

# ANNUAL QUALIFICATIONS INSIGHT 2017





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# Annual Qualifications Insight 2017

## Chief Executive Preface



CCEA plays a key role to support teachers and learners throughout the years of compulsory education and beyond. We provide advice to government on what's taught and assessed in local schools, develop and administer a wide range of qualifications, including GCSE and A level courses, and we act as regulator for all general and vocational qualifications offered in Northern Ireland. Our mission is to enable the full potential of all learners here to be achieved and recognised.

Each year the CCEA Awarding Organisation generates a significant amount of data, charting participation and performance in Northern Ireland GCSE and GCE examinations. Our Insight publication provides an in depth look at trends and patterns, in both GCSE and A-Level data, in more detail than we would normally be able to cover during the results period in August 2017.

The report contains analysis and a broad forecast, based on historic trends and patterns for GCSE and GCE qualifications. It aims to promote discussion and engagement on educational matters, supporting policy makers, education professionals and industry to work together to improve education in Northern Ireland.

As with all public sector organisations, we are committed to opening our data for analysis, transparency, accountability and efficiency. Our approach with the Insights Report has the potential to encourage new commercial opportunities and drive economic growth and innovation across the education sectors. The report will also be available via the Open Data Portal, demonstrating our support to the Digital NI 2020 initiative.

A handwritten signature in black ink that reads "Justin Edwards". The signature is written in a cursive style.

**Justin Edwards**

Chief Executive

Council for the Curriculum, Examinations and Assessment (CCEA)

# 1 Executive Summary

## 1.1 GCSE

- GCSE results have improved with an increase in A\*–C grades.
- Performance in English continues to rise.
- At Grades A (7)–C (4) Mathematics is at its highest level of attainment since 2015, recovering from a slight decline in 2016.
- Performance in English has improved notably; female candidates still outperform males.
- GCSE candidates tend to perform better in languages compared to other subject categories.
- Proportional entry for STEM subjects has increased steadily over the last five years.

Across Northern Ireland, the 2017 entries for GCSE have declined considerably on 2016, falling by 3.2%. This follows a decline of 5.5% between 2015 and 2016. The declines in entries are in line with the falling age of the population.

The proportion of entries awarded A\*–C grades has increased by 0.7 percentage points this year to 79.8%. Entries achieving A\*–A have increased by 0.6 percentage points to 29.7%. The number of entries achieving the top A\* grade now sits at 10%, an increase of 0.7 percentage points on 2016.

This year, performance in Mathematics increased slightly with 66.4% of entries achieving A(7)–C(4) grades, up 1.5 percentage points on 2016. Performance in English continued to improve with A(7)–C(4) grades now representing 79.6% of entries in the subject, a rise of 1.8 percentage points.

Female candidates have made a notable contribution to this year's rise in total performance with the percentage of female entries achieving A\*–C increasing by 0.9 percentage points in 2017 to 83.8%. Male candidates' performance has also increased by 0.4 percentage points at A\*–C (75.7%). Female candidates are still well ahead in GCSE performance. The performance gap at A\*–C sits at 8.1%, an increase of 0.5 percentage points on the previous year.

The total number of entries in GCSE examinations in Northern Ireland has fallen by 3.2% to 156,806.

The proportion of entries in STEM subjects (Science, Technology, Engineering and Mathematics) has grown by 2.6% over the last five years. On average,

83.7% of candidates achieve at least a Grade C in STEM subjects. Proportionally, the split between male and female STEM candidates has remained consistent, with roughly a 55/45 split in favour of male candidates.

Overall, entries for languages fell in numerical terms in 2017. However, the overall share of the candidature for languages has remained at the previous year's level of 7.3%. French is becoming less popular, while Spanish is becoming more popular. This trend has been observed since 2013. Language performance still continues to be high with 89.3% of all candidates achieving at least a Grade C.

The Arts and Humanities are becoming a less popular subject choice at GCSE, particularly among male candidates. In the last year almost 1,000 fewer male candidates (-994) studied these subjects at GCSE. This has contributed to the overall decline in the entries for these subjects. On average 81.6% of candidates achieve at least a Grade C in Arts and Humanities subjects.

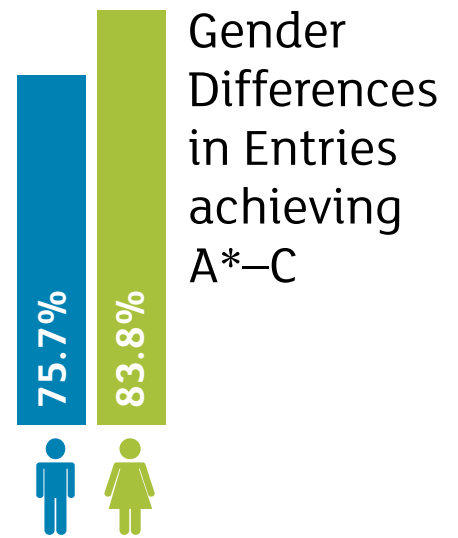
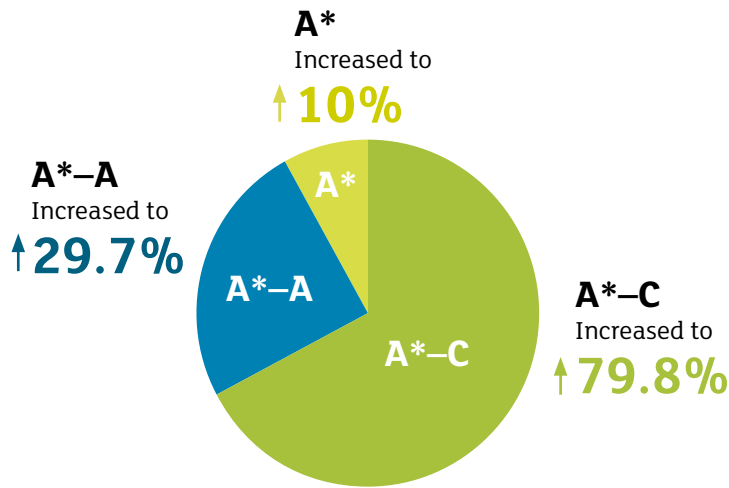
Three Country GCSE results have improved. This is in keeping with the trend observed in Northern Ireland. Statistics show that:

- Grade A\* increased by 0.6 percentage points to 7.1%;
- Grades A\*–A increased by 0.8 percentage points to 21.3%; and
- Grades A\*–C decreased by 1.6 percentage points to 65.3%.

Candidates took a total of 5,443,072 GCSEs across the three countries. This is an increase of 3.9% on the previous year.

# GCSE

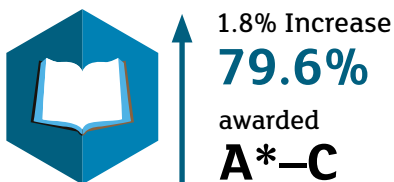
## Overall Northern Ireland Outcomes



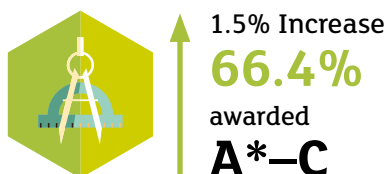
GCSE RESULTS HAVE IMPROVED WITH AN INCREASE IN A\*-C GRADES.

### Increases in Performance for English and Mathematics

#### English



#### Mathematics



### Three Countries

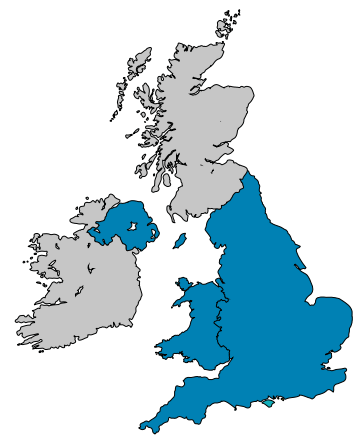
Grade A\* increased by 0.6% to:



Grades A\*-A increased by 0.8% to:



Grades A\*-C decrease by 1.6% to:



### STEM Subjects

On average **83.7%** of all candidates achieving **at least a Grade C**



The proportion of entries in STEM subjects has grown by 2.6% over the last five years.



## 1.2 GCE A Level

- Mathematics is now the most popular A level in Northern Ireland.
- Over the last five years, STEM subjects have been the most popular based on the overall percentage entry.
- Northern Ireland continued as the top performing region in the Three Country comparison at Grades A\*–A and A\*–E.

GCE A level results issued to candidates in Northern Ireland in August 2017 show a decrease in numbers taking A levels this year. Overall A level entries decreased by 3.6% from 31,828 in 2016 to 30,684 this year.

Candidates continue to perform strongly at A level, with an overall A\*–E pass rate of 98.3%. There was an increase in those awarded the top grade, with 8.1% of entries receiving an A\*, up 0.4 percentage points on last year. The percentage of entries achieving A\*–A also increased to 30.4%, up by 0.9 percentage points. Female candidates still account for most of the A\*s awarded (8.7%). This year the percentage of male candidates achieving the highest grade declined by 0.3 percentage points to 7.2%.

Participation in STEM subjects remains strong. In 2017, STEM candidature decreased by 0.6%, which could be explained by the decline in Biology, Chemistry and Physics candidature. Since 2013 the overall share of STEM has increased from 39% to 39.2%.

Similar to the trends noted at GCSE, the Arts and Humanities subjects are becoming less popular at this level. This has been driven by year-on-year reductions in candidates taking subjects such as Art and Design, English and Music. Proportional entry for the Arts and Humanities has been in consistent decline since 2013 (-1.5%). This mirrors the trends identified at AS.

The Three Country results for A level show there is relative stability in performances of both male and female candidates across the grades. Grades A\*, A\*–A, and A\*–E varied between 0.1 and 0.9 percentage points on the previous year.

The number of A levels taken in the Three Countries has also declined by -1% compared with 2016, from 836,705 to 828,355.



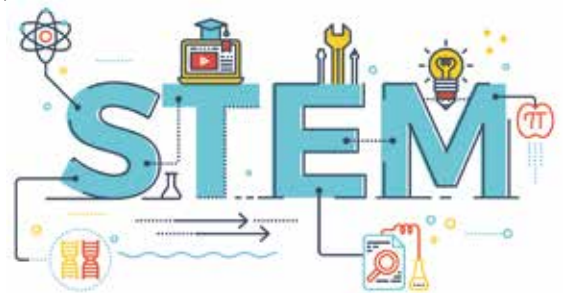
## GCE



## STEM

Over past five years, STEM subjects are most popular based on overall % entry

Since 2013, the overall share of STEM has increased from 39% to 39.2%



## Three Countries

N.I. is Top Performing Region

across the Three Countries at Grades A\*–A and A\*–E



Overall A\*–E pass rate increasing to **98.3%**



An increase in those awarded the top grade, with **8.1% of entries achieving an A\***, an increase of **0.4% since last year**



## Overall A Level Entries

Overall A Level entries decreased by **3.6%**

31, 828 in 2016 to **30,684** in **2017**



**% OF ENTRIES ACHIEVING A\*–A ALSO INCREASED TO 30.4%, AN INCREASE OF 0.9%**



## 2

# Introduction

## 2.1 Background/Rationale

This document is a comparative analysis aimed at identifying trends in 16–18 year old students' uptake of selected GCSE, AS and A level subjects over five and ten year periods. This analysis aims to give stakeholders a summary of the trends in these subjects over these periods, raising issues for debate and discussion.

## 2.2 Analysis

The analysis focuses on notable changes in entry and performance across Sciences, Technology, Engineering and Mathematics (STEM), Languages, and Arts and Humanities subjects at GCSE, AS and A level. The analysis assesses male and female students over five and ten year periods (where applicable).

The STEM subjects included in the analysis at GCSE are:

- Biology
- Chemistry
- Physics
- Mathematics (including Further Mathematics)
- ICT
- Computing
- Engineering and
- Design and Technology.

At AS and A level, the STEM subjects examined are identical, except for engineering.

At GCSE, AS and A level, this document reviews French, German, Irish and Spanish. At GCSE, the Arts and Humanities subjects considered are:

- Art and Design
- Classical Subjects
- English (Language and Literature)
- History
- Music
- Religious Studies
- Drama (including Performing and Expressive Arts) and
- Social Sciences.

At AS and A level, all the subjects listed above are considered, with the exception of English Language, which is not available at this level. Political Studies and Law are also considered under this category.

