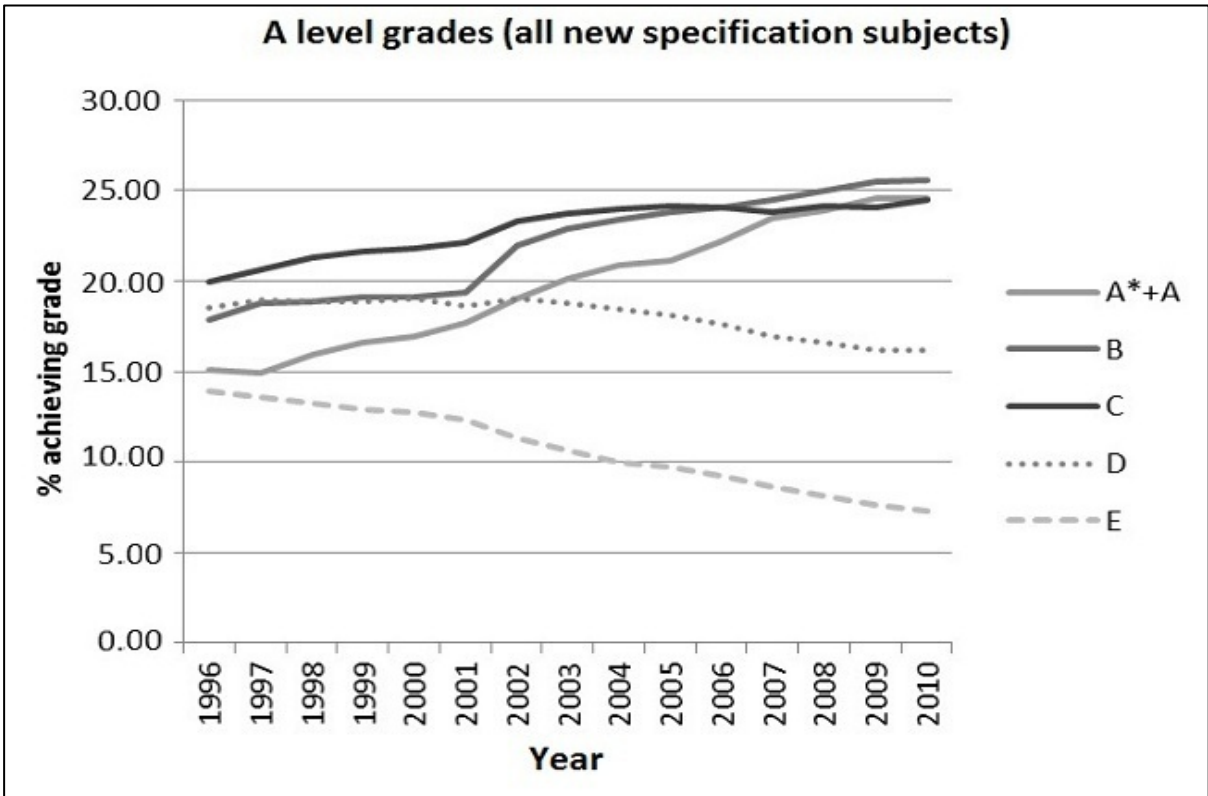


Figure 5: A level all subjects (except mathematics and further mathematics) % candidature achieving each grade (1996-2010) (SFR)

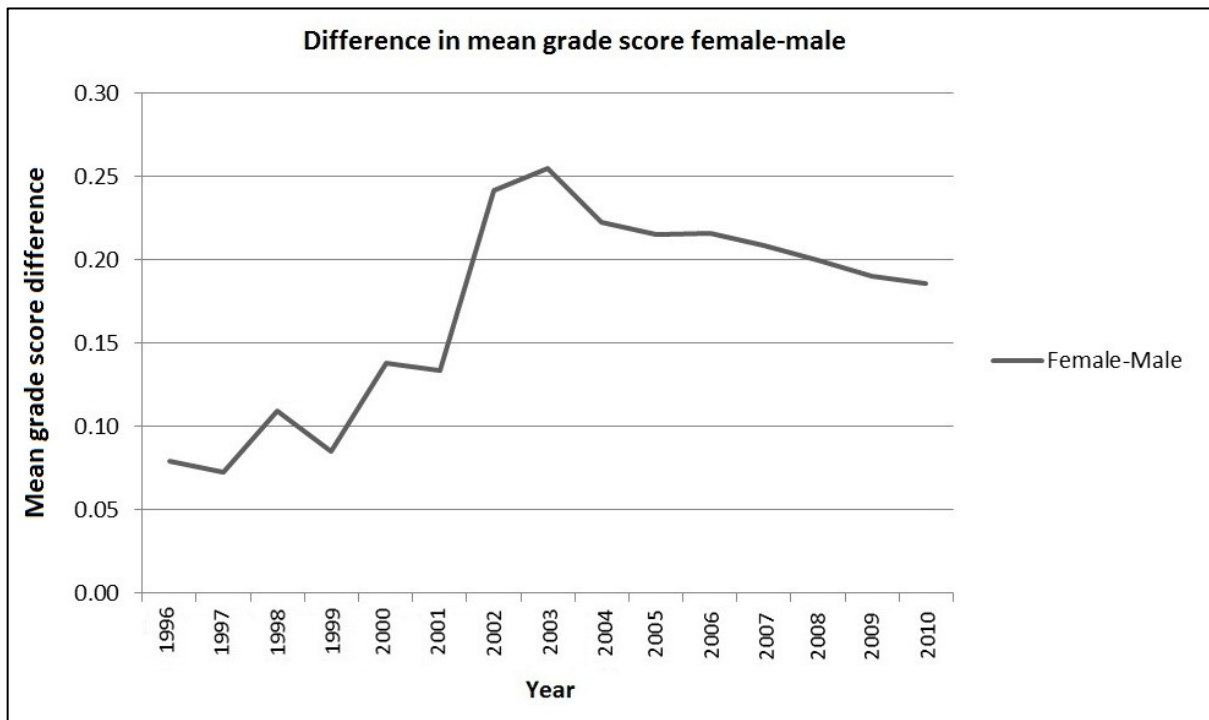


Figure 6: Difference in mean grade scores for all new specification subjects

4.2 A level subject specific grades

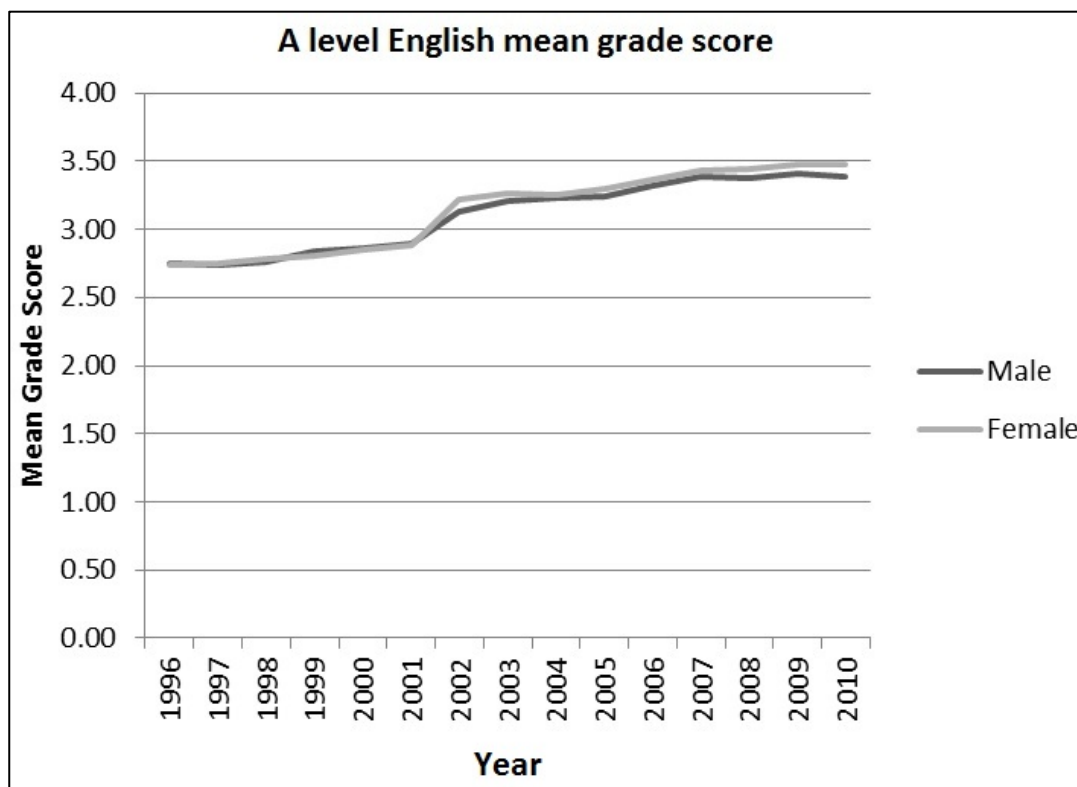


Figure 7: A level English mean grade score (1996-2010) (SFR)

