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

Final report

Appendices

Alpha*Plus* Consultancy Ltd

Table of contents

1 Research questions	3
2 Methodology	
2.1 Centre-based case study data	
2.1.1 Centre sample	
2.2 Centre online survey: participating centres	
3 Statistical data	10
3.1 A level	
3.1.1 Mean grade score by subject	
3.2.1 Attainment in English and mathematics (legacy qualifications)	
3.2.2 Entries for English and mathematics (legacy qualifications)	19
Table of tables	
Table 1: Breakdown of the characteristics of centres involved in the third round of da (autumn 2011)	
Table 2: Subjects and roles included during second centre visit spring 2011	7
Table 3: Subjects and roles included during centre visit spring 2010	8
Table 4: Centre online survey centre characteristics table	10
Table of figures	
Figure 1: A level French mean grade score (1996-2011) (SFR)	11
Figure 2: A level French mean grade score (1996-2011) (SFR)	11
Figure 3: A level geography mean grade score (1996-2011) (SFR)	12
Figure 4: A level geography mean grade score (1996-2011) (SFR)	12
Figure 5: A level history mean grade score (1996-2011) (SFR)	13
Figure 6: A level history mean grade score (1996-2011) (SFR)	13
Figure 7: A level physics mean grade score (1996-2011) (SFR)	14
Figure 8: A level physics mean grade score (1996-2011) (SFR)	14
Figure 9: A level psychology mean grade score (1996-2011) (SFR)	15
Figure 10: A level psychology mean grade score (1996-2011) (SFR)	15
Figure 11: A level English mean grade score (1996-2011) (SFR)	16
Figure 12: A level English mean grade score (1996-2011) (SFR)	16
Figure 13: GCSE English mean grade score (2002-2011) (JCQ)	17
Figure 14: GCSE English mean grade score (2002-2011) (JCQ)	17
Figure 16: GCSE mathematics mean grade score (2001-2011) (JCQ)	18
Figure 17: GCSE mathematics mean grade score (2001-2011) (JCQ)	18
Figure 18: GCSE English entries (2002-2011) (JCQ)	19
Figure 19: GCSE mathematics entries (2002-2011) (JCQ)	19

1 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).

2 Methodology

2.1 Centre-based case study data

2.1.1 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 a Further Education (FE) college and a secondary school. Table 1 below gives a breakdown of case study centre characteristics for the 2011 round of data collection.

Table 1: Breakdown of the characteristics of centres involved in the third round of data collection (autumn 2011)

Centre No.	Type of School	Selective/ non- selective	School Category	Region	Age Range	Gender of intake	Ofsted rating
			Foundation	0 - 11			
1	Secondary	Non- selective	School / Comprehensive	South East	11 -18	Mixed	1
I.			•		11-10	IVIIXEU	I
_	6th Form	Non-	Sixth Form	Yorkshire	40 40	NA:	4
5	College	selective	College	& Humber	16 - 19	Mixed	1
_	0	Non-	0	South	44 40	N 41	0
7	Secondary	selective	Comprehensive	East	11 - 18	Mixed	3
	0	Non-	0	Yorkshire	44 40	N 41	0
8	Secondary	selective	Comprehensive	& Humber	11 - 18	Mixed	2
40	0	Non-	0	East of	40 40	N diament	0
12	Secondary	selective	Community	England	13 - 18	Mixed	2
40	Casandami	Non-	Community.	West	44 40	Missad	2
13	Secondary	selective Non-	Community	Midlands	11 - 18	Mixed	2
4.4	Casandami	selective	Community.	East of	40 40	Missad	
14	Secondary Primary &	Selective	Community	England South	13 - 18	Mixed	1
15	Secondary	Selective	Independent	East	3 - 18	Girls	Outstanding
13	6th Form and	Selective	паерепаета	Easi	3-10	GIIIS	(ISI)
	FE College	Non-		South			
16	(offer GCSEs)	selective	Community	East	16 - 19	Mixed	2
10	Secondary (incl.	Non-	Community	East	10 - 19	Mixed	
17	6 th Form College)	selective	Community	Midlands	11 - 18	Mixed	2
17	6 Form College)	Non-	Community	East of	11 - 10	IVIIAEG	
18	Secondary	Selective	Foundation	England	11–18	Mixed	2
10	Occorridary	Ocicotive	Todridation	East of	11 10	WIIXCG	
19	Secondary	Selective	Foundation	England	11-18	Mixed	3
	Geogradary	Non-		East of			
20	Secondary	selective	Community	England	11-19	Mixed	2
	Geogradary	Non-	Community	West			_
21	Secondary	Selective	Community	Midlands	11-16	Mixed	3
	<i> </i>	Non-	Voluntary	North			
22	Secondary	Selective	Controlled	West	11-18	Mixed	2
				East of	-		
23	Secondary	Selective	Foundation		England 13-19 Mixed		1
	Secondary (inc	Non-		North			
24	6 th Form)	selective	Community	Yorkshire	11-18	Mixed	2