Business Studies, Geography and Media or Film Studies are considered in a separate section.

Trends in performance and entry figures for the subjects detailed above are examined for all Northern Ireland students, irrespective of awarding organisation.

The report takes putative information and forecasts subject entries for the next five years. This analysis was conducted using prior entry data, population and economic projections.

## 2.3 Revisions to CCEA Analysis

The first CCEA Annual Insight Report (2015), assessed uptake at GCSE, AS and A level including the total number of subject-specific student entries and how this varies from year to year. A CCEA Research and Statistics (R and S) meeting, that took place before starting this research, concluded that although this method of analysis successfully detailed numerical changes in student entry, it did not consider proportional entry.

Student populations tend to fluctuate year-on-year. This probably has a knock-on effect on the pool of entry for certain subjects. So, although numbers within a certain subject may decline, this may not be symptomatic of the subject becoming less popular among students. It could instead be caused by overall decline in the student population for that year.

Therefore, in order to take into account changes in population, the previous Annual Insight Report (2016) took proportional entry (the total number of students as a proportion of population) into consideration alongside numerical entry for GCSE, AS and A level.

We have implemented this analysis method again in this report.

## 2.4 Report Structure

The first section of this report provides the summary analysis for GCSE subjects and grade outcomes for the 2013–2017 period. Similarities and differences between the entry figures for each year for all male and female Northern Ireland students are outlined. Notable entry patterns are highlighted. This is followed by an equivalent summary analysis for AS and A level.

The report also takes an in depth look at gender differences in subject choice, examination outcomes and performance probability. The previous Insight Report considered GCSEs. This report focuses on A levels taken in Northern Ireland and how this has changed over the last ten years.

The report also looks ahead at subject entries for the next five years, using prior entry data, population and economic projections.

The rest of this document is structured as follows:

- Section 3: GCSE level;
- Section 4: AS–A level;
- Section 5: A level;
- Section 6: Other Subjects (GCSE, AS and A level);
- Section 7: Gender Analysis (A level);
- Section 8: Projected entries; and
- Section 9: Conclusions.

## 2.5 Changes to GCSE, AS and A level qualifications in England, Wales and Northern Ireland

Awarding organisations based in England and WJEC (Eduqas) have been introducing reformed GCSE qualifications for first teaching from September 2015. These reformed GCSE qualifications are linear. They use a 9–1 grading scale, with grade 9 being the highest grade achievable. Summer 2017 saw the first award of GCSE English Language, English Literature and Mathematics using this new format. The rest of the reformed GCSEs will be awarded for the first time in 2018 or 2019.

CCEA has recently introduced its new suite of revised GCSEs for first teaching in September 2017. These qualifications will be awarded for the first time in summer 2019, using an A\* to G grading scale that includes a new C\* grade. WJEC has retained the old A\* to G grading scale that does not include a C\* grade. As a consequence, the Northern Ireland Minister for Education has determined that WJEC GCSE qualifications using lettered grades should no longer be available in Northern Ireland from September 2017 (first teaching)<sup>1</sup>.

Reformed AS and A level qualifications offered by WJEC (Eduqas) and awarding organisations based in England have been introduced for first teaching over a 3 year period from 2015 to 2017. As with the reformed GCSEs, these qualifications are linear: all exams are taken at the end of the course. Importantly, the AS qualification no longer contributes to the full A level. It is a stand-alone qualification.

WJEC and CCEA have retained the unitised nature of their AS and A level qualifications. However, the weighting of the AS component has decreased from 50 percent to 40 percent. Like awarding organisations based in England, WJEC has phased in its new AS and A level qualifications over 3 years from 2015 to 2017, whereas CCEA introduced nearly all of its revised AS qualifications for first teaching in September 2016.

<sup>1</sup> WJEC qualifications offered under the Eduqas banner will use 9-1 grading and will be available in N. Ireland.

## 3

## GCSE Level

The General Certificate of Secondary Education (GCSE) is an internationally recognised qualification awarded in a specified subject. Pupils generally take these qualifications in a number of subjects in post-primary education in Northern Ireland.

The GCSE qualification is a brand shared across Northern Ireland, England and Wales (Three Countries).

Although the principles of the brand remain constant, devolution across the Three Countries is increasingly diversifying the format of the qualifications in each region.

GCSE Mathematics, English and ICT qualifications are equivalent to Level 1 (grade G–D) or Level 2 (grade C–A\*) Essential Skills Numeracy, Literacy and ICT qualifications in Northern Ireland. Some pupils may decide to take one GCSE or more before or after they sit others. Anyone may apply to take GCSEs at any point either internally through an institution or externally.

### 3.1 GCSE Entries and Performance (Overall)

Across Northern Ireland, the 2017 entries for GCSE have declined considerably since 2016, falling by 3.2%. This follows a decline of 5.5% between 2015 and 2016. These declines in entries are in-line with the falling population age.

The total number of GCSEs candidates take across the Three Countries was 5,443,072, making Northern Ireland candidates accountable for 2.9% of the overall entries. The age profile of GCSE candidates in Northern Ireland remains stable and in-line with 2016.

**Table 1: Number of 15–17 year olds at GCSE 2016–2017**

Age	2016	2017
15 year olds	4,688	3,802
16 year olds	123,029	120,210
17 year olds	34,258	32,794
<b>Total</b>	<b>161,975</b>	<b>156,806</b>

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2016–2017

Overall in 2017, there was a 0.7% point increase at A\* from 9.3% to 10.0% for Northern Ireland candidates. Grades A\*–A also show a 0.6% increase to 29.7%. Grades A\*–C increased by 0.7% to 79.8%. Grades A\*–G showed no change from last year.

In Northern Ireland female candidates continue to outperform males at A\* by 5.5%, at A\*–A by 11.6%, at A\*–C by 8.1% (an increase of 0.5 percentage points on the previous year), and at A\*–G by 0.6%. This gender trend is the same across the Three Countries.

Furthermore, Northern Ireland candidates have consistently outperformed the Three Countries candidates across all grades and genders.

**Table 2: Three Country and Northern Ireland Performance (Gender)**

2017 provisional (2016 figures in brackets)	Overall		Males		Females	
	NI	Three Country	NI	Three Country	NI	Three Country
<b>%A*</b>	10.0 (9.3)	7.1 (6.5)	7.2 (7.2)	5.4 (5.0)	12.7 (11.4)	8.8 (7.9)
<b>%A*-A</b>	29.7 (29.1)	21.3 (20.5)	23.9 (24.1)	17.4 (16.8)	35.5 (34.0)	25.0 (24.1)
<b>%A*-C</b>	79.8 (79.1)	65.3 (66.9)	75.7 (75.3)	60.8 (62.4)	83.8 (82.9)	69.7 (71.3)
<b>%A*-G</b>	99.0 (99.0)	98.5 (98.4)	98.7 (98.8)	98.0 (98.0)	99.3 (99.3)	98.9 (98.8)

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland and Three Country), 2013–2017

The five most popular subjects at GCSE in 2017 are detailed in the table below:

**Table 3: Most Popular GCSE Subjects**

	Overall	Male	Females
<b>1</b>	Mathematics (15.3%)	Mathematics (15.3%)	Mathematics (15.2%)
<b>2</b>	English (13.9%)	English (14.2%)	English (13.5%)
<b>3</b>	Religious Studies (7.3%)	Religious Studies (6.6%)	Religious Studies (7.9%)
<b>4</b>	English Literature (6.5%)	English Literature (5.8%)	English Literature (7.1%)
<b>5</b>	ICT (5%)	ICT (5.8%)	Home Economics (4.6%)

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Additional analysis will be based on various subject categories.

### 3.2 GCSE Mathematics and English (Entries and Performance)

Language and Literacy, and Mathematics and Numeracy make up two of the nine statutory areas of learning at GCSE in Northern Ireland. Both Mathematics and English Language are therefore considered separately as well as being assessed in their respective subject categories.

The following section details information on GCSE candidates' performance in Mathematics and English over the last five academic years (2013–2017).

There were 23,963 entries in GCSE Mathematics and 21,720 entries in GCSE English. Of these entries, 1,080 were taken with an assessment organisation that offered the revised 9–1 grade scale in Mathematics. In total, there were 90 such candidates for GCSE English. This represents 4.5% of the Mathematics cohort and 0.4% of the English cohort.

For comparison with Three Country performance, the revised grading will be assessed in this section.

**Table 4: Mathematics and English Performance (Overall) (2013–2017)**

			Cumulative Percentages by Grade					
Subject	Year	Number Sat (NI)	NI			Three Country		
			A/7	C/4	G/1	A/7	C/4	G/1
Mathematics	2013	25,578	21.9	64.6	98.3	14.3	57.6	92.6
	2014	25,954	22.0	66.2	98.1	15.2	62.4	96.0
	2015	26,808	21.7	66.6	98.0	16.5	63.3	96.5
	2016	24,827	21.1	64.9	97.1	15.9	61.0	96.5
	2017	23,963	22.2	66.4	97.0	5.2	59.4	97.0
English	2013	24,079	18.5	68.8	99.5	14.1	63.5	98.1
	2014	23,510	20.3	73.0	99.6	14.3	61.7	98.9
	2015	23,471	21.1	75.8	99.6	14.6	65.4	98.7
	2016	22,102	22.0	77.8	99.7	13.7	60.2	97.9
	2017	21,720	22.9	79.6	99.5	13.6	62.1	98.6

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland and Three Country), 2013–2017

Table 4 presents information on GCSE candidates' performance in Mathematics and English over the last five academic years: 2013–2017.

As illustrated, between 64.6% and 66.6% of Northern Ireland candidates achieved grades A(7)–C(4) in Mathematics over this five-year period, whereas between 68.8% and 79.6% achieved grades A(7)–C(4) in English over the same period.

The table shows that the overall proportion of candidates who achieved A(7)–C(4) grades for Mathematics in 2017 is considerably smaller than the proportion of candidates achieving these grades for English.

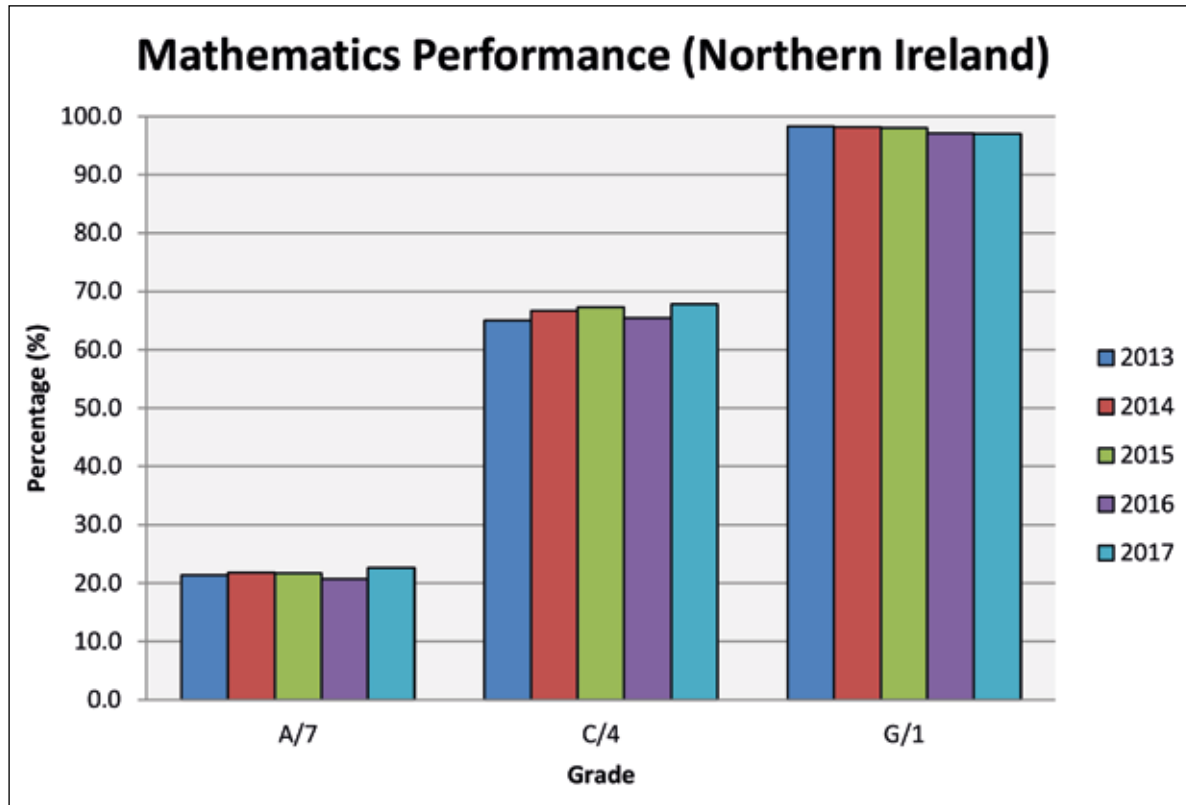
At grades A(7)–C(4) Mathematics is at its highest level of attainment since 2015, recovering from a slight decline in 2016. However, at these grades, the improvements in English performance over this time have been greater and more consistent.