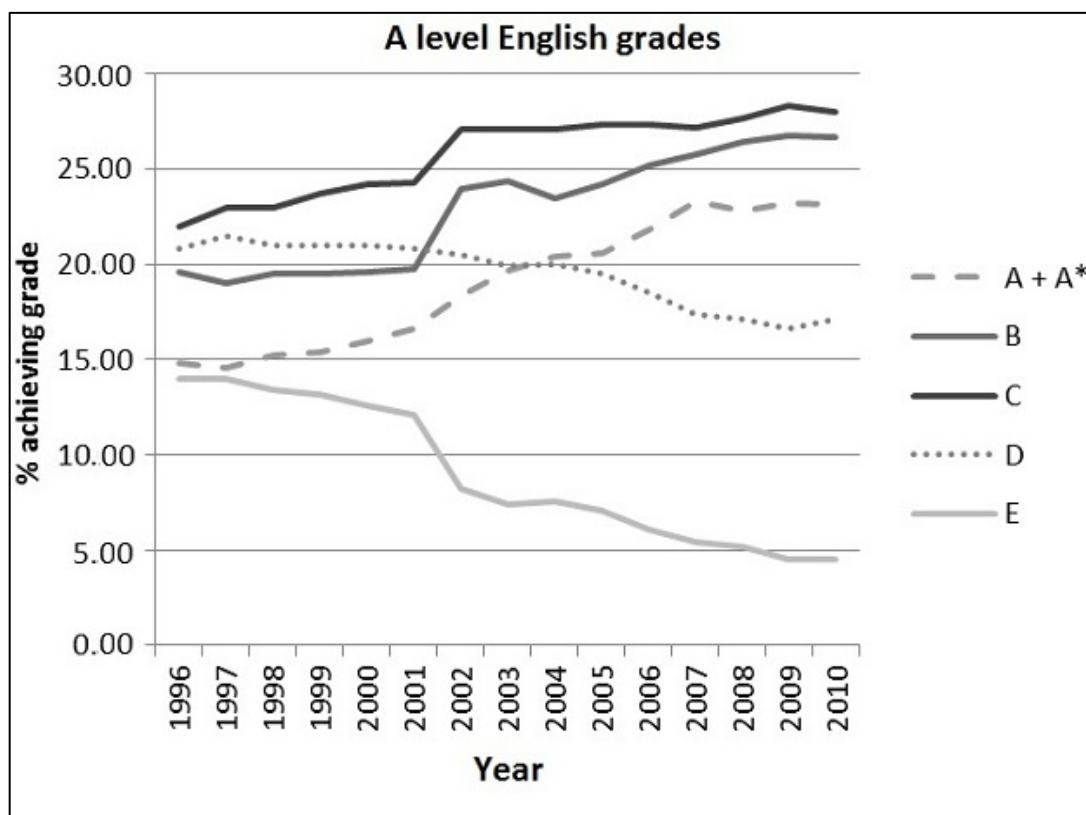


Figure 8: A level English % candidature achieving each grade (1996-2010) (SFR)

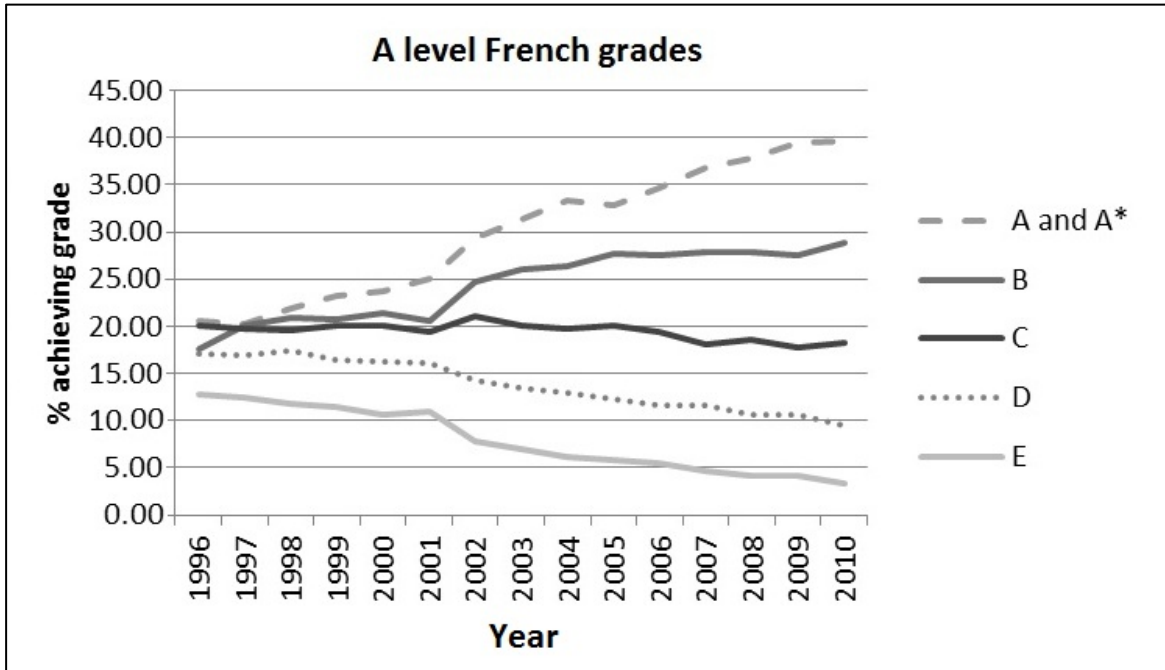


Figure 9: A level French mean grade score (1996-2010) (SFR)

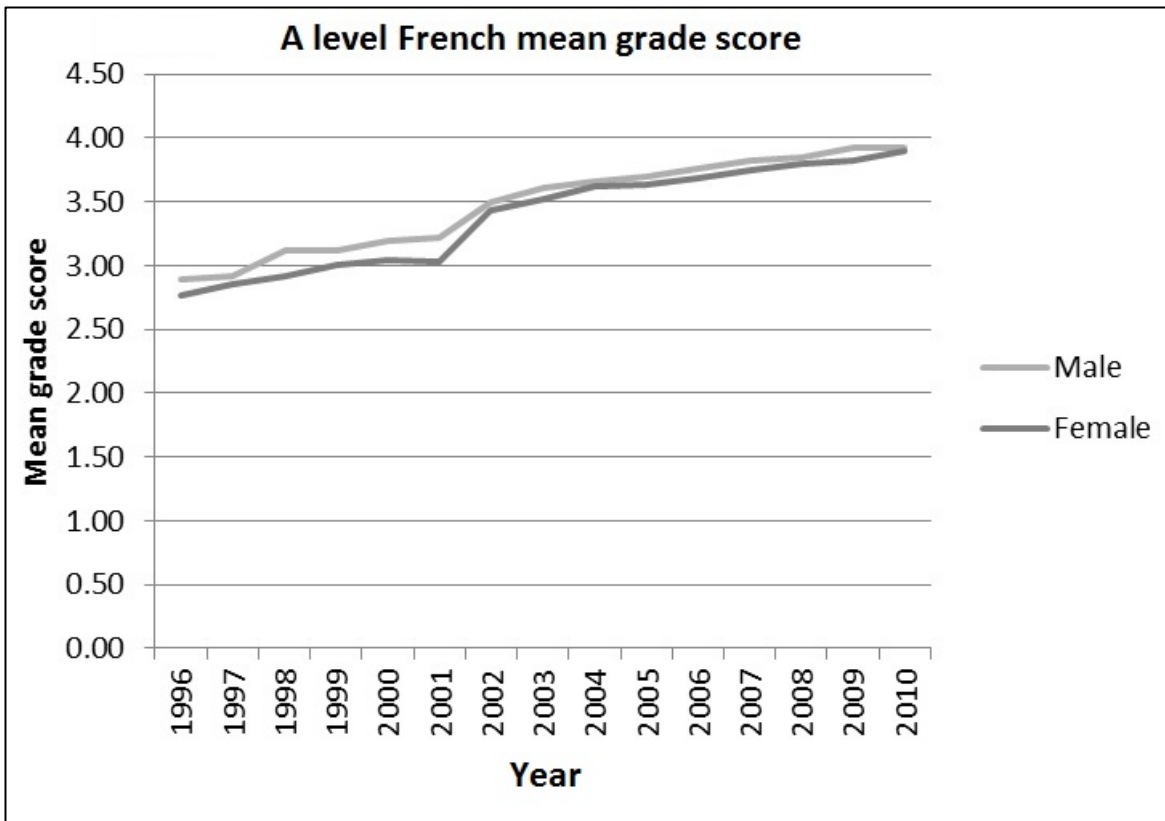


Figure 10: A level French % candidature achieving each grade (1996-2010) (SFR)