2.1.2 Case study sample coverage

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

Table 2: 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	Vice Deignig einel		✓	✓				√	✓	√	√	√		1	4	1	0 4.0
6	Vice Principal Two Area Programme Managers (sciences and humanities)							V	√	✓ ✓	>	*	✓	3	1	5	6 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	4 40
16	11 14 1	✓		√				✓	√		✓		✓	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 3: 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	✓	
9	Community School	Secondary			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	7		7	x2 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
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															4			

2.2 Centre online survey: participating centres

A breakdown of centres that responded to the centre online survey by key characteristics can be found in Table 4 below.

Table 4: Centre online survey centre characteristics table

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

3 Statistical data

3.1 A level

3.1.1 Mean grade score by subject

For each subject of focus at A-level, a breakdown of mean grade score by gender and year is provided, based on the SFR data of entries for 16-18 year olds at the start of the academic

year (i.e. those in KS5). Also provided for each subject is a graph indicating the difference in mean grade score between males and females each year, also based on the SFR data.

3.1.1.1 French

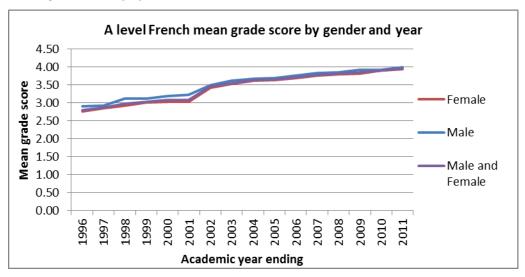


Figure 1: A level French mean grade score (1996-2011) (SFR)

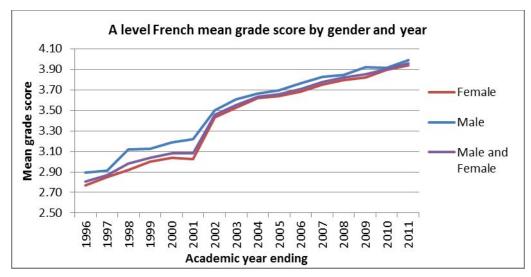


Figure 2: A level French mean grade score (1996-2011) (SFR)

At A level, both males' and females' mean grade score has increased since 2010, with males' mean grade score increasing from 3.92 in 2010 to 3.99 in 2011 and females' mean grade score increasing from 3.89 in 2010 to 3.94 in 2011. Overall mean grade score has increased by 0.06 from 3.90 in 2010 to 3.96 in 2011. Thus, despite a plateauing of males' grade profiles in the first year that the new specification A level was awarded, these grades continue their yearly increase again in 2011.

The gender gap in terms of mean grade score is small but has widened a little since 2010. Males continue to out-perform females, with the difference in mean grade score increasing from 0.02 to 0.05 at A level and from 0.05 to 0.08 at AS-level.