Over the past year, the proportion of candidates achieving A(7)–C(4) grades in Mathematics has increased to 66.4% (an increase of 1.5%). The percentage of candidates achieving A(7)–C(4) grades in English has increased to 79.6%.

The attainment gap at A(7)–C(4) between these two subjects is currently 13.2%. This is larger than the gap observed in 2016 (12.9%). This has increased from a 4.2% gap in 2013.

Similar trends in performance between English and Mathematics are also noted at grades A(7).

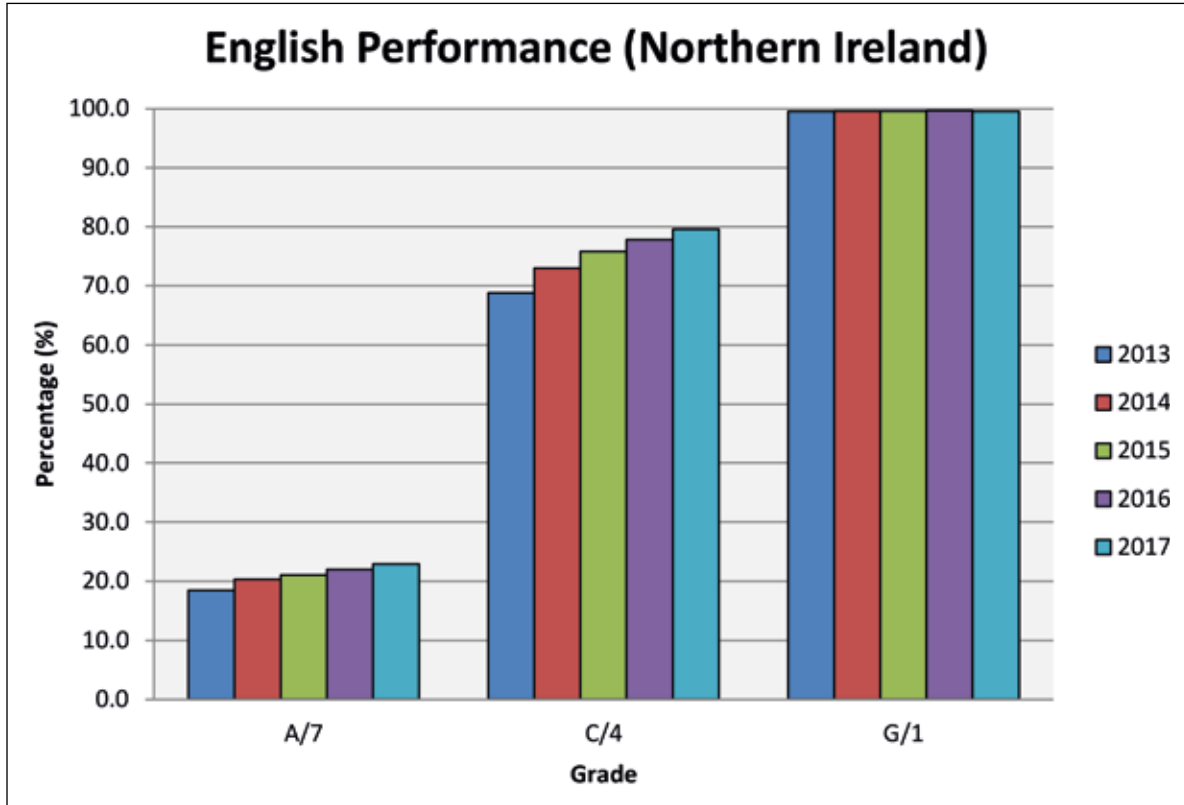
Candidates in Northern Ireland continue to show higher performance in English and Mathematics across all grades than the Three Country performance.

**Figure 1: Mathematics Performance (Northern Ireland) (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

At grades A(7)–C(4), there were slight improvements in performance between 2013 and 2015, followed by a decline of 1.7% in 2016. Performance at grades A and C is at its highest level in since 2015.



**Figure 2: English Performance (Northern Ireland) (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Across all grades, performance at GCSE English has increased year-on-year since 2013.

When grades A(7)–C(4) are considered, the proportion of candidates achieving these grades has increased steadily year-on-year since 2013 from 68.8% to 79.6%.

Similarly the proportion of candidates achieving grades A(7) has also increased year-on-year since 2013, from 18.5% to 22.9%.

The subsequent tables and figures in this sub-section considers whether there are any trends to be noted when gender is considered.

**Table 5: Mathematics and English Performance (Male) (2013–2017)**

			Cumulative Percentages by Grade					
Subject	Year	Number Sat (NI)	NI			Three Country		
			A/7	C/4	G/1	A/7	C/4	G/1
Mathematics	2013	12,458	21.4	65.0	98.4	14.6	58.0	92.3
	2014	12,696	21.8	66.7	98.0	15.7	62.5	95.7
	2015	13,270	21.7	67.3	98.0	17.3	63.9	96.3
	2016	12,252	20.7	65.4	96.9	16.3	61.3	96.2
	2017	11,272	21.4	66.3	96.7	16.3	59.9	96.7
English	2013	12,049	13.0	61.8	99.8	9.5	56.2	97.4
	2014	11,743	14.0	66.4	99.5	9.6	53.8	98.6
	2015	11,842	14.4	69.8	99.4	9.6	57.7	98.4
	2016	11,255	15.6	71.9	99.5	9.0	52.3	97.3
	2017	11,020	15.5	73.7	99.3	9.0	53.9	98.0

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Table 5 above presents information on male GCSE candidates' performance in Mathematics and English over the last five academic years: 2013–2017.

Between 65% and 66.3% of male Northern Ireland candidates achieved grades A(7)–C(4) in Mathematics over the five-year period, whereas between 61.8% and 73.7% achieved grades A(7)–C(4) in English over the same period.

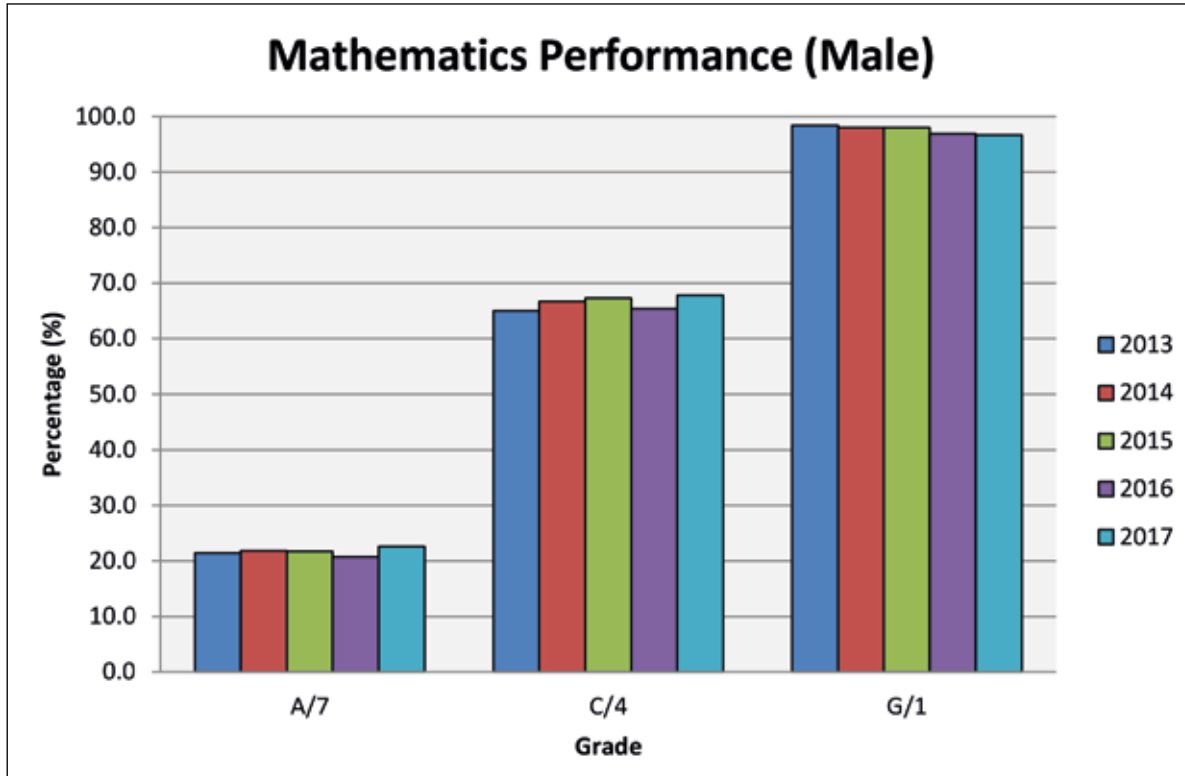
Similar to overall performance, the proportion of male candidates achieving grades A(7)–C(4) in Mathematics improved slightly between 2013 and 2015 and then declined in 2016. However, that attainment has improved in the last year.

In GCSE English, there has been a continual improvement in performance over the five-year period.

Over the last five years, the proportion of male candidates achieving grades A(7)–C(4) in English has increased by 11.9%. Over the past three academic years, male candidates have performed better in English compared to Mathematics, whereas for the preceding years the opposite trend was observed.

At grade A(7), male candidates' Mathematics attainment has increased significantly in 2017, following a decline in the previous year. English attainment has, in the main, increased year-on-year since 2013.

**Figure 3: Male Mathematics Performance (Northern Ireland) (2013–2017)**



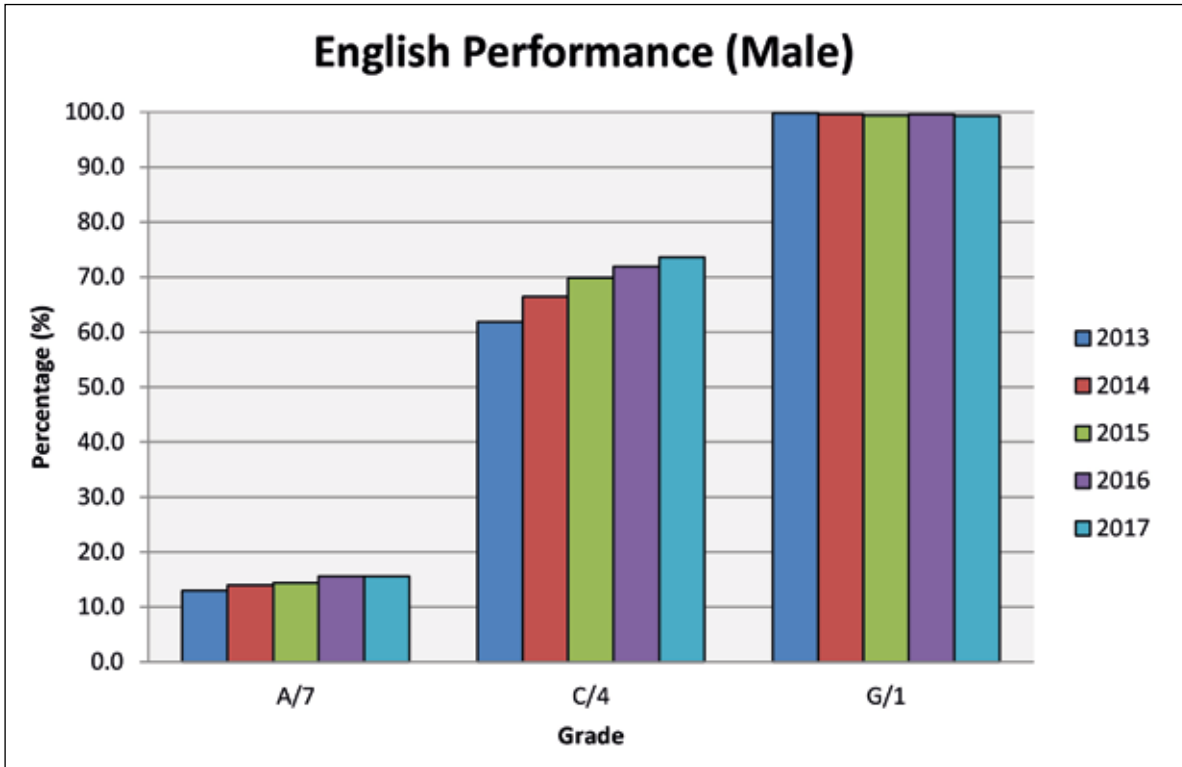
Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Male candidates in GCSE Mathematics have achieved their highest level of performance across grades A(7) and A(7)–C(4).