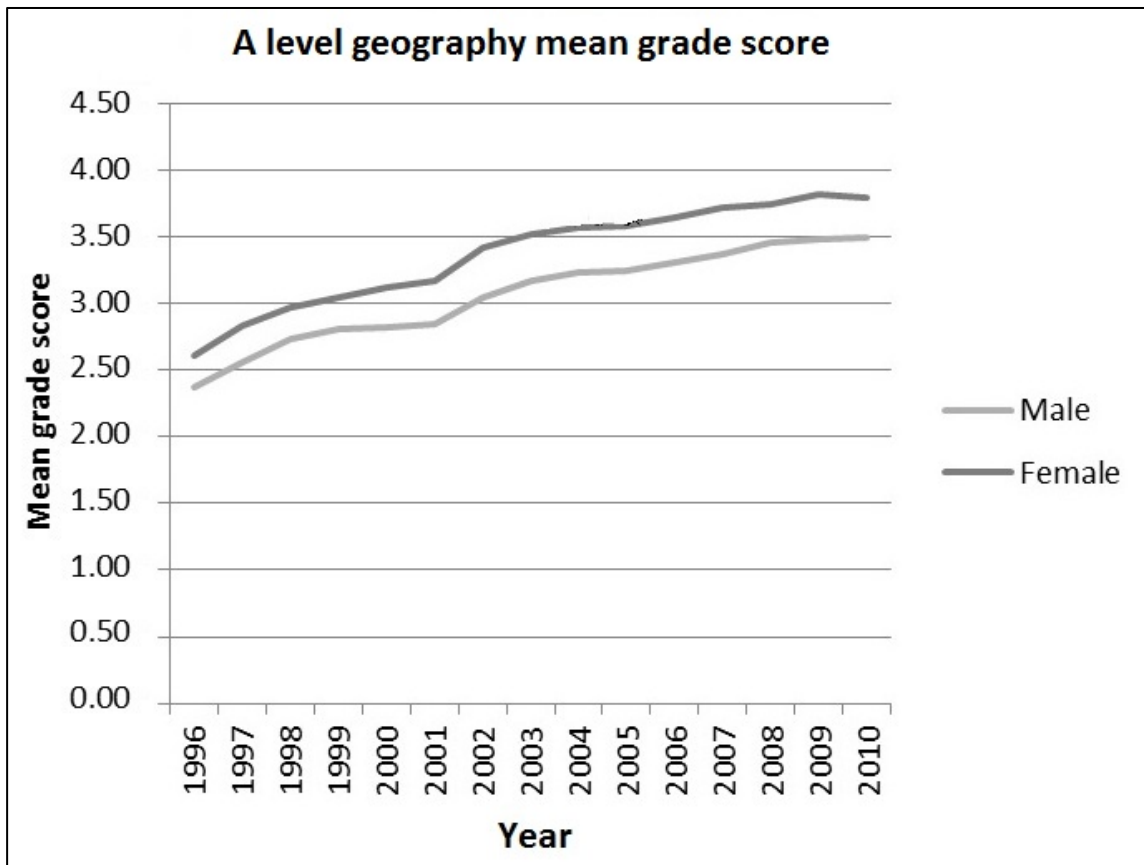


Figure 11: A level geography mean grade score (1996-2010) (SFR)

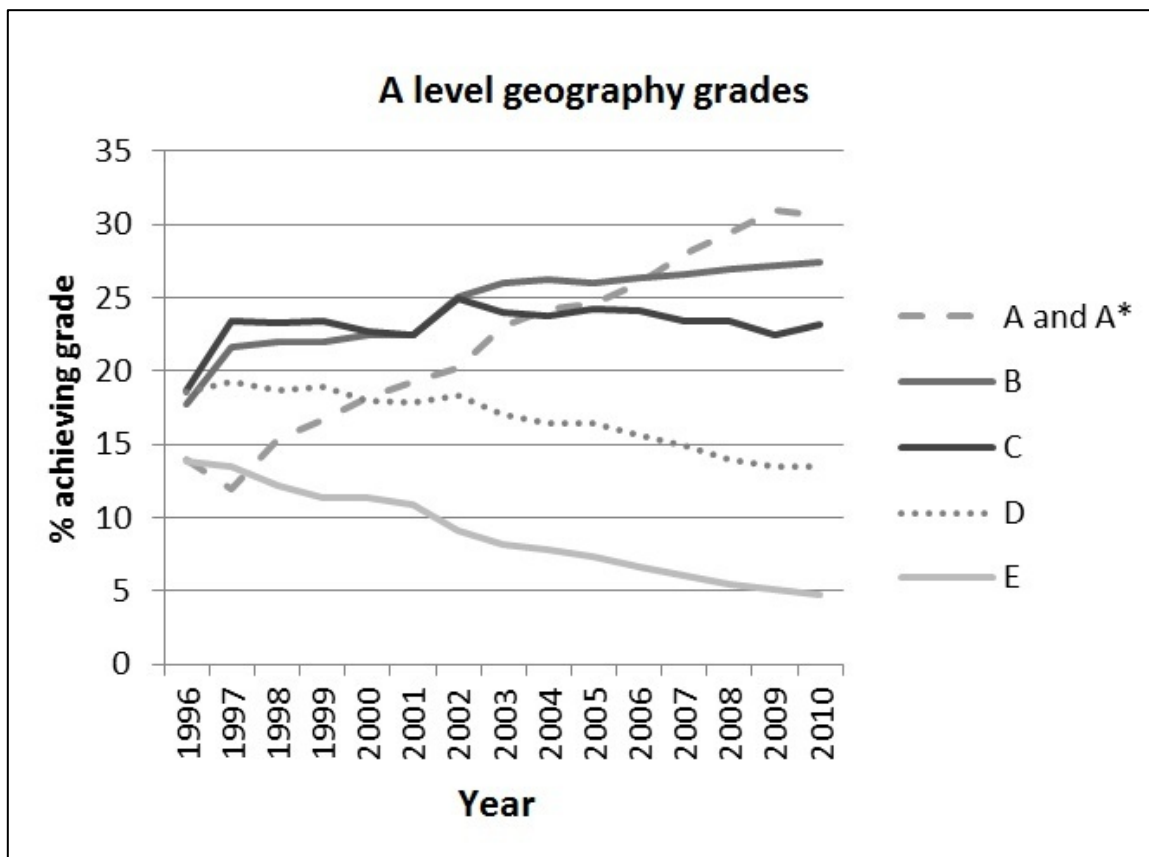


Figure 12: A level geography % candidature achieving each grade (1996-2010) (SFR)

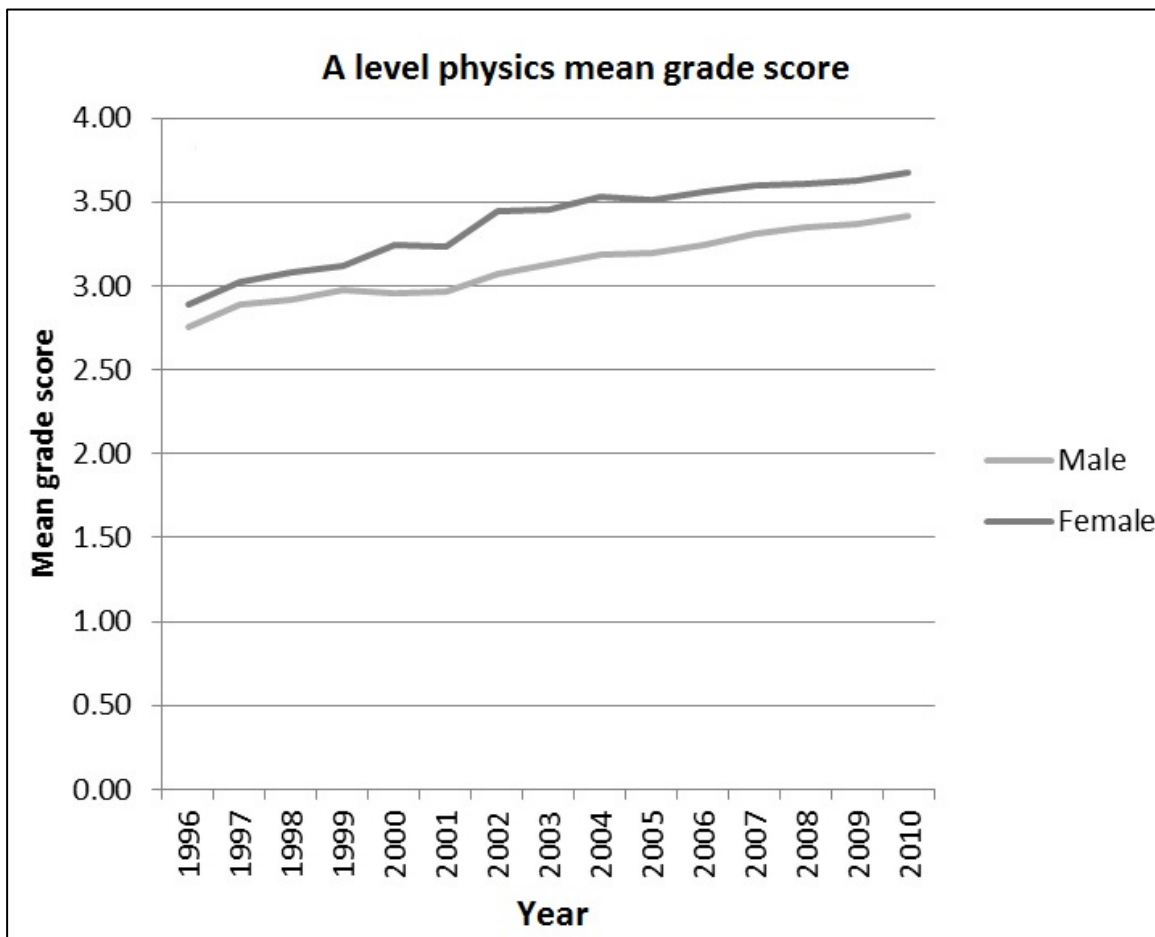


Figure 13: A level physics mean grade score (1996-2010) (SFR)