3.1.1.2 Geography

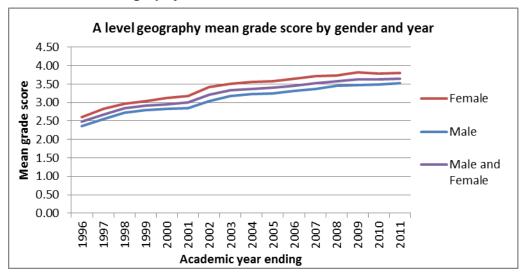


Figure 3: A level geography mean grade score (1996-2011) (SFR)

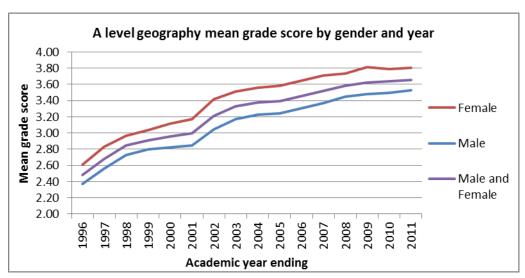


Figure 4: A level geography mean grade score (1996-2011) (SFR)

At A level, both females' and males' mean grades have continued to increase a little, with females' mean grade score rising from 3.79 in 2010 to 3.81 in 2011 and males' mean grade score rising from 3.49 in 2010 to 3.53 in 2011. Overall mean grade score has increased from 3.64 in 2010 to 3.65 in 2011. The rate by which mean grades increase yearly appears to have reduced since 2010, the year in which the new specification A level was awarded, i.e. continuing the observed plateauing seen in 2010.

The difference in average attainment between males and females has decreased a little from 0.30 in 2010 to 0.28 in 2011.

3.1.1.3 History

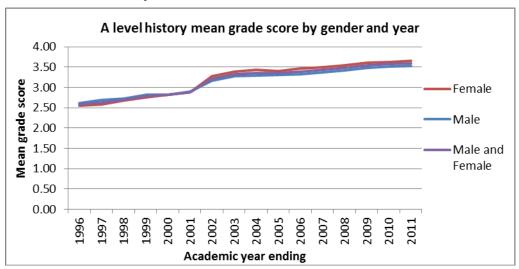


Figure 5: A level history mean grade score (1996-2011) (SFR)

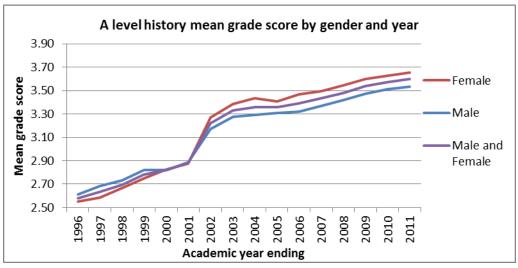


Figure 6: A level history mean grade score (1996-2011) (SFR)

At A level, the mean grade has increased for both females and males. Females' mean grade score has risen from 3.63 in 2010 to 3.66 in 2011 and males' mean grade score has risen from 3.51 in 2010 to 3.53 in 2011. Overall mean grade score has risen from 3.57 in 2010 to 3.60 in 2011.

The difference in mean grades between males and females has remained similar to last year. Males' mean grade score increased slightly less than females' between 2010 and 2011 so the gap has increased marginally from 0.11 to 0.12.

3.1.1.4 Physics

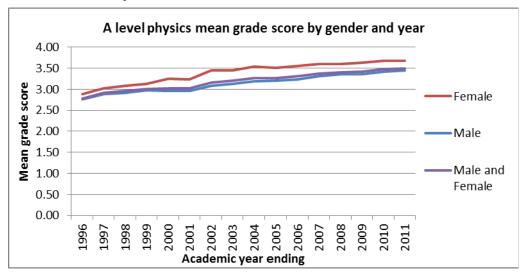


Figure 7: A level physics mean grade score (1996-2011) (SFR)

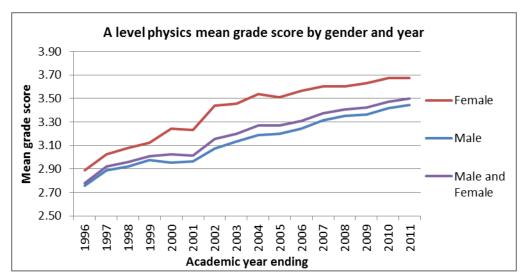


Figure 8: A level physics mean grade score (1996-2011) (SFR)

At A level both females' and males' mean grade scores have improved very slightly - females' mean grade score has risen from 3.67 in 2010 to 3.68 in 2011, while males' mean grade score has risen from 3.42 in 2010 to 3.45 in 2011. Overall, the increasing trend seen in previous years has continued, with total mean grade score rising from 3.47 in 2010 to 3.50 in 2011.