Attainment across all grades is at its highest level since 2015. This is particularly encouraging as there was a general decline in performance at GCSE in the previous year.

The proportion of male candidates achieving an A(7) grade has ranged from 20.7% to 21.8% over these years.

Over the last year, male performance in GCSE Mathematics at grades A(7)–C(4) has increased from 65.4% to 66.3%.

**Figure 4: Male English Performance (Northern Ireland) (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

For all grades (excluding G(1)), male performance at GCSE English has increased year-on-year since 2013.

When grades A(7)–C(4) are considered, the proportion of male candidates achieving these grades has increased steadily year-on-year since 2013 from 61.8% to 73.7%.

Similarly, the proportion of male candidates achieving grade A(7) has increased from 13% to 15.5%.

This reflects the overall trends noted previously.

**Table 6: Mathematics and English Performance (Female) (2013–2017)**

			Cumulative Percentages by Grade					
Subject	Year	Number Sat (NI)	NI			Three Country		
			A/7	C/4	G/1	A/7	C/4	G/1
Mathematics	2013	13,120	22.4	64.1	98.3	14.0	57.3	97.4
	2014	13,258	22.2	65.8	98.0	14.6	62.3	96.3
	2015	13,538	21.7	66.0	98.1	15.6	62.6	96.6
	2016	12,575	21.4	64.5	97.2	15.6	60.8	96.9
	2017	11,611	22.9	66.4	97.3	14.8	58.9	97.3
English	2013	12,030	24.0	75.8	99.6	18.9	71.1	99.5
	2014	11,767	26.5	79.6	98.8	19.2	69.7	99.2
	2015	11,629	27.9	81.9	98.8	19.4	72.8	99.0
	2016	10,847	28.7	84.0	99.8	18.5	68.2	98.6
	2017	10,610	30.4	85.7	99.6	18.5	70.9	99.3

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Table 6 presents information on female GCSE candidates' performance in Mathematics and English over the last five academic years: 2013–2017.

As illustrated, between 64.1% and 66.4% of female Northern Ireland candidates achieved grades A(7)–C(4) in Mathematics over the five-year period.

Between 75.8% and 85.7% achieved grades A(7)–C(4) in English over the same period.

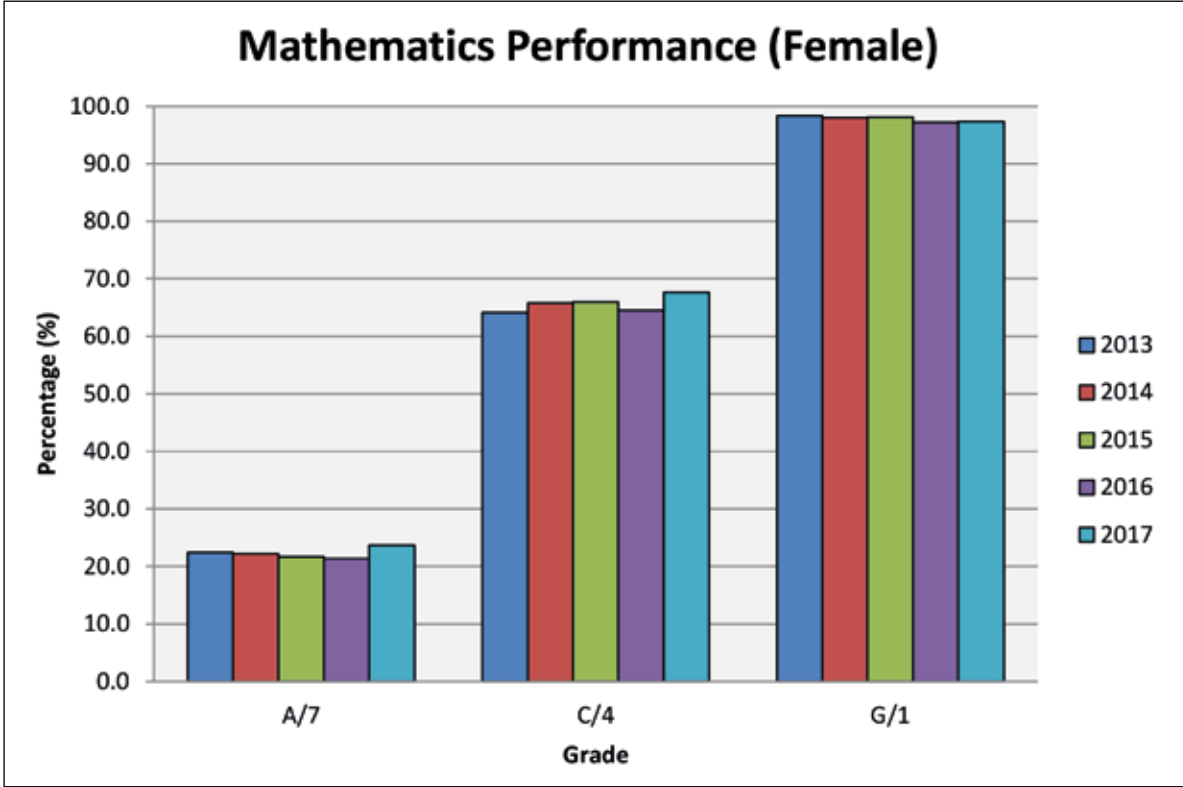
Similar to the male cohort, the proportion of female candidates achieving grades A(7)–C(4) in Mathematics is at its highest level in five years, after a slight decline in performance in 2016.

In GCSE English, there has been a continual improvement in performance over the five-year period.

Over this period, performance in GCSE English for female candidates has increased continually year-on-year. In total, 9.9% more female candidates achieved A(7)–C(4) now, when compared to the GCSE cohort five years ago.

At grade A(7), female Mathematics candidates' attainment has maintained a level of consistency over the 2013–2017 period. English attainment at these grades, however, has increased year-on-year over this period.

**Figure 5: Female Mathematics Performance (Northern Ireland) (2013–2017)**

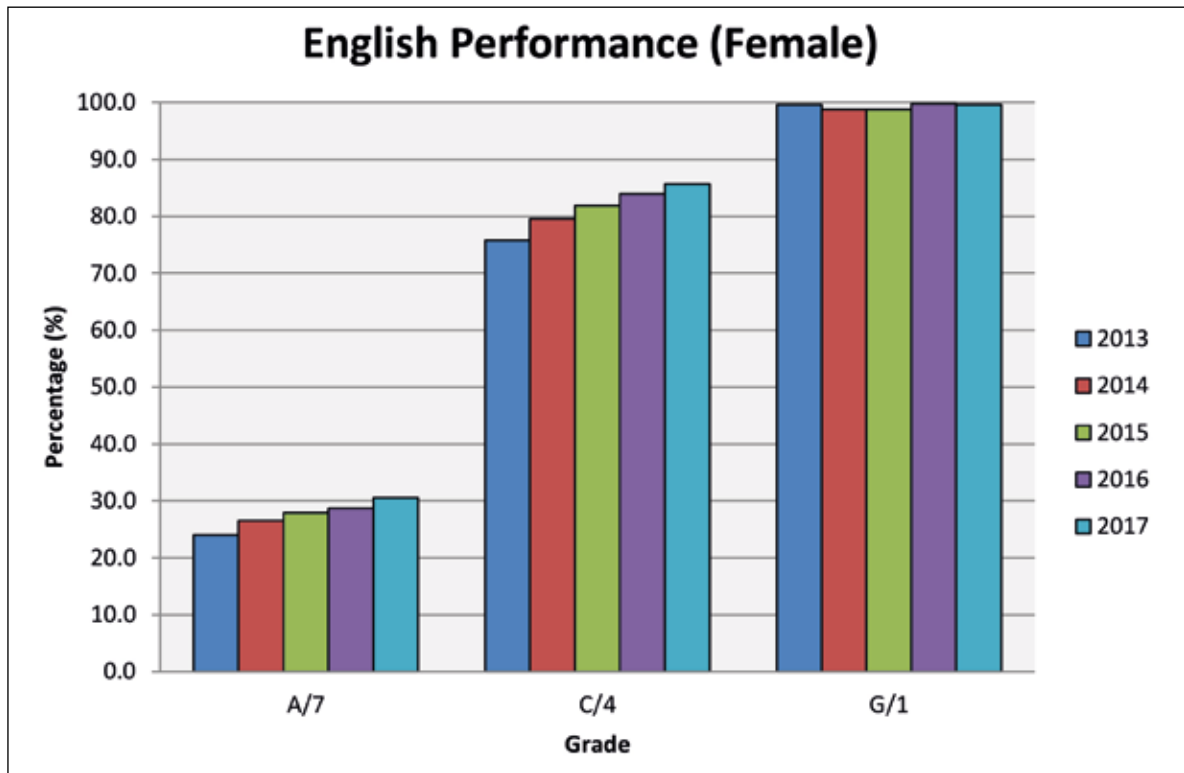


Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

Female candidates in GCSE Mathematics have achieved their highest level of performance at grades A(7) and C(4). This is particularly encouraging as there was a general decline in performance at GCSE in 2016.

The proportion of female candidates achieving an A(7) grade has ranged from 22.4%–22.9% between 2013 and 2017.

Over the last year, female candidates’ performance in GCSE Mathematics at grades A(7)–C(4) has increased from 64.5% to 66.4%.

**Figure 6: Female English Performance (Northern Ireland) (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

Over the last five years, female candidates' performance in GCSE English has increased year-on-year at A(7).

The proportion of candidates achieving an A grade has increased from 24.0%–30.4% over these years.

When grades A(7)–C(4) are considered, the proportion of female candidates achieving these grades has also increased steadily year-on-year since 2013 from 75.8% to 85.7%.

This is largely reflective of the trends noted previously for male candidates.

**Table 7: Age and Gender Breakdown Mathematics and English Candidates (Number) (2015–2017)**

Subject	Gender	Year	Age					
			≤15		16		≥17	
Mathematics	Male	2015	1,600	12.1%	8,580	64.7%	3,090	23.3%
		2016	1,484	12.1%	7,902	64.5%	2,866	23.4%
		2017	1,376	11.6%	7,554	63.4%	2,987	25.1%
	Female	2015	1,298	9.6%	8,445	62.4%	3,795	28.0%
		2016	1,408	11.2%	7,686	61.1%	3,481	27.7%
		2017	1,261	10.5%	7,353	61.0%	3,432	28.5%
English	Male	2015	81	0.7%	8,866	74.9%	2,895	24.4%
		2016	80	0.7%	8,389	74.5%	2,786	24.8%
		2017	60	0.5%	8,256	74.6%	2,746	24.8%
	Female	2015	73	0.6%	8,785	75.5%	2,771	23.8%
		2016	78	0.7%	8,213	75.7%	2,556	23.6%
		2017	5	0.05%	8,184	76.8%	2,469	23.15%

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2015–2017

As expected, the largest proportion of Northern Ireland male and female candidates studying GCSE Mathematics and English are 16 years old. On average 64.2% of male and 61.5% of female candidates at age 16 study Mathematics at GCSE. A larger proportion of candidates study English at age 16, (74.7% male and 76% female).

On average, 11.9% of all male Mathematics candidates (over the last three years) have been aged 15 or under. A slightly smaller proportion of female candidates study GCSE Mathematics at this age (10.4%).

A much smaller proportion of candidates study GCSE English at age 15 (<1%). On average 0.6% of male candidates and 0.5% of female candidates study English at this age.