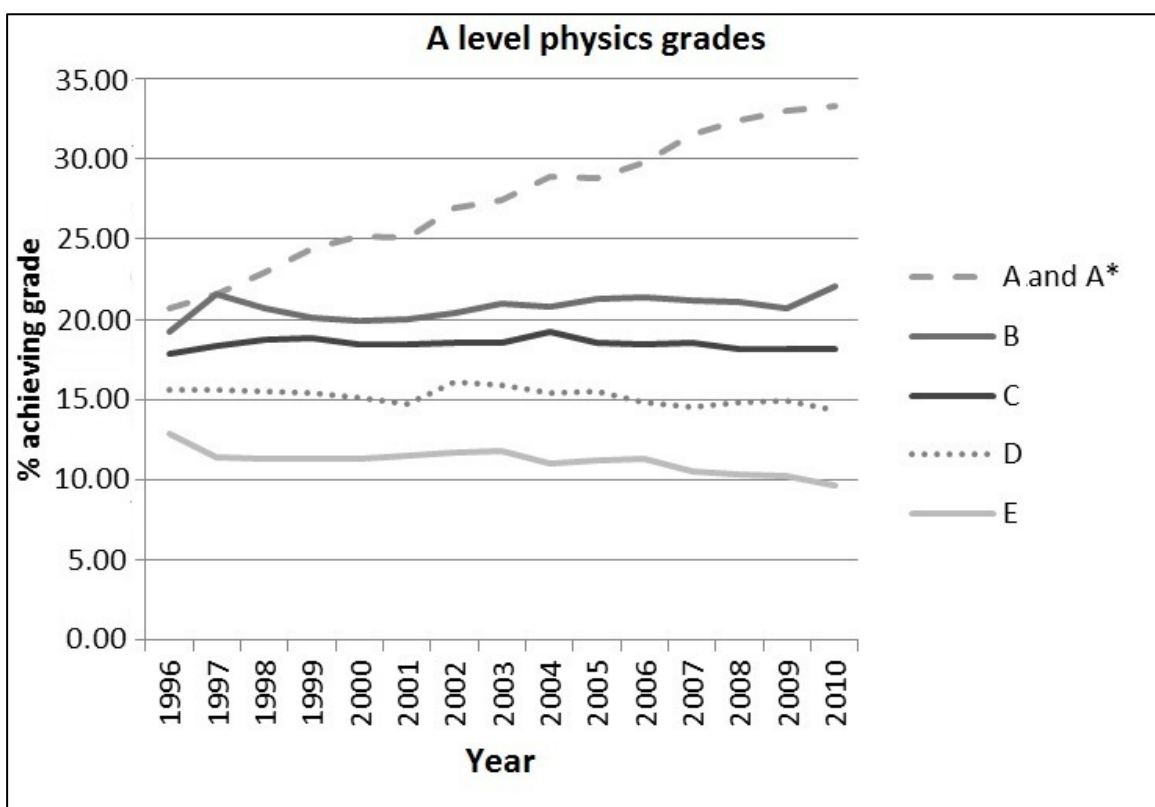


Figure 14: A level physics % candidature achieving each grade (1996-2010) (SFR)

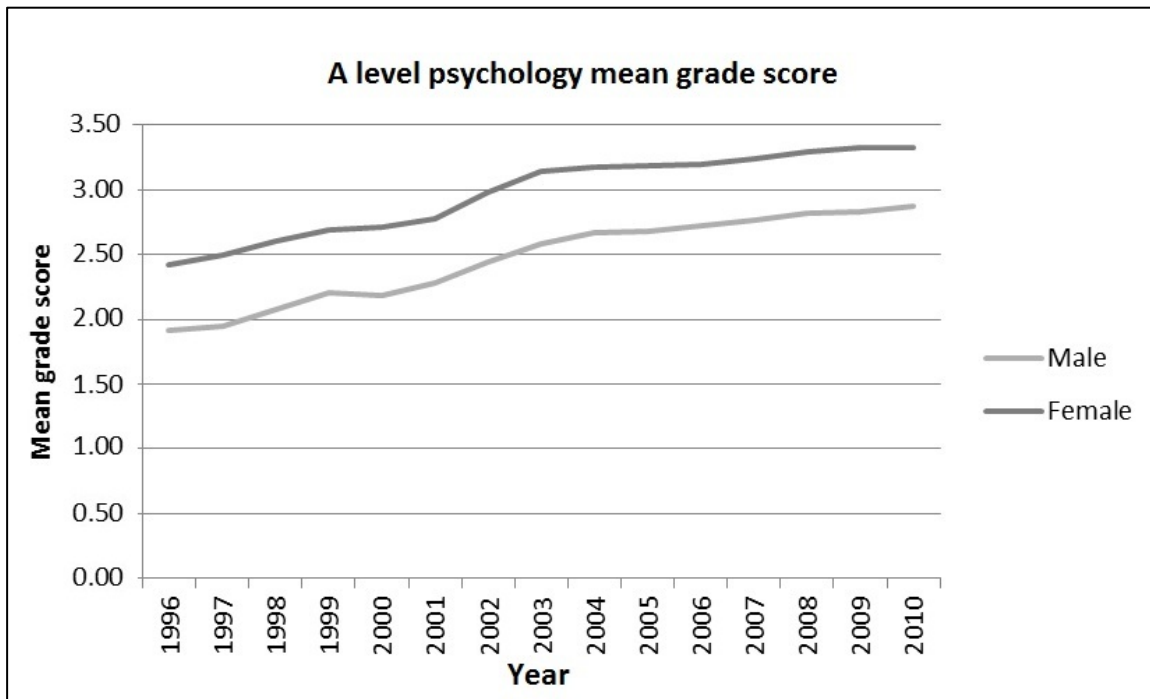


Figure 15: A level psychology mean grade score (1996-2010) (SFR)

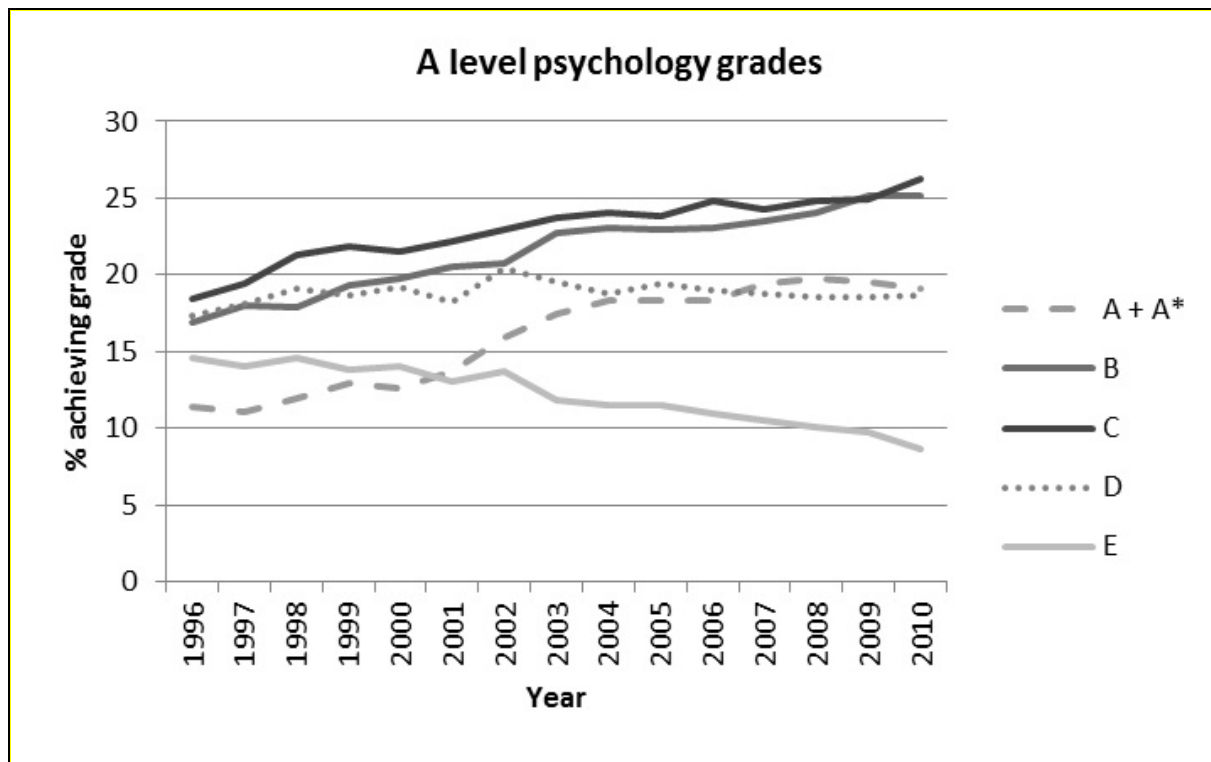


Figure 16: A level psychology % candidature achieving each grade (1996-2010) (SFR)

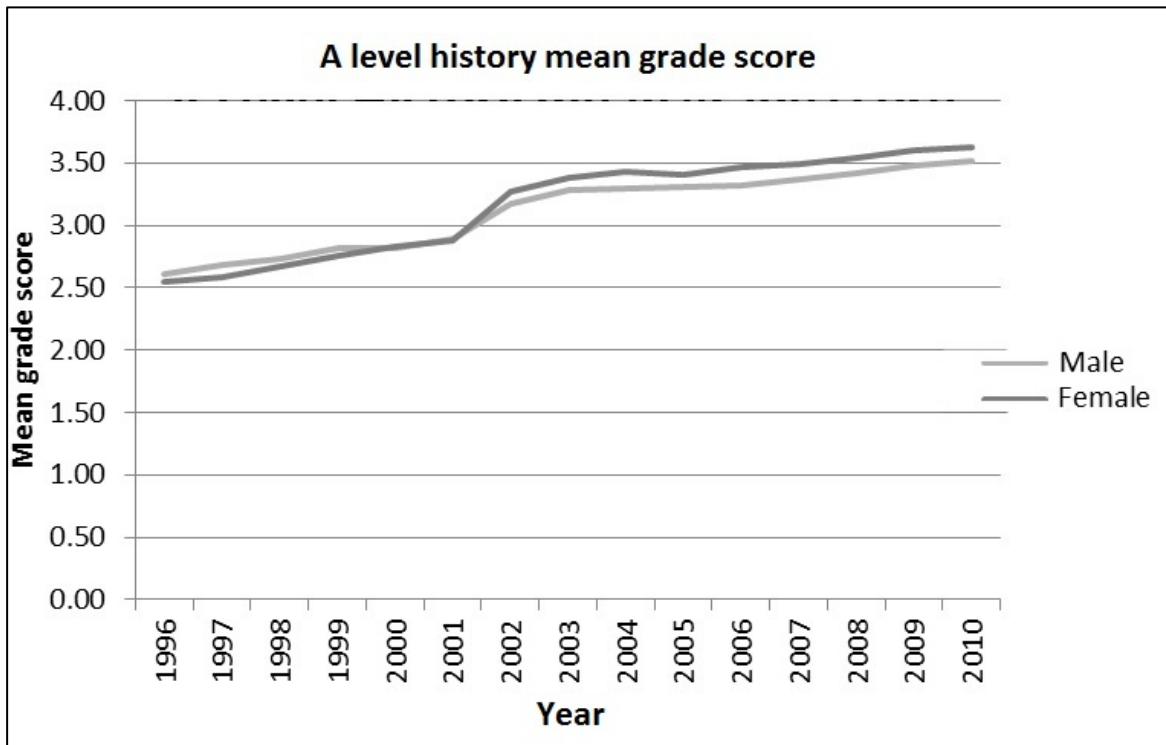


Figure 17: A level history mean grade score (1996-2010) (SFR)