Females continue to perform significantly better than males. The gender gap in attainment has narrowed since 2010, with difference in mean grade score closing from 0.28 to 0.23.

3.1.1.5 Psychology

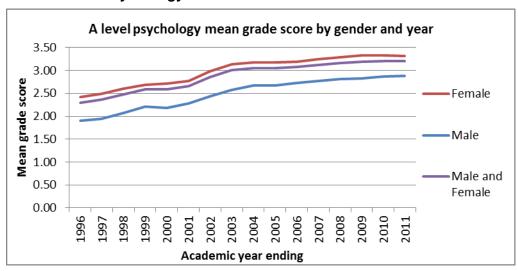


Figure 9: A level psychology mean grade score (1996-2011) (SFR)

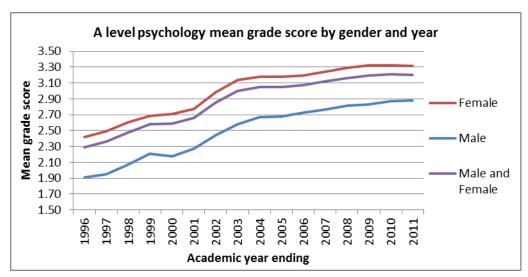


Figure 10: A level psychology mean grade score (1996-2011) (SFR)

At A level, females' and overall mean grades are on average only very slightly lower than in 2010, with mean grade scores having decreased from 3.33 and 3.21 in 2010 to 3.32 and 3.20 in 2011, respectively. In contrast males' mean grades have increased slightly from 2.87 to 2.88. None of these changes are particularly large, and in general it attainment appears to have plateaued in the 2 years that the new specification A level has been awarded.

Females continue to perform significantly better than males although the gender gap in mean grades has narrowed since 2010, with difference in mean grade score closing a little from 0.45 to 0.43.

3.1.1.6 English

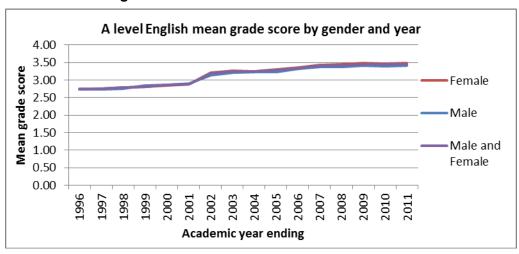


Figure 11: A level English mean grade score (1996-2011) (SFR)

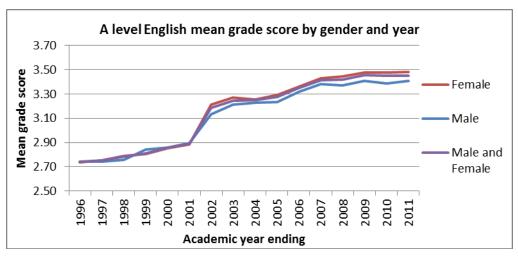


Figure 12: A level English mean grade score (1996-2011) (SFR)

Since statistical data is not available for English literature individually for 2011¹, the data discussed here represents the A level English subject as a whole i.e. they include results for English language, English literature and English language and literature.

Figures provided by JCQ² indicate that around 55% of the UK's English A level results in 2010 were from English literature. Though the charts developed for the report are based on data from the SFR, this statistic provides a very rough indication as to what proportion of the overall English results are made up by English literature results. However, it must be taken into account that the 55% figure is only based on data from 2010, which includes all candidates from the UK (not just England) and also represents a different cohort of candidates to those in the SFR. Nevertheless, assuming similar participation trends in the English A levels between different cohorts and years, it is likely that around 50-60% of the results which contribute to the English results reported here are from English literature candidates.

-

¹ SFR data

² JCQ June 2010 GCE A level English specifications – All awarding bodies (UK candidates only). Candidates contribute once only for each specification completed. Acquired 18-11-2011.