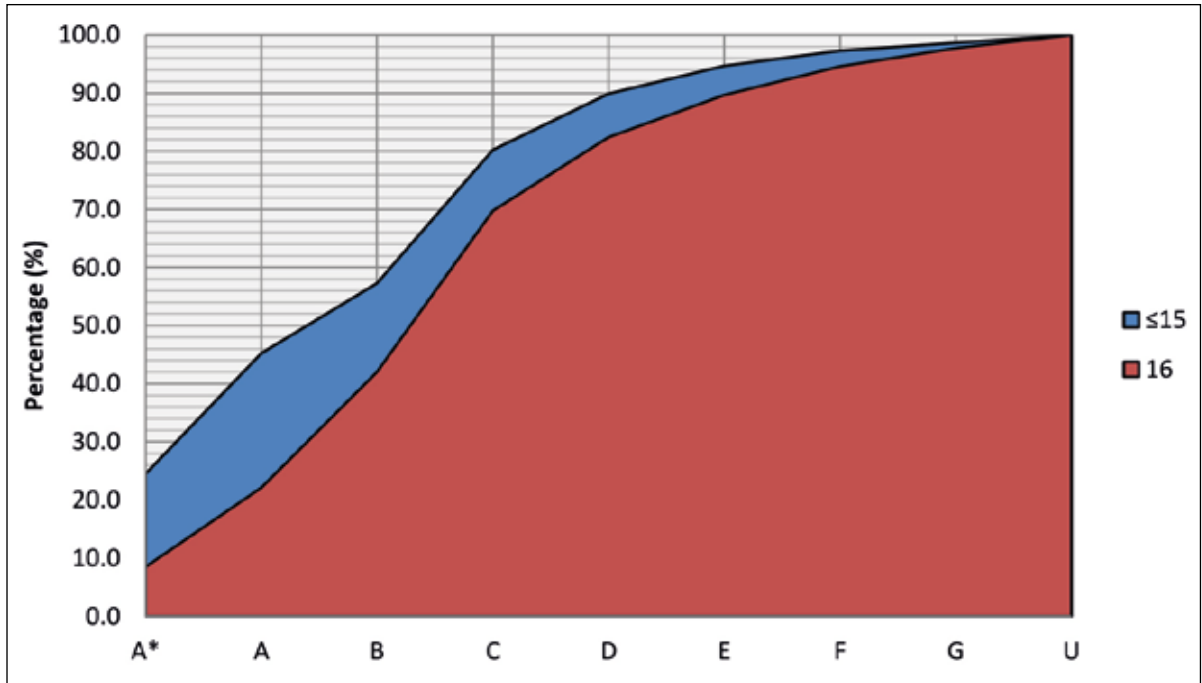
Around one quarter of all GCSE Mathematics candidates are aged 17 or over. On average 23.9% of male candidates who study GCSE Mathematics are at least 17 years old. A slightly larger proportion of female candidates (28.7%) are in this age range.

A similar proportion of candidates aged 17 or over study GCSE English. Over the last three years an average of 24.7% of male and 23.5% of female candidates have been 17 years of age or older when studying GCSE English.

The performance statistics over the last three years (2015–2017), indicate that, on average, 80.3% of 15 year old candidates achieved at least a grade C(4) in GCSE Mathematics, whereas 69.8% of 16 year olds reached the same level of attainment.



**Figure 7: Grade Comparison: 15/16 Year Olds (GCSE Mathematics)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2015–2017

Other factors may have an influence. However, as this is not the focus on this report, further research will need to be conducted for these trends to be investigated.

### 3.3 GCSE STEM (Entries and Performance)

STEM incorporates a range of Science, Technology, Engineering and Mathematics (STEM) subjects. As stated in Section 2 of this document, this includes the following subjects: Biology, Chemistry, Computing, Design and Technology, Engineering, ICT, Mathematics (including Further Mathematics) and Physics. Entries and performance are analysed under separately headings below.

#### 3.3.1 Entries

One of the most notable trends in GCSE entries in the past five years is the rise of STEM subjects. The following section highlights the subject increases and decreases over the five-year period.

**Table 8: GCSE STEM Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
Biology	4,489	4,080	4,112	4,252	4,077
Chemistry	3,195	3,151	3,161	3,214	3,085
Computing	45	109	252	519	630
Design and Technology	4,886	4,703	4,591	4,238	4,205
Engineering	318	348	344	397	389
Mathematics	25,533	25,954	26,808	24,827	23,963
Further Mathematics	3,323	3,495	3,518	3,469	3,445
ICT	7,565	7,750	8,239	7,862	7,778
Physics	3,092	3,007	3,052	2,960	3,035
<b>Total STEM</b>	<b>52,446</b>	<b>52,597</b>	<b>54,077</b>	<b>51,738</b>	<b>50,607</b>
<b>Total Entry</b>	<b>176,301</b>	<b>172,692</b>	<b>171,325</b>	<b>161,975</b>	<b>156,806</b>
<b>STEM as a % of Total Entry</b>	<b>29.7%</b>	<b>30.5%</b>	<b>31.6%</b>	<b>31.9%</b>	<b>32.3%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Table 8 shows that the total number of candidates studying STEM subjects increased by 1,631 between 2013 and 2015. However, over the last two years the total number of STEM entries declined by 3,470. This is a decrease of approximately 4.3% in 2016 and 2.2% in 2017. This reduction in STEM entry has largely been driven by decreases in the following subjects:

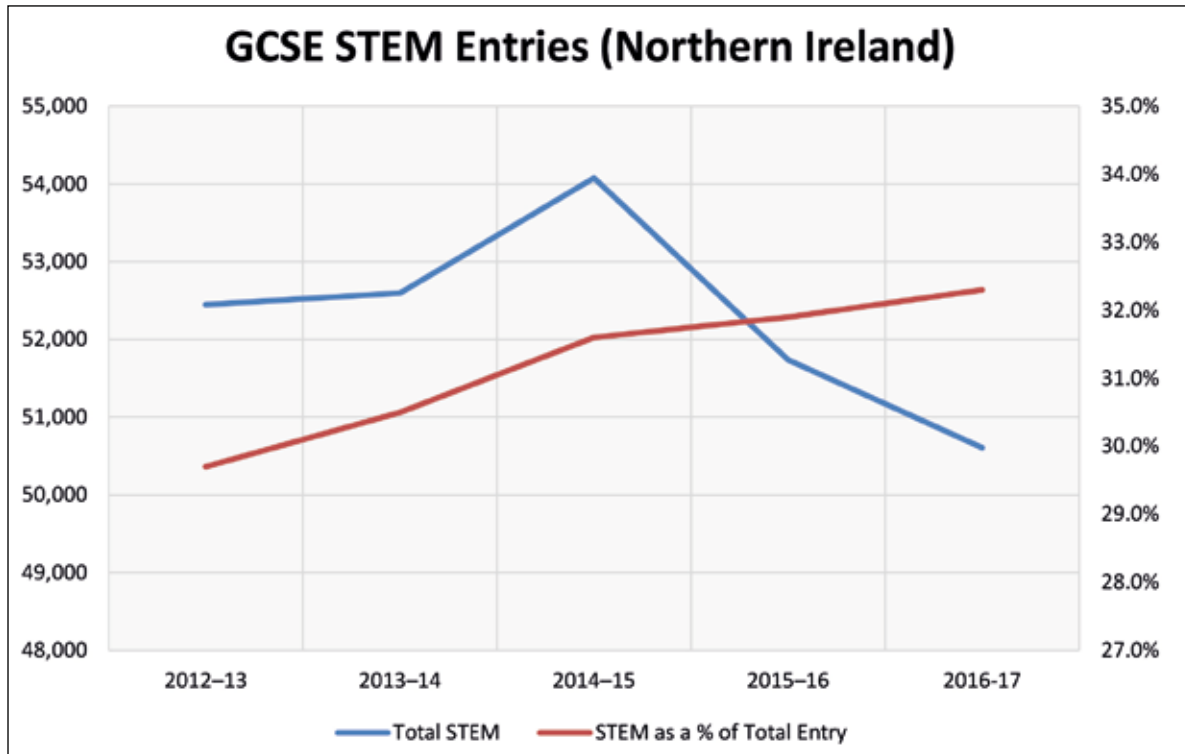
- Mathematics;
- Biology;
- Chemistry; and
- ICT.

Although there has been a decline in the overall number of STEM candidates, it is important to note that there has been a real terms increase (0.4%) in the proportion of candidates taking STEM qualifications at GCSE level.

Also, over the last five years, the proportional entry for STEM subjects has increased steadily from 29.7% to 32.3%. This indicates that STEM is becoming more popular at this level.

This is shown in Figure 8 below.

**Figure 8: GCSE STEM Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Table 9 below considers entry trends for both male and female candidates.

**Table 9: GCSE STEM Subject Trends by Gender (2013–2017)**

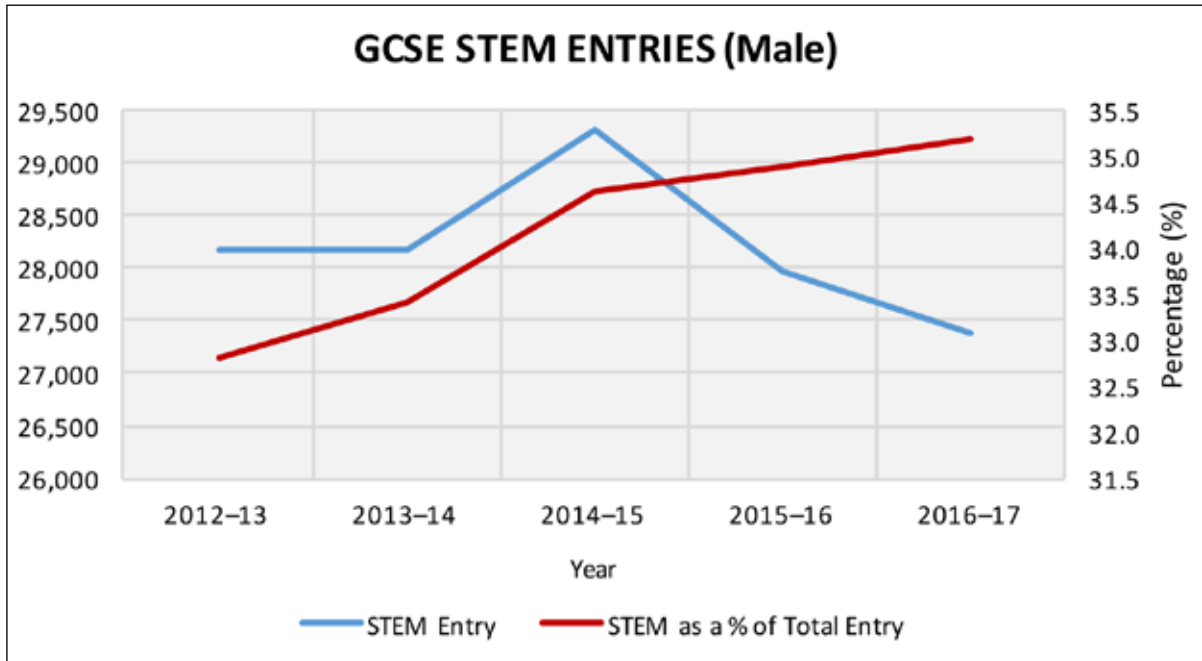
	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
STEM Entry	28,184	28,183	29,318	27,961	27,389
Total Entry	85,921	84,302	84,668	80,218	77,723
STEM as a % of Total Entry	32.8%	33.4%	34.6%	34.9%	35.2%
<b>Female</b>					
STEM Entry	24,262	24,414	24,759	23,777	23,218
Total Entry	90,380	88,390	86,657	81,757	79,083
STEM as a % of Total Entry	26.8%	27.6%	28.6%	29.1%	29.4%

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

As expected, because of the changes in total STEM candidature identified earlier, year-on-year, the total number of male STEM candidates at GCSE increased between 2013 and 2015 (+1,134) and decreased in 2016 and 2017 (-1,929).

However, the overall share of GCSE male candidature for STEM subjects has consistently improved over the last five academic years. The total share of male candidates has increased by 2.4% over this time. This indicates that GCSE STEM subjects are becoming more popular in real terms for male candidates.