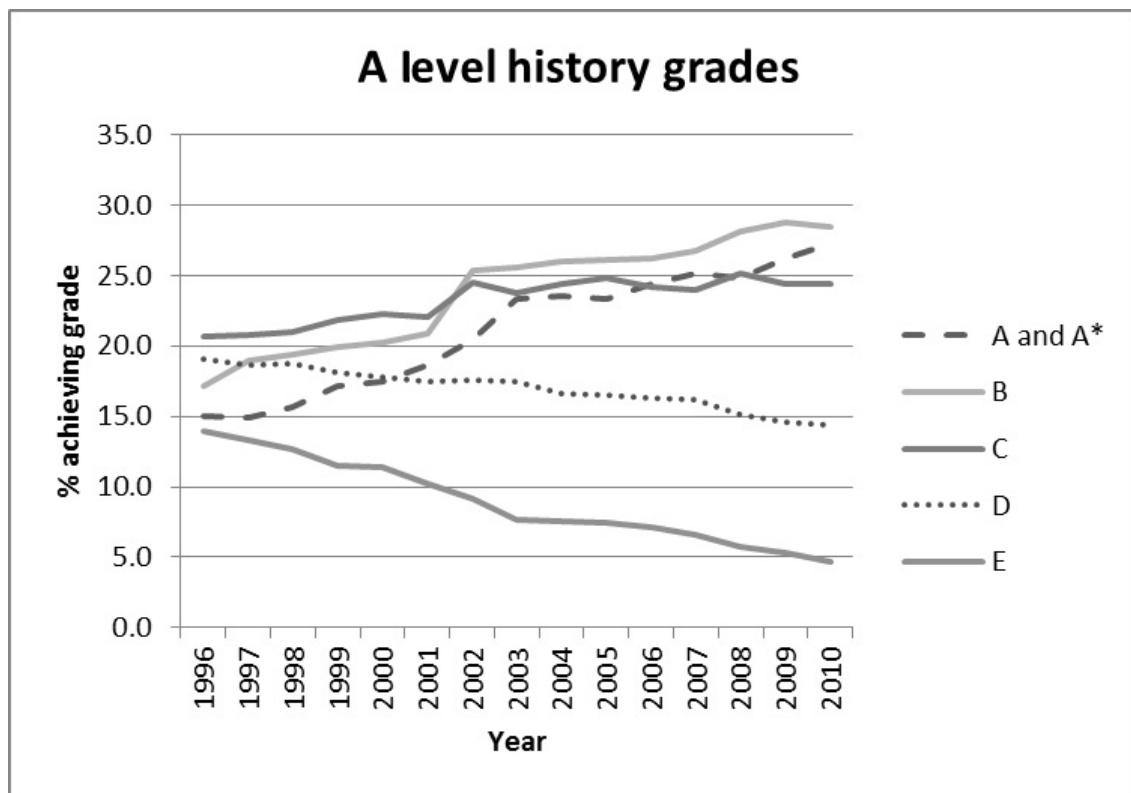


Figure 18: A level history % candidature achieving each grade (1996-2010) (SFR)

4.3 A level participation

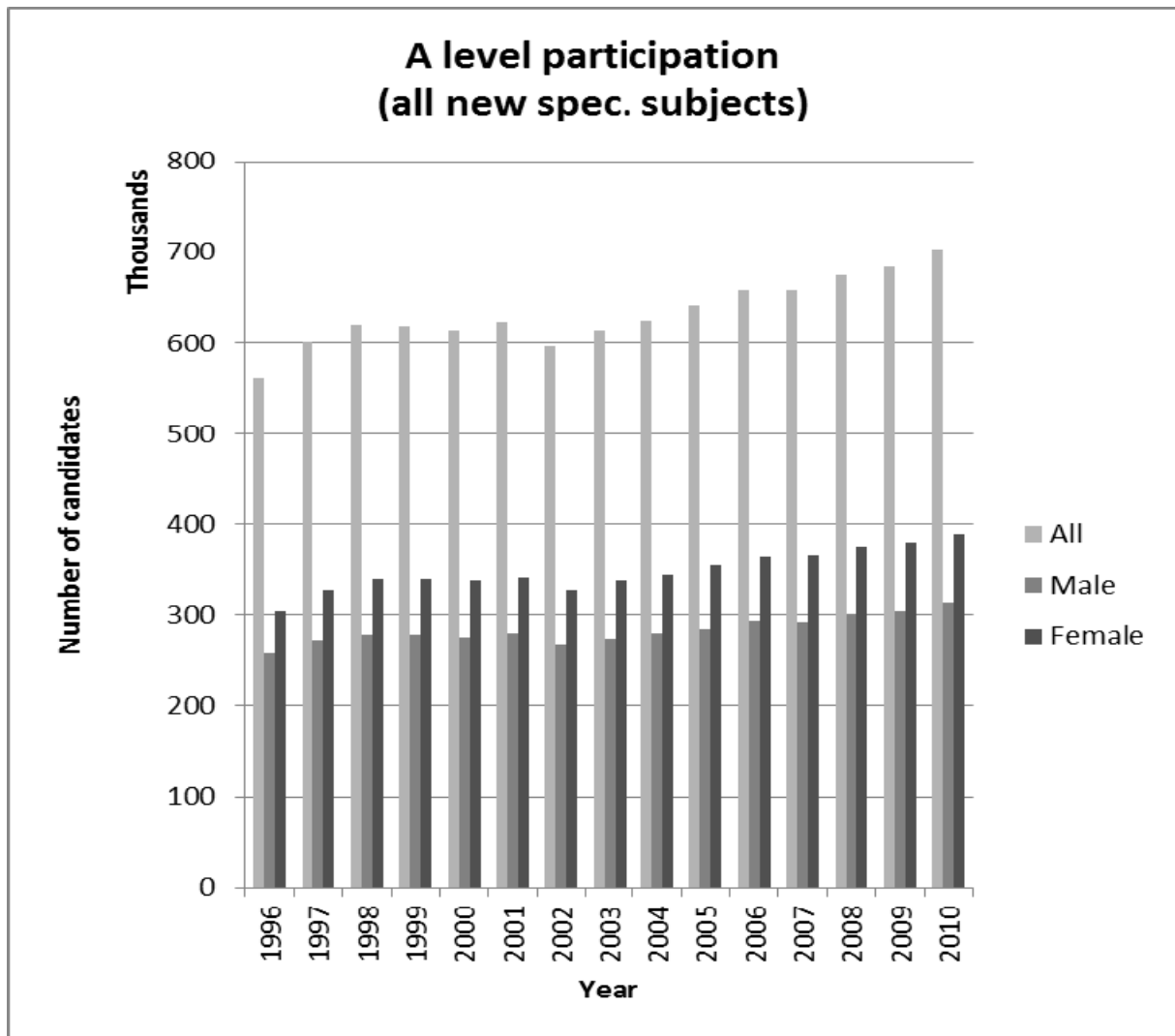


Figure 19: Time series of candidate entries for all subjects with new specifications in 2010

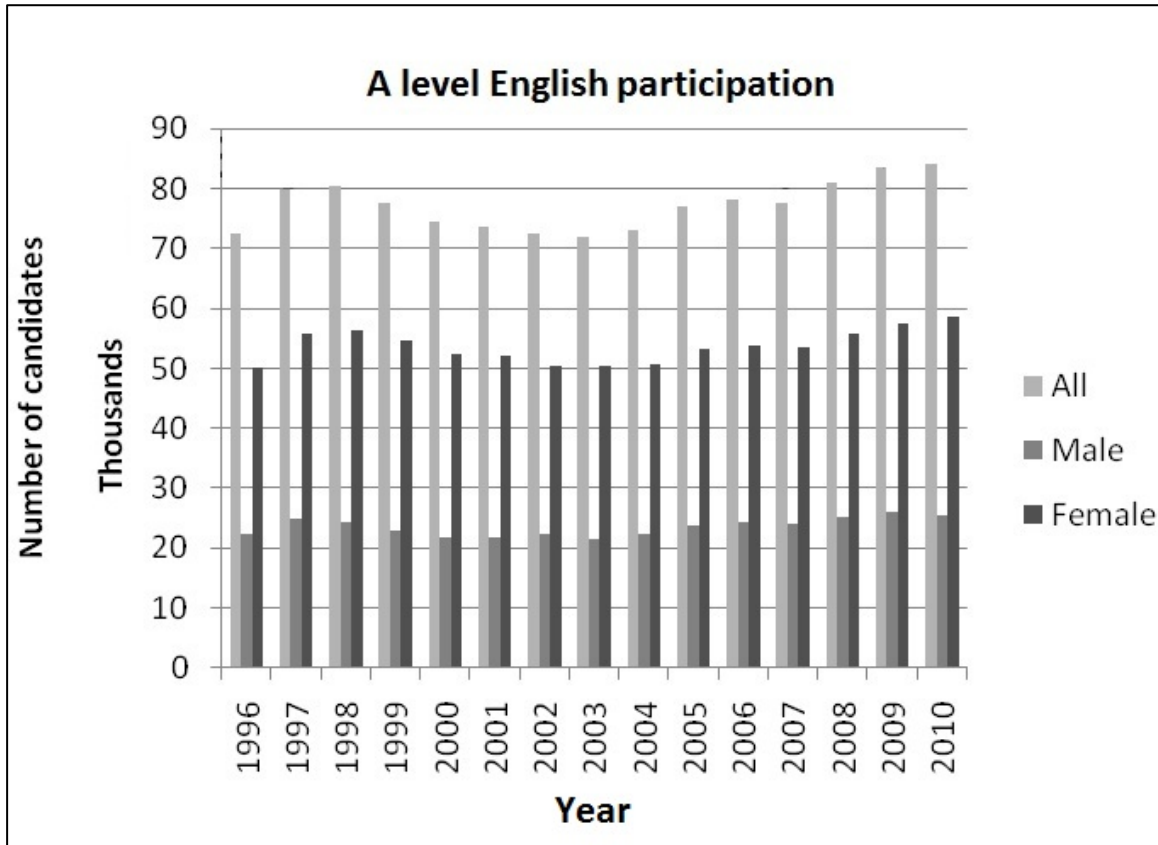


Figure 20: Time series of candidate entries for A level English 1996-2010 (SFR)