With those caveats, A level results have continued to plateau: Overall and female mean grade scores have remained constant between 2010 and 2011 at 3.45 and 3.48, respectively, while male mean grade score has increased from 3.39 to 3.41.

The difference in mean grade score between males and females has decreased from 0.09 to 0.07, with females continuing to out-perform males.

3.2 GCSE

3.2.1 Attainment in English and mathematics (legacy qualifications)

3.2.1.1 English

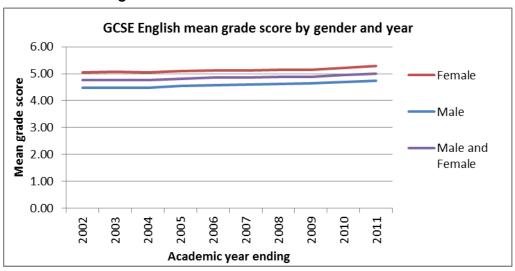


Figure 13: GCSE English mean grade score (2002-2011) (JCQ)

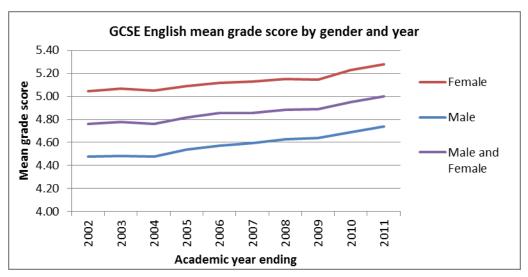


Figure 14: GCSE English mean grade score (2002-2011) (JCQ)

3.2.1.2 Mathematics

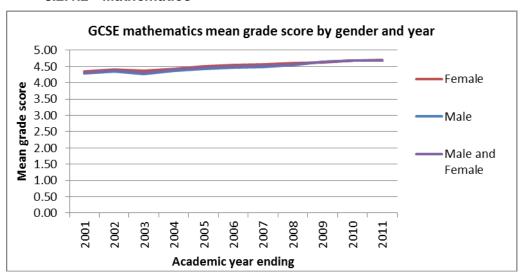


Figure 15: GCSE mathematics mean grade score (2001-2011) (JCQ)

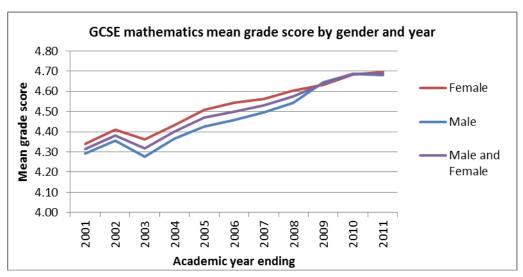


Figure 16: GCSE mathematics mean grade score (2001-2011) (JCQ)

3.2.2 Entries for English and mathematics (legacy qualifications)

3.2.2.1 English

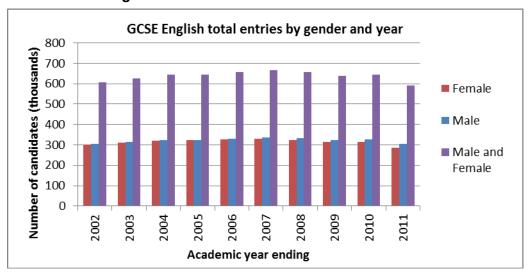


Figure 17: GCSE English entries (2002-2011) (JCQ)

3.2.2.2 Mathematics

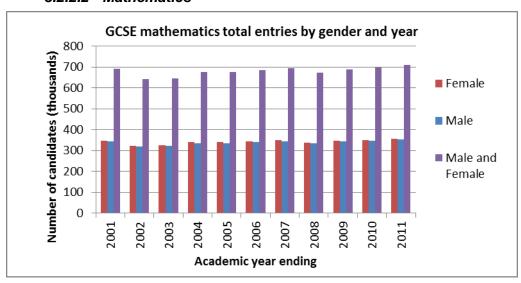


Figure 18: GCSE mathematics entries (2002-2011) (JCQ)