**Figure 9: GCSE Male STEM Entry (2013–2017)**

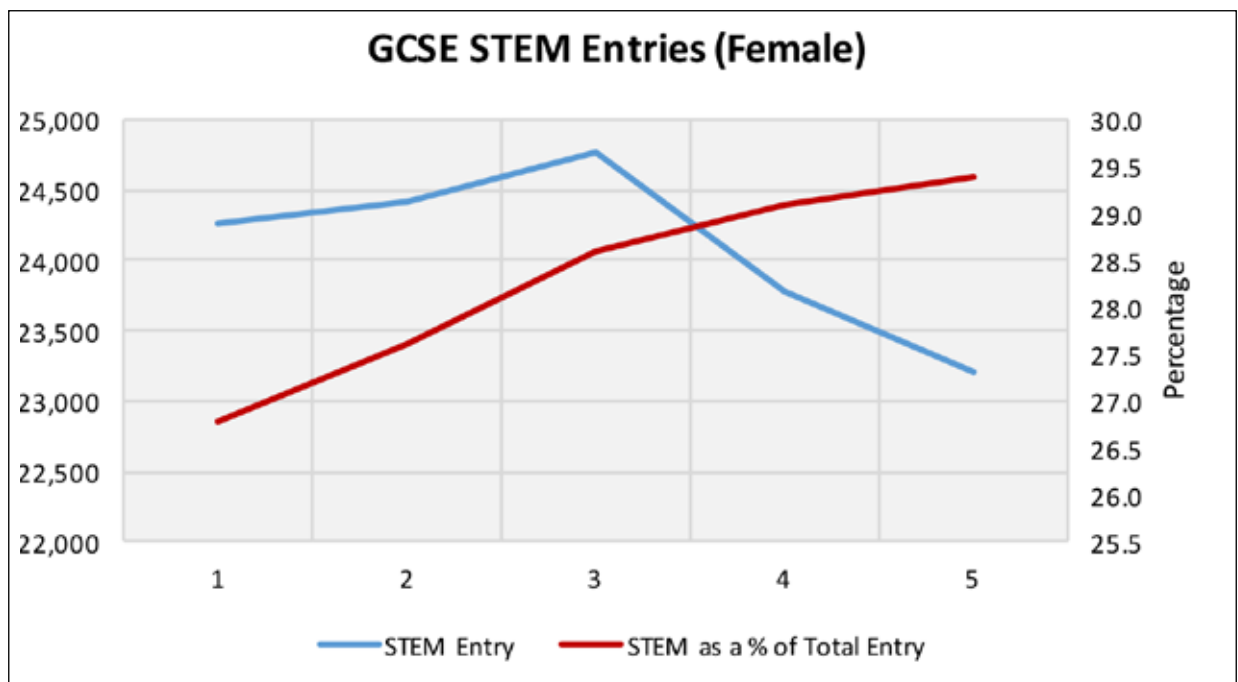


Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Similarly for female candidates, the same trends in regards to STEM can be identified; i.e. an increase in candidature between 2013 and 2015 (+497) and a subsequent decline in candidature in 2016 and 2017 (-1,541).

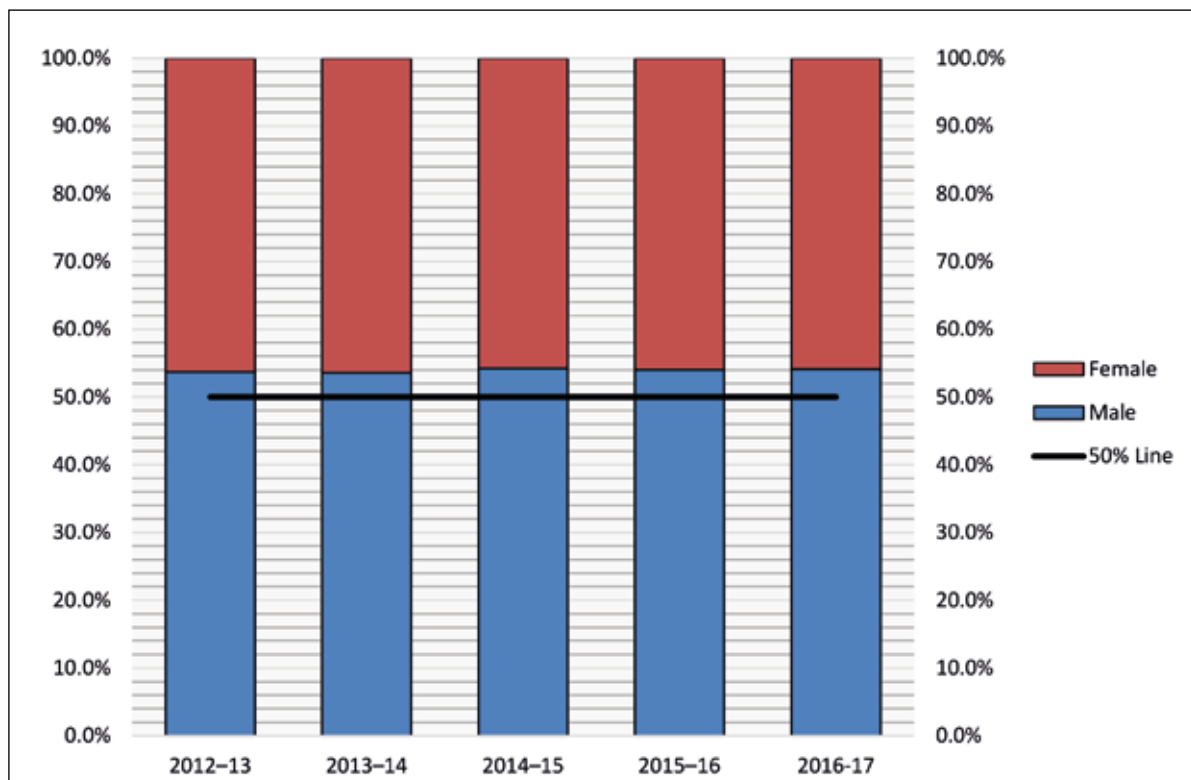
Nevertheless, the proportion of female candidates has also increased year-on-year since 2013. The proportion of female candidates studying STEM subjects at GCSE has increased by 2.6% over the last five years. This has resulted in just under one third of all female candidates (29.4%) studying STEM at this level.

**Figure 10: GCSE Female STEM Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Proportionally, the split between male and female STEM candidates has remained consistent over time. This is unsurprising, given that both genders are experiencing the same entry trends. Figure 11 overleaf indicates roughly a 55/45 split in favour of male candidates.

**Figure 11: GCSE STEM Entry Breakdown (2013–2017)**

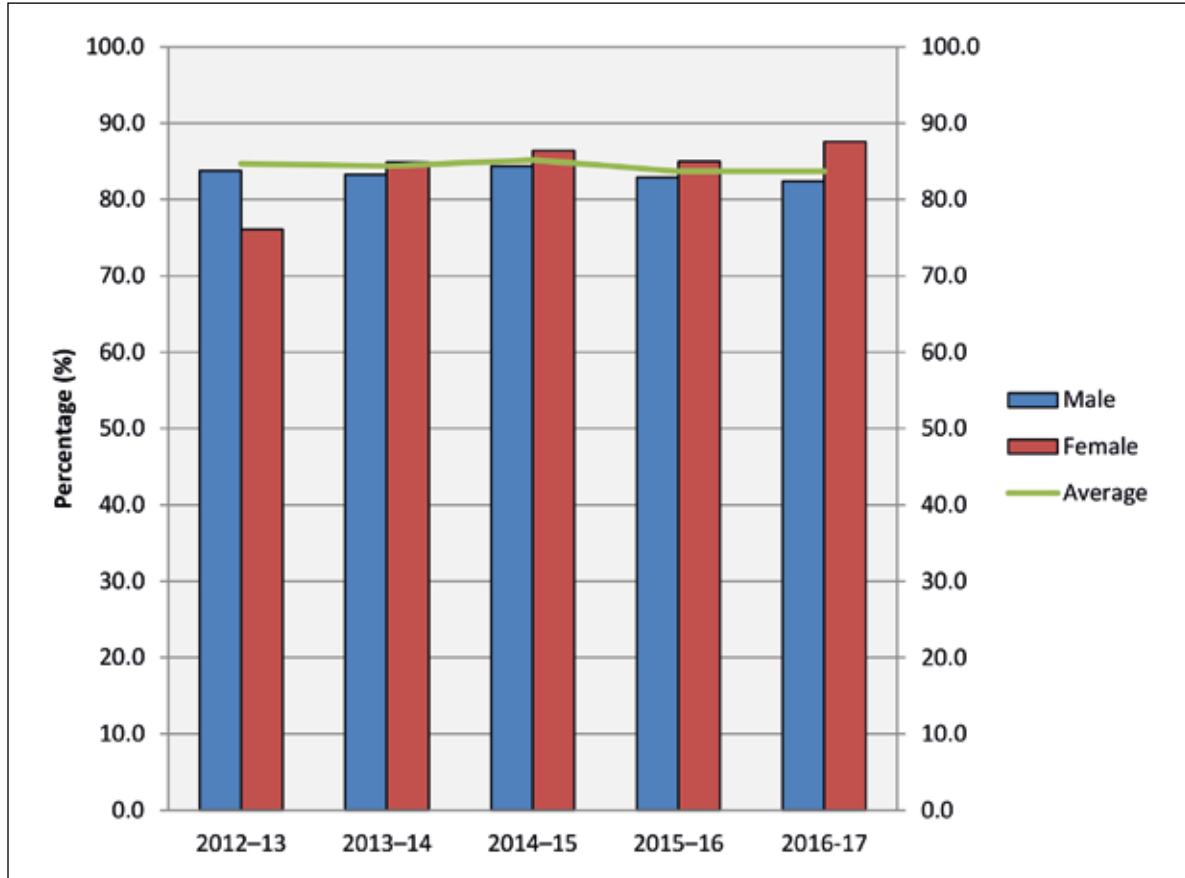
Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

### 3.3.2 Performance

**Table 10: Cumulative A\*–C Grades for GCSE STEM (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>	Total	754.6	749.9	759.5	745.8	741.9
	Average	83.8	83.3	84.4	82.9	82.4
<b>Female</b>	Total	684.8	764.1	777.2	764.6	788.1
	Average	76.1	84.9	86.4	85.0	87.6
<b>Male and Female</b>	Total	762.7	759.4	767.0	753.4	753.0
	Average	84.7	84.4	85.2	83.7	83.7

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

**Figure 12: Cumulative A\*–C Grades for GCSE STEM (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Figure 12 above presents information on GCSE candidates' performance at grades A\*–C in STEM subjects over the last five academic years: 2013–2017. In the period 2014–2017 female candidates outperform their male counterparts in STEM subjects.

It is encouraging to note that performance for male candidates in these subjects has not experienced any considerable declines over the last five years. As illustrated in Figure 12, male performance has maintained a level of consistency over this time.

Over the last five years, female candidates' performance has improved considerably. In total, 87.6% of female candidates achieved grades A\*–C in STEM subjects in 2017. This has opened up a noticeable gender gap in performance with females outperforming males. This is particularly striking, as the opposite trend was noted in 2013.

### 3.4 GCSE Languages (Entries and Performance)

In this report, languages refers to French, German, Spanish and Irish. As before, entries and performance are analysed under separate headings below.

#### 3.4.1 Entries

**Table 11: GCSE Language Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
French	6,250	5,852	5,533	5,179	4,709
German	1,017	1,158	1,044	1,162	937
Irish	2,078	2,024	1,980	1,901	1,987
Spanish	3,568	3,490	3,734	3,593	3,877
<b>Total</b>	<b>12,913</b>	<b>12,524</b>	<b>12,291</b>	<b>11,835</b>	<b>11,510</b>
<b>Total Entry</b>	<b>176,301</b>	<b>172,692</b>	<b>171,325</b>	<b>161,975</b>	<b>156,806</b>
<b>Languages as a % of Total Entry</b>	<b>7.3%</b>	<b>7.3%</b>	<b>7.2%</b>	<b>7.3%</b>	<b>7.3%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Entries for languages, with the exception of French, have been fairly consistent year-on-year.