Please note 'English' in SFR data includes all English A levels

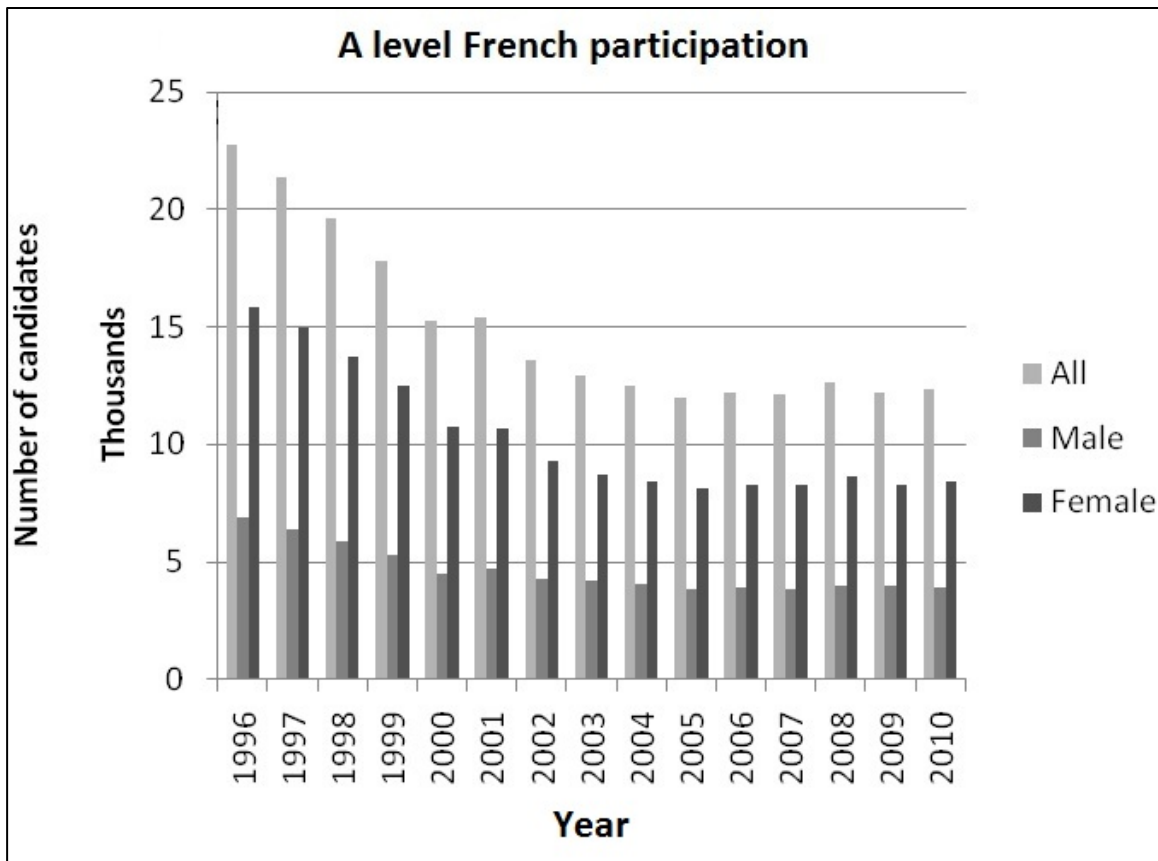


Figure 21: Time series of candidate entries for A level French 1996-2010 (SFR)

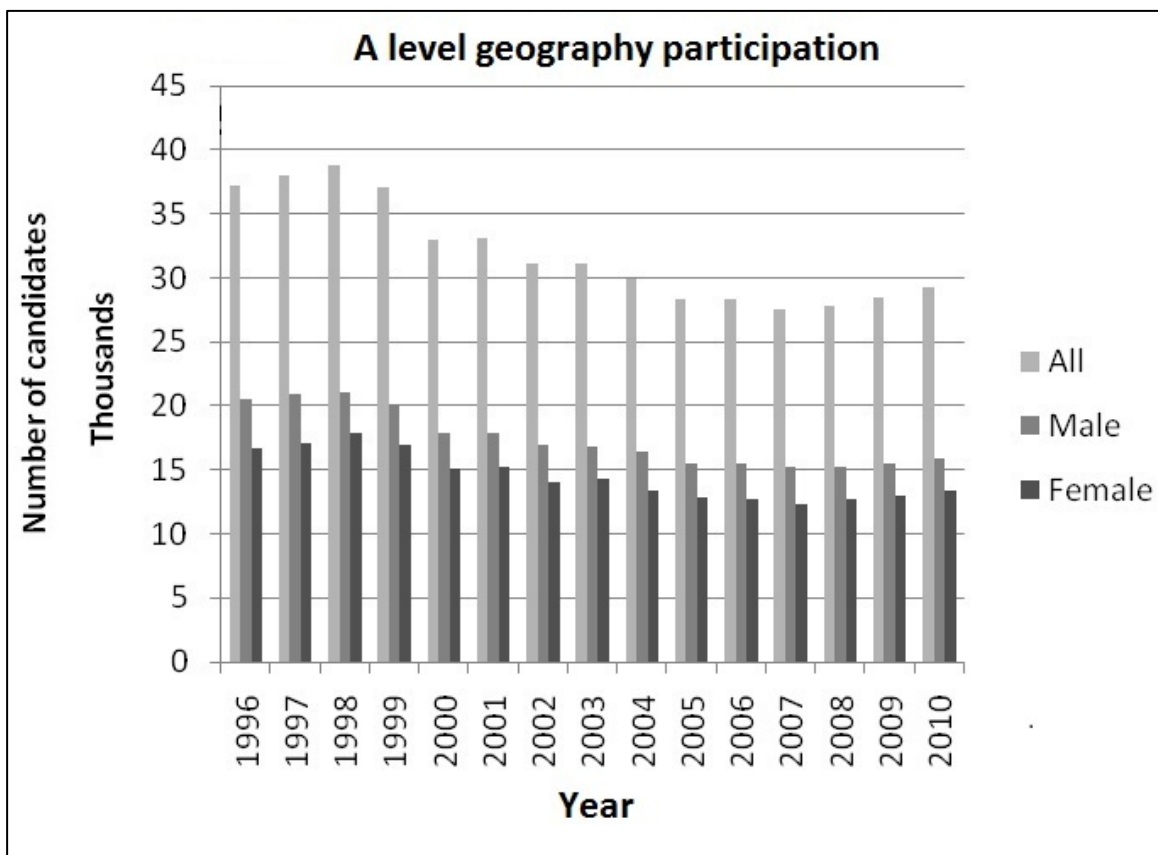


Figure 22: Time series of candidate entries for A level geography 1996-2010 (SFR)