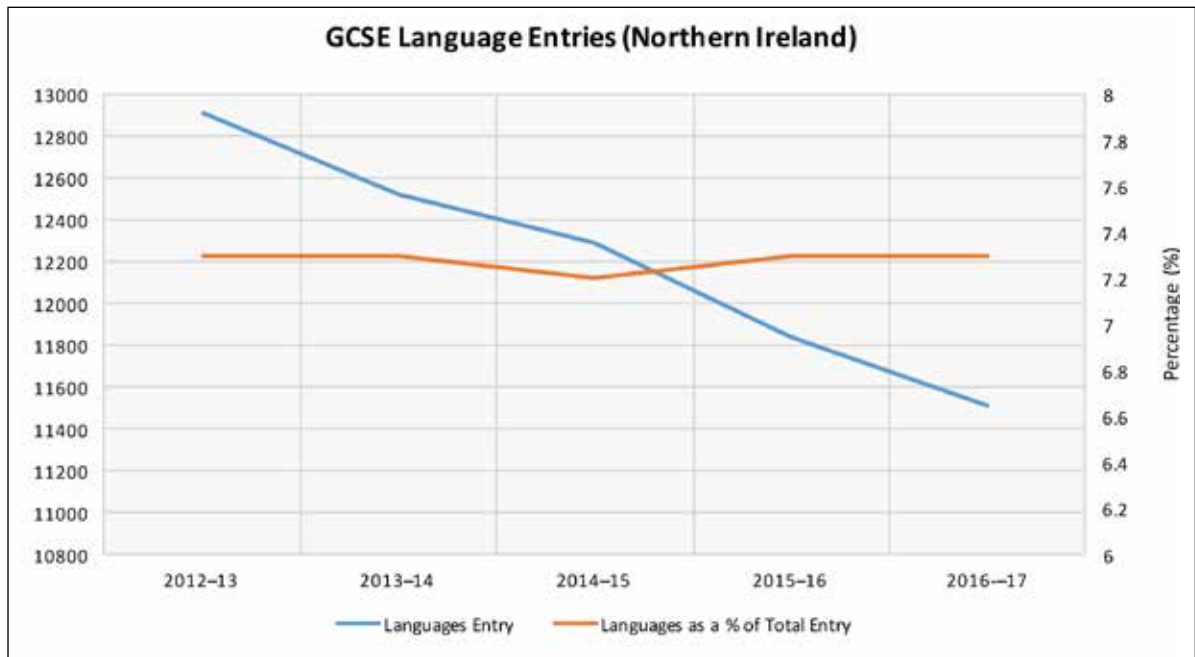
The decline in candidature for French continues to be of concern. Although it is still the most popular language studied at GCSE Level, numbers have been decreasing year-on-year since 2013 (-1,403) irrespective of any changes to the GCSE cohort. This has resulted in an overall decline in the total number of language candidates.

Despite this, because of the trends noted in other languages, proportional entry has maintained a level of consistency over the last five years.



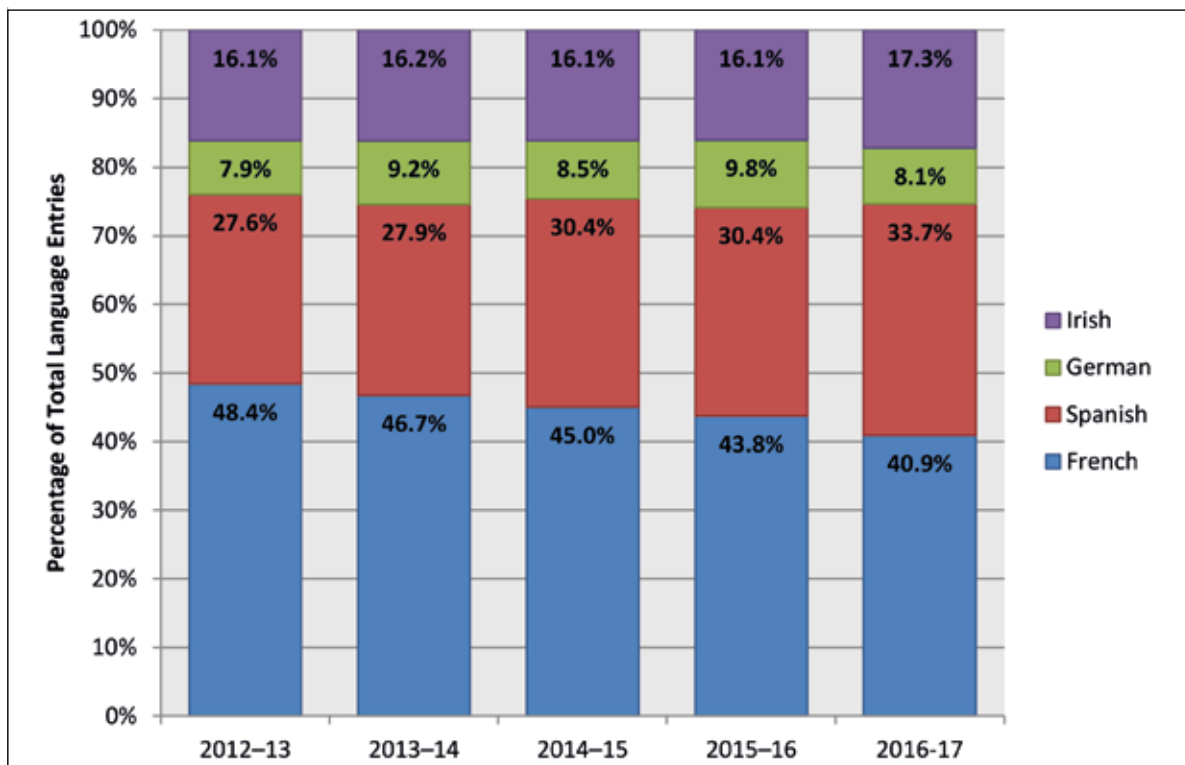
The graph below shows this decline.

**Figure 13: GCSE Language Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

**Figure 14: GCSE Language Entry Breakdown (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

As illustrated above French is becoming less popular and Spanish and Irish are increasing in popularity.

Table 12 below shows entry trends for both male and female candidates.

**Table 12: GCSE Language Subject Trends by Gender (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
Languages Entry	5,434	5,329	5,293	5,246	5,035
Total Entry	85,921	84,302	84,668	80,218	77,723
Languages as a % of Total Entry	6.3%	6.3%	6.3%	6.5%	6.5%
<b>Female</b>					
Languages Entry	7,338	7,059	6,998	6,589	6,475
Total Entry	90,380	88,390	86,657	81,757	79,083
Languages as a % of Total Entry	8.1%	8.0%	8.1%	8.1%	8.2%

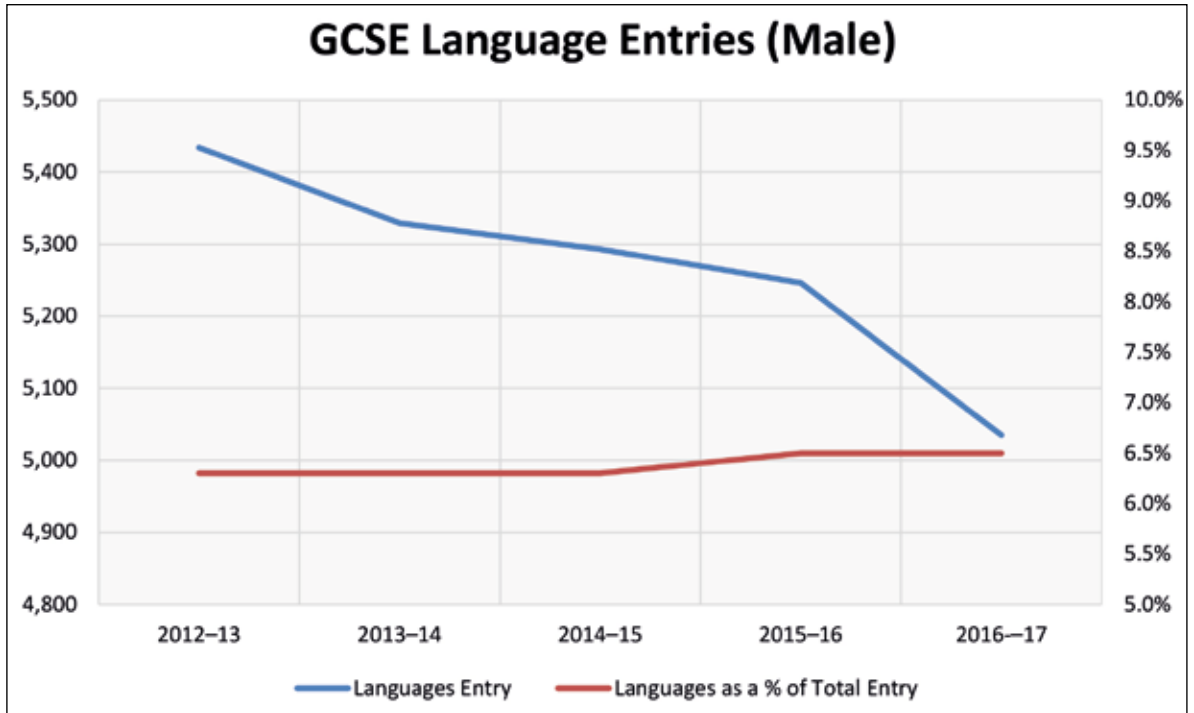
Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

Both male and female candidature in languages has declined by -399 and -863 respectively since 2013.

However, in real terms, the proportion of female candidates studying GCSE languages has been consistent since 2013, indicating that languages have maintained a level of popularity. Any decline experienced can be considered the result of a reduction in the total candidature of that particular year.

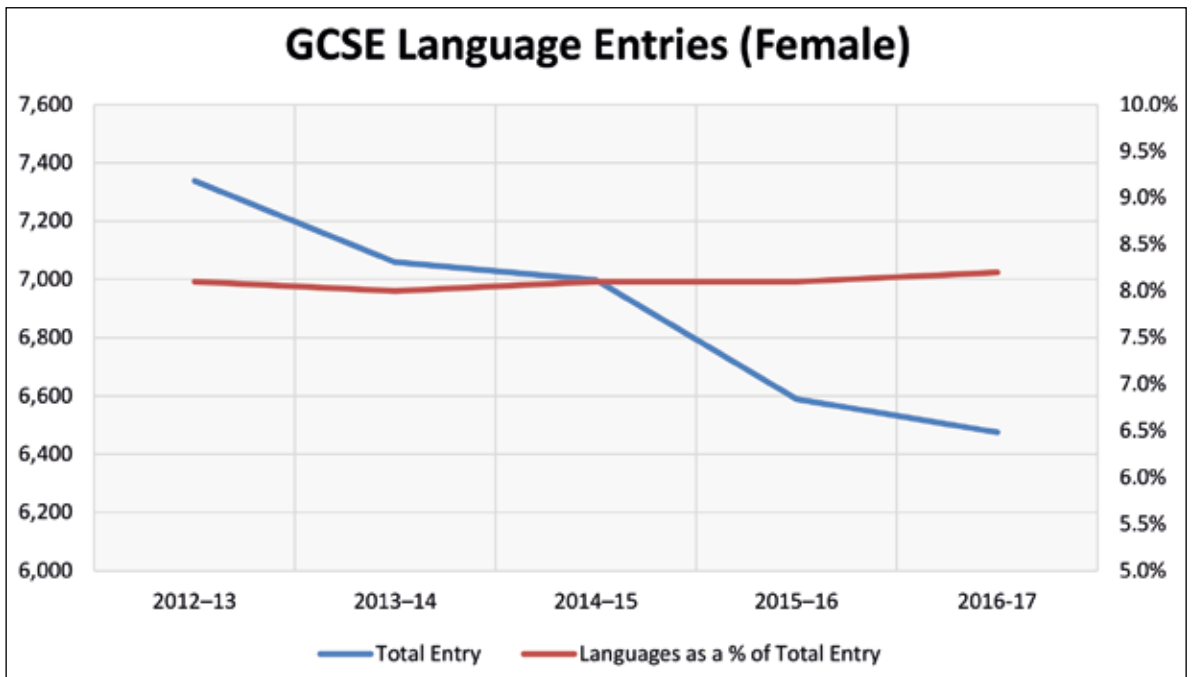
Despite the decline in the number, the overall proportion of male candidates studying at least one language at GCSE increased by 0.2% in 2016 to 6.5% and held for 2017. Before this, proportional entry was consistent. Any decline in entry experienced is likely due to a decrease in total candidature.