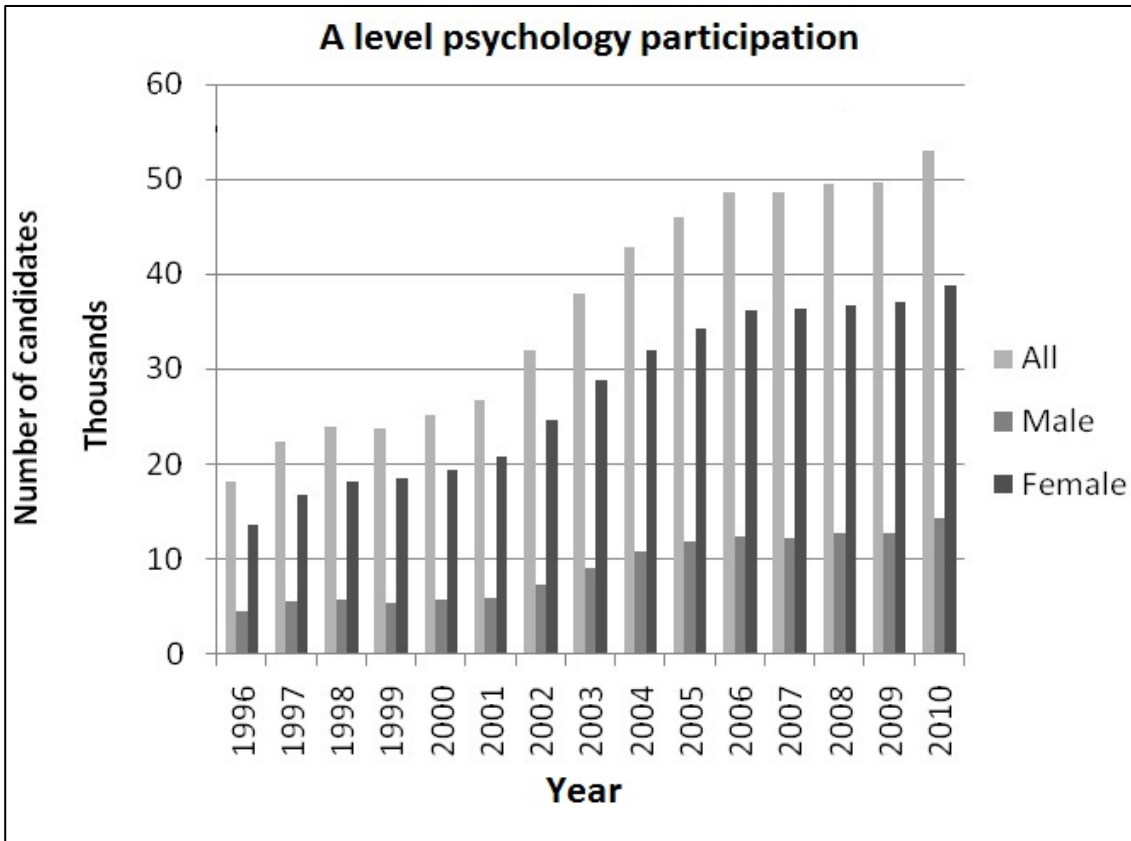


Figure 23: Time series of candidate entries for A level psychology 1996-2010 (SFR)

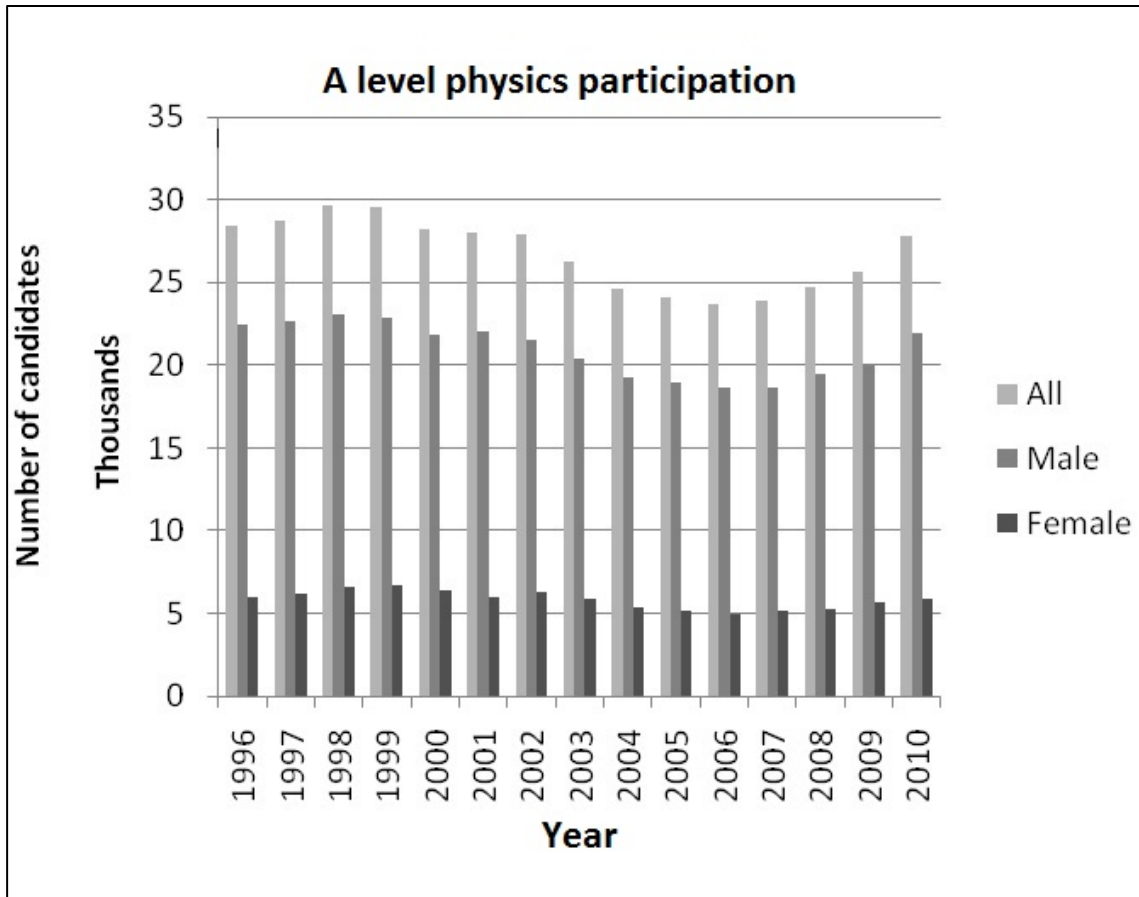


Figure 24: Time series of candidate entries for A level physics 1996-2010 (SFR)

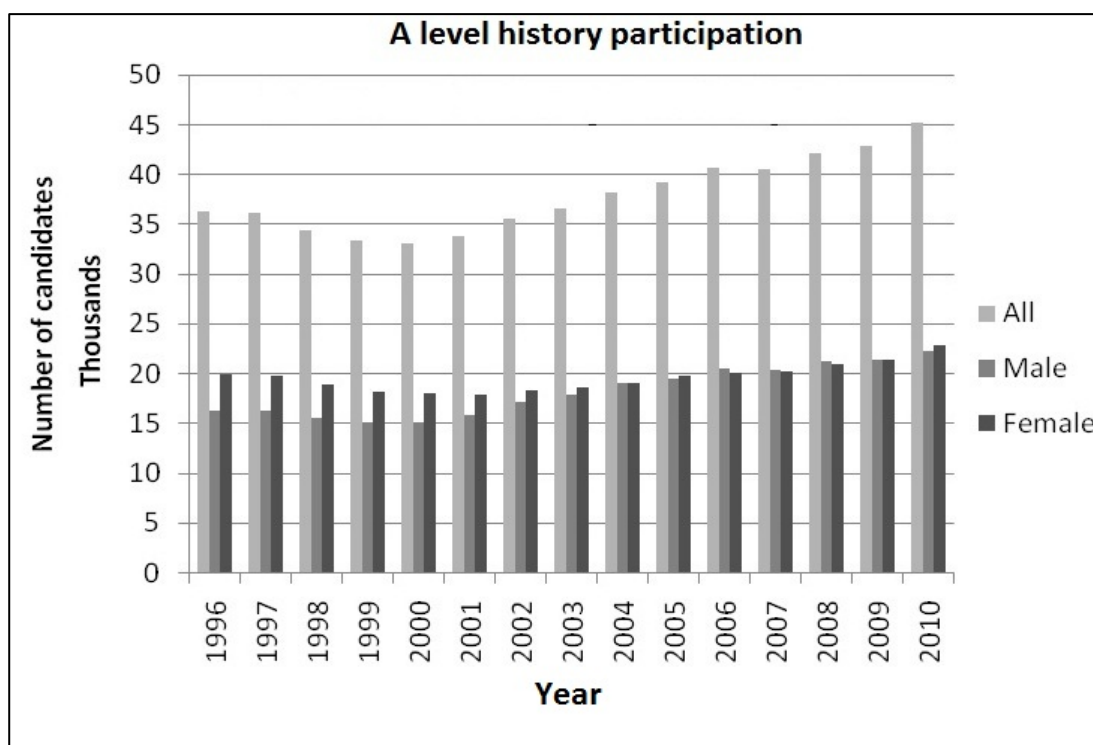


Figure 25: Time series of candidate entries for A level history 1996-2010 (SFR)

4.4 Comparison of candidatures' demographics and prior attainment

4.4.1 Demographics

Table 6: Demographic composition of A level candidatures for candidates completing the old (2009) and new (2010) specification A level qualifications (NPD)

% Yes	Free school meals ¹³		English not as first language ¹⁴		Special educational needs ¹⁵	
	2008/09	2009/10	2008/09	2009/10	2008/09	2009/10
English literature	5.0	5.0	7.2	6.9	3.8	4.3
French	3.4	3.8	7.1	7.4	2.3	3.0
Geography	2.2	2.4	3.1	3.4	3.3	4.3
Physics	3.6	3.7	9.2	9.1	4.7	5.7
Psychology	6.4	6.2	10.6	10.5	3.5	4.6
History	4.2	3.7	5.6	5.3	4.1	4.8
	2006/07	2007/08	2006/07	2007/08	2006/07	2007/08
All year 11 KS4 completers	13	13	9	9	20	22

The trends show an increasing proportion of special educational needs (SEN) candidates taking each of the A levels under investigation, substantially greater than the increase in the SEN population across the corresponding period (shown on the bottom line).

¹³ Free school meal information is not recorded consistently in NPD data for candidates in year 12 and year 13. The calculations have therefore been made by identifying the candidates' FSM status in Year 11.

¹⁴ The "English not first language" is based on the PLASC FLANG variable with records "English" and "Other", "Believed English", "Believed Other", and a variety of 'Not Known', 'Refused' etc codes which are treated as "missing".

¹⁵ Special educational needs status refers to any recorded provision (Statement, School Action or School Action Plus).

Changes in proportions of candidates with free school meals and English not as a first language are smaller and more varied. The proportion of these candidates taking history and psychology reduced in 2010 compared to 2009. More generally, the proportion of candidates with free school meals and English not as a first language increased by a small amount in 2010 compared to 2009 although no further investigation was undertaken.

4.4.2 Prior attainment

In addition to the demographic information about participation, this report also considers whether the changes in attainment trends may result from changes to the profile of 'incoming' students to the A level programme, i.e. if the students starting the new specification A levels (to complete in 2010) were of a weaker profile than the equivalent group starting the last cycle of the old specification A levels (to complete in 2009) then this might explain the dip in grade trends observed.

This investigation is undertaken using two methods:

Firstly, the investigation is undertaken by comparing A level outcome grades for students with the grades achieved at GCSE by the same students in the same subject, i.e. physics GCSE for physics A level, etc. The results are summarised in Table 7 below. There is no clear pattern, suggesting that for these subjects at least, changes in A level grades from 2009 to 2010 are unrelated to the change in associated GCSE scores from 2007 to 2010. This adds to the view presented in the preceding section on participation that the students taking new specification A levels are very similar in profile to those taking the old specifications immediately previously.

Table 7: The change in grades score for GCSEs (2007 to 2008) and associated A levels (2009-10) (NPD)

Subject	Change in A level mean grade score from 2009 to 2010	Change in corresponding GCSE mean grade score from 2007 to 2008 (the cohort that went on to complete A level in 2009-10)
English	-0.01	+0.02
French	+0.05	-0.03
Geography	+0.01	-0.01
Physics	+0.05	+0.06
Psychology	+0.01	n/a
History	+0.38	-0.01

4.4.2.1 English literature A level

Table 8 shows the average grade points achieved in GCSE English language and English literature for those who went on to complete A level English literature in 2009 and 2010, i.e. the last cohort taking the old specification and the first group taking the new specification A level. (The table also shows GCSE results for students not taking A level English literature). It shows that candidates who completed the new specification A level in 2010 had slightly higher grades (+0.02, +0.01) at English GCSEs than those completing the old specification A level in 2009. Prior attainment (and participation demographics) appear therefore not to offer an explanation for the slight drop in attainment in 2010 (-0.01), following several years of rising trends.

Table 8: English grades achieved at GCSE for candidates completing A level English literature in 2009 and 2010 (NPD)

GCSE results for candidates taking A level English literature							
		Took the GCSE in 2007, completed A level in 2009			Took the GCSE in 2008, completed A level in 2010		
		Grade score	n	Std. Dev	Grade score	n	Std. Dev
GCSE English ¹⁶	Did not do A level English literature	2.94	2,407,277	1.5283	2.94	2,408,623	1.5281
	Did A level English literature	4.66	45,346	0.9372	4.68	44,000	0.9305
GCSE English literature	Did not do A level English literature	3.16	1,997,463	1.526	3.16	1,998,829	1.526
	Did A level English literature	4.71	44,724	0.91	4.72	43,358	0.913

4.4.2.2 French A level

Table 9 shows the average grade points achieved in GCSE French for those who went on to complete A level French in 2009 and 2010, i.e. the last cohort taking the old specification and the first group taking the new specification A level. (The table also shows GCSE results for students not taking A level French). It shows that candidates who completed the new

¹⁶ GCSE English recoded in NPD as (**'=6') (*'=6') (*A'=5.5') (A'=5') (AA'=5') (AB'=4.5') (B'=4') (BB'=4') (BC'=3.5') (C'=3') (CC'=3') (CD'=2.5') (D'=2') (DD'=2') (DE'=1.5') (E'=1') (EE'=1') (EF'=0.5') (F'=0') (FF'=0') (FG'=0') (G'=0') (GG'=0') (U'=0').

specification A level in 2010 had slightly lower grades (-0.03) at French GCSE than those completing the old specification A level in 2009. Prior attainment (and participation demographics) appear therefore not to offer an explanation for the continued small gain in attainment in 2010 (+0.05), following several years of rising trends.

Table 9: French grades achieved at GCSE for candidates completing A level French in 2009 and 2010 (NPD)

GCSE results for candidates taking A level French							
		Took the GCSE in 2007, completed A level in 2009			Took the GCSE in 2008, completed A level in 2010		
		Grade score	n	Std. Dev	Grade score	n	Std. Dev
GCSE French	Did not do A level French	3.18	733,095	1.64	3.18	733,094	1.64
	Did A level French	5.47	11,719	0.72	5.44	11,720	0.71

4.4.2.3 Geography A level

Table 10 shows the average grade points achieved in GCSE geography for those who went on to complete A level geography in 2009 and 2010, i.e. the last cohort taking the old specification and the first group taking the new specification A level. (The table also shows GCSE results for students not taking A level geography). It shows that candidates who completed the new specification A level in 2010 had very similar grades (-0.01) at geography GCSE to those completing the old specification A level in 2009.

Table 10: Geography grades achieved at GCSE for candidates completing A level geography in 2009 and 2010 (NPD)

GCSE results for candidates taking A level geography							
		Took the GCSE in 2007, completed A level in 2009			Took the GCSE in 2008, completed A level in 2010		
		Grade score	n	Std. Dev	Grade score	n	Std. Dev
GCSE geography	Did not do A level geography	3.16	693,146	1.73	3.16	692,882	1.73
	Did A level geography	4.74	26,854	1.00	4.73	27,118	0.99

4.4.2.4 *Physics A level*

Table 11 shows the average grade points achieved in GCSE physics for those who went on to complete A level physics in 2009 and 2010, i.e. the last cohort taking the old specification and the first group taking the new specification A level. (The table also shows GCSE results for students not taking A level physics). It shows that candidates who completed the new specification A level in 2010 had higher grades (+0.06) at physics GCSE to those completing the old specification A level in 2009. Prior attainment (and participation demographics) may therefore offer an explanation for the drop in attainment at A level in 2010 (+0.05), continuing several years of rising trends.

Table 11: Physics grades achieved at GCSE for candidates completing A level physics in 2009 and 2010 (NPD)

GCSE results for candidates taking A level physics							
		Took the GCSE in 2007, completed A level in 2009			Took the GCSE in 2008, completed A level in 2010		
		Grade score	n	Std. Dev	Grade score	n	Std. Dev
GCSE Physics	Did not do A level physics	4.36	240,003	1.26	4.35	237,569	1.26
	Did A level physics	5.27	10,083	0.78	5.33	12,517	0.75

4.4.2.5 *Psychology A level*

No analysis is possible here as psychology has no clear 'predecessor GCSE'

4.4.2.6 *History A level*

Table 12 shows the average grade points achieved in GCSE history for those who went on to complete A level history in 2009 and 2010, i.e. the last cohort taking the old specification and the first group taking the new specification A level. (The table also shows GCSE results for students not taking A level history). It shows that candidates who completed the new specification A level in 2010 had the almost same grade profile (-0.01) as those completing the old specification A level in 2009. Prior attainment appears therefore to offer no explanation for the substantial increase in attainment at A level in 2010 (+0.38), continuing several years of rising trends.

Table 12: History grades achieved at GCSE for candidates completing A level history in 2009 and 2010 (NPD)

GCSE results for candidates taking A level history							
		Took the GCSE in 2007, completed A level in 2009			Took the GCSE in 2008, completed A level in 2010		
		Grade score	n	Std. Dev	Grade score	n	Std. Dev
GCSE history	Did not do A level history	3.20	774,153	1.81	3.20	772,432	1.81
	Did A level history	4.75	39,772	0.97	4.74	41,493	0.99

The above analysis considers progression in terms of a single GCSE. Given that prior GCSE attainment seems the most obvious potential predictor of A level attainment, consideration of the effects of mean GCSE score across all GCSEs attempted by candidates has also been undertaken. This second method of analysis has been done based on the ABDA dataset, which covers only a subset of A level examinations set (as shown in Table 13 below), and covers cohorts completing A levels in 2008 and 2010.

The results broadly confirm what has been seen for the NPD analysis of KS5 A level completers 2009 and 2010.

Table 13: Frequency of individuals taking each GCE A level subject, 2008 and 2010 data combined (ABDA)

A level subject	Frequency (2008+2010) ABDA	All KS5 candidates (2008+2010)	ABDA as a % of all KS5 candidates
English literature	67,537	164,566	41%
French	24,730	24,929	99%
Geography	51,090	57,071	90%
Physics	37,778	52,489	72%
Psychology	85,923	102,501	84%
Total	267,058	401,556	67%

The mean prior attainment GCSE score (ABDA Variable MN) and the final UMS for an A level qualification are correlated in the overall data set ($r = 0.52$, $p < 0.01$).

Table 14 shows mean grade scores for each ABDA A level for 2008 and 2010 (ABDA data is not available for A level in 2009).

Note that the ABDA data includes mean grade score calculated on a different basis to that used elsewhere in the report¹⁷ so the scores cannot be compared with similar calculations on the NPD data.

However, the trend is clear – in every subject, candidates completing the 2010 A levels had slightly stronger GCSE scores than their equivalents completing A levels in 2008, so the plateauing of grades observed in 2010 is not accounted for by the candidates' prior GCSE scores.

Table 14: GCSE mean grade score for A level completers in 2008 and 2010 (ABDA)

A level subject	Mean GCSE grade score for KS5 A level completers in 2010 (ABDA)	Mean GCSE grade score for KS5 A level completers in 2008 (ABDA)	Difference (2010-2008)
English Lit	6.356	6.297	0.060
French	6.921	6.890	0.031
Geography	6.385	6.282	0.103
Physics	6.762	6.709	0.053
Psychology	6.072	6.030	0.042
Total	6.383	6.316	0.067

Further analysis not included here shows that the differences between the mean GCSE scores are significant controlling for year and that the difference in mean GCSE scores between years is significant controlling for subject: young people taking these subjects had higher GCSE scores in 2010 compared to 2008.

¹⁷ ABDA uses a weighting of A*=8, A=7, B=6, C=5, D=4, E=3, F=2, G=1, U=0, and includes only those GCSEs completed in year 11.