**Figure 15: GCSE Male Language Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

**Figure 16: GCSE Female Language Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

### 3.4.2 Performance

**Table 13: Cumulative A\*–C Grades for GCSE Languages (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
Male	Total	337.2	345.2	345.3	346.5	343.6
	Average	84.3	86.3	86.3	86.6	85.9
Female	Total	362.2	369.4	371.8	369.3	368.9
	Average	90.6	92.4	93.0	92.3	92.2
Male and Female	Total	351.0	358.5	359.5	358.7	357.3
	Average	87.8	89.6	89.9	89.7	89.3

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

**Figure 17: Cumulative A\*–C Grades for GCSE Languages (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

The table and graph above present information on GCSE candidates' performance at grades A\*–C in languages over the last five academic years: 2013–2017.

As illustrated, female candidates consistently outperform their male counterparts in GCSE languages.

Figure 17 shows that performance has maintained a level of consistency in both groups. This means however, that the performance gap between the two genders has persisted over time.

### 3.5 GCSE Arts and Humanities (Entries and Performance)

The following sections analyse and detail entries and performance statistics for these subjects: Art and Design, Classical Subjects, English (both Language and Literature), History, Music, Religious Studies, Drama (including Performing and Expressive Arts) and Social Sciences.

#### 3.5.1 Entries

**Table 14: GCSE Arts and Humanities Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
Art and Design	5,228	4,777	4,409	4,225	4,085
Classical Subjects	196	165	197	137	178
Drama	1,828	1,676	1,605	1,491	1,309
English	24,079	23,510	23,471	22,102	21,720
English Literature	11,016	10,724	10,807	10,301	10,132
History	7,857	7,573	7,706	6,751	6,368
Music	1,841	1,662	1,701	1,582	1,453
Performing/Expressive Arts	419	617	549	430	362
Religious Studies	12,925	12,605	11,974	11,953	11,373
Social Science Subjects	191	187	271	232	213
<b>Total</b>	<b>65,580</b>	<b>63,496</b>	<b>62,690</b>	<b>59,204</b>	<b>57,193</b>
<b>Total Entry</b>	<b>176,301</b>	<b>172,692</b>	<b>171,325</b>	<b>161,975</b>	<b>156,806</b>
<b>Arts and Humanities as a % of Total Entry</b>	<b>37.2%</b>	<b>36.8%</b>	<b>36.6%</b>	<b>36.6%</b>	<b>36.5%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

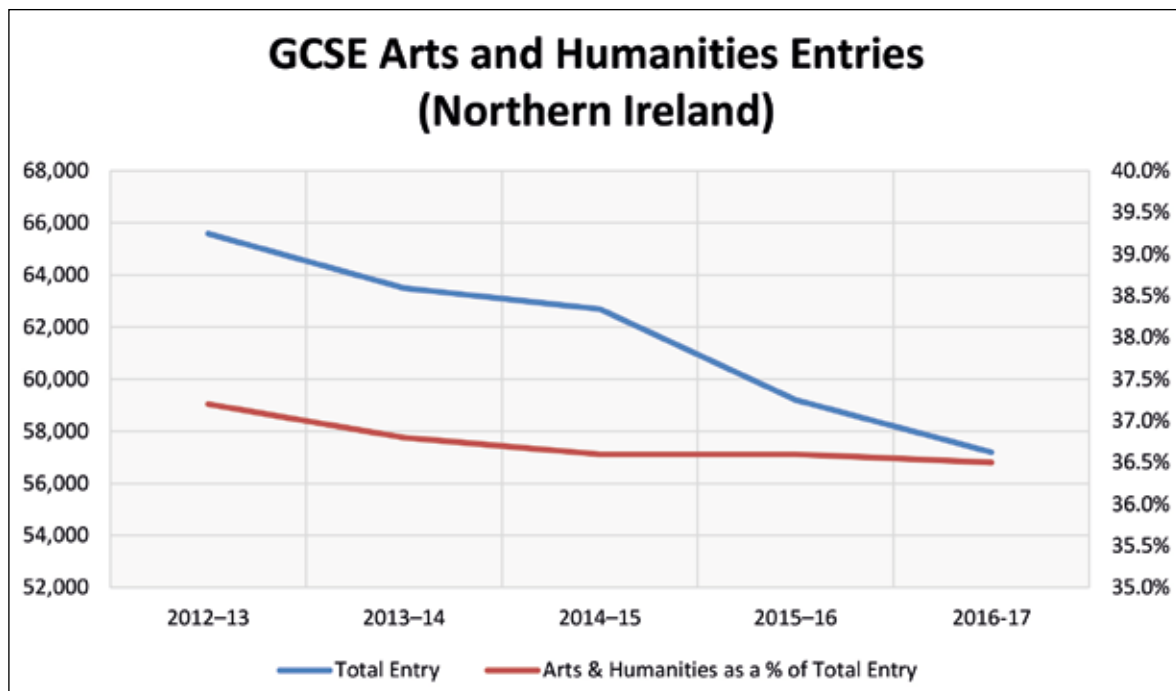
Entries for Arts and Humanities subjects have declined in Northern Ireland over the last year (-2,011). The largest reductions were witnessed in:

- Religious Studies (-580);
- History (-383);
- English (-382); and
- Drama (-182).

This follows a year-on-year decline between 2013 and 2017.

Unlike in STEM subjects and Languages, proportional entry follows the same pattern as the total Arts and Humanities candidature. Since 2013, the overall proportion of Arts and Humanities candidates has declined from 37.2% to 36.5%.

This is shown in Figure 18 overleaf.

**Figure 18: GCSE Arts and Humanities Entry (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

Table 15 below considers entry trends for male and female candidates.

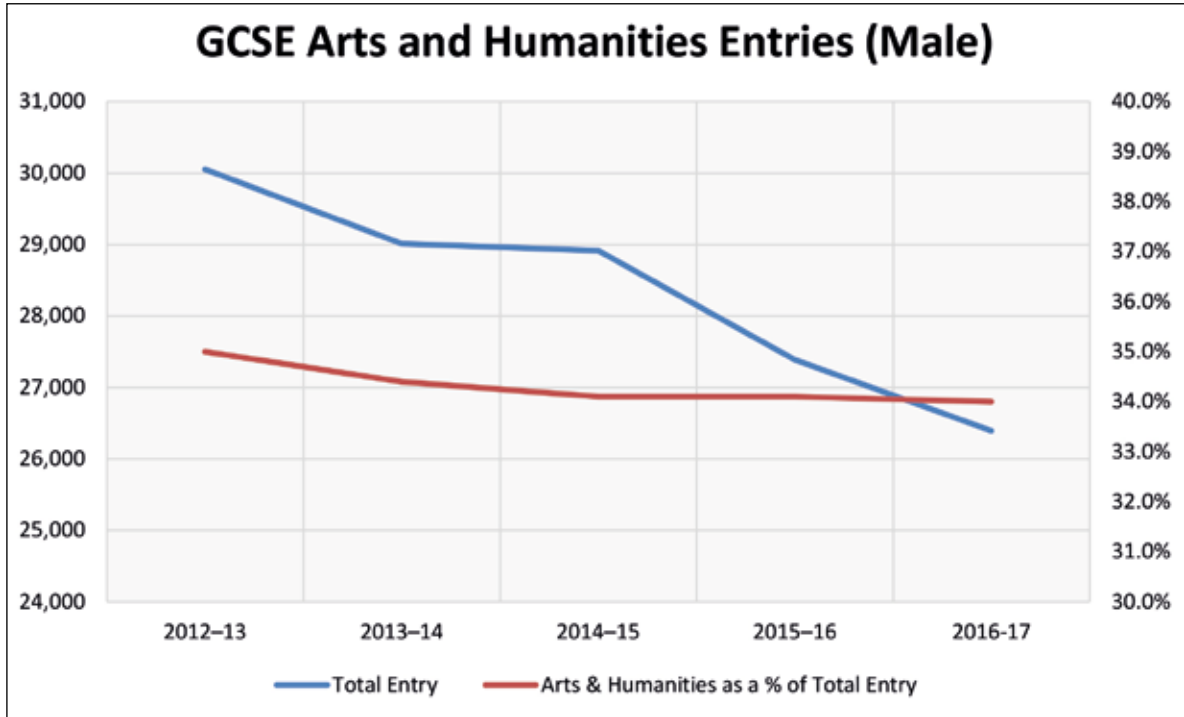
**Table 15: GCSE Arts and Humanities Subject Trends by Gender (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
Arts and Humanities Entry	30,052	29,013	28,913	27,388	26,394
Total Entry	85,921	84,302	84,668	80,218	77,723
Arts and Humanities as a % of Total Entry	35.0%	34.4%	34.1%	34.1%	34.0%
<b>Female</b>					
Arts and Humanities Entry	35,528	34,483	33,777	31,816	30,799
Total Entry	90,380	88,390	86,657	81,757	79,083
Arts and Humanities as a % of Total Entry	39.3%	39.0%	39.0%	38.9%	38.9%

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

The table above illustrates that the total number of male Arts and Humanities candidates at GCSE has declined year-on-year since 2013. Overall, almost 1,000 fewer male candidates (-994) studied these subjects at GCSE in 2017 compared to the previous year.

Figure 19: GCSE Male Arts and Humanities Entry (2013–2017)

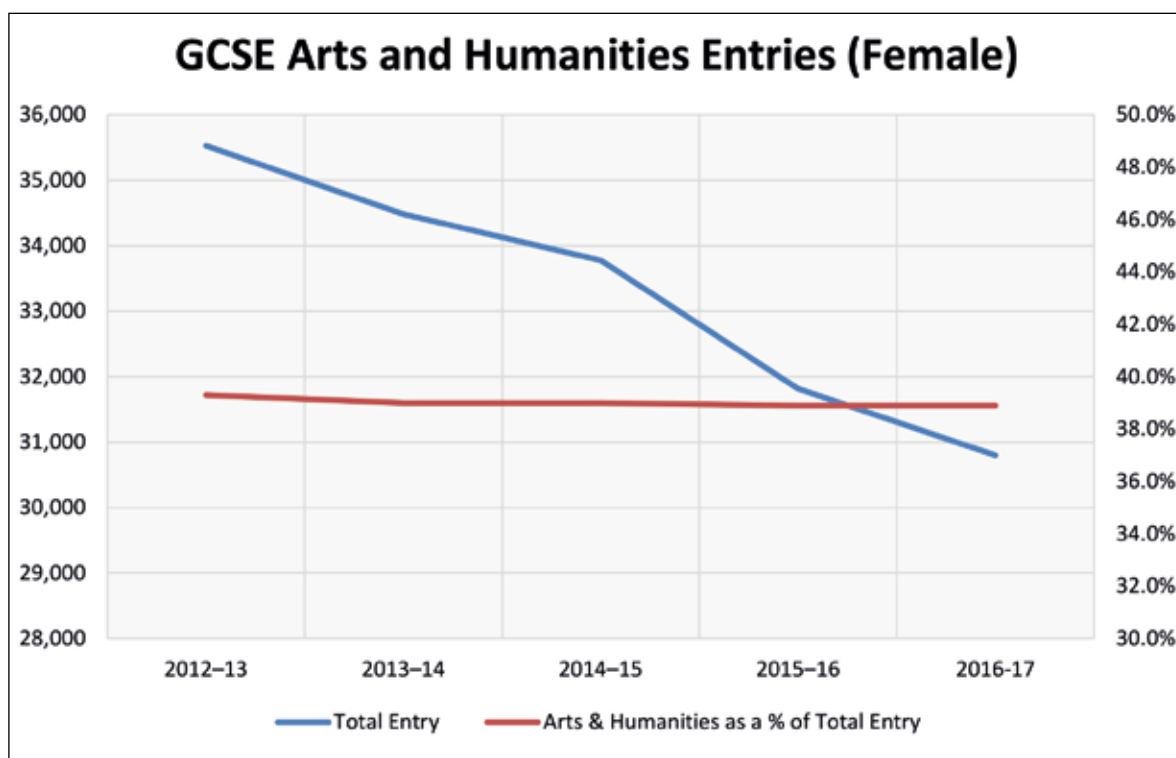


Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

Similarly, the overall proportion of male candidates studying Arts and Humanities decreased year-on-year between 2013 and 2017 (-1%). It would appear that for male candidates the Arts and Humanities are becoming less popular in real terms.

For female candidates, numbers have been in decline since 2013 (-4,729). However, unlike their male counterparts, female proportional entry has maintained a level of consistency since 2013. This indicates that the decline in female Arts and Humanities candidature is most likely because of a decline in the total candidature of that particular group. Unlike male candidates, for female candidates there has been a more pronounced reduction that seems to be driving the overall decline.

**Figure 20: GCSE Female Arts and Humanities Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2012–2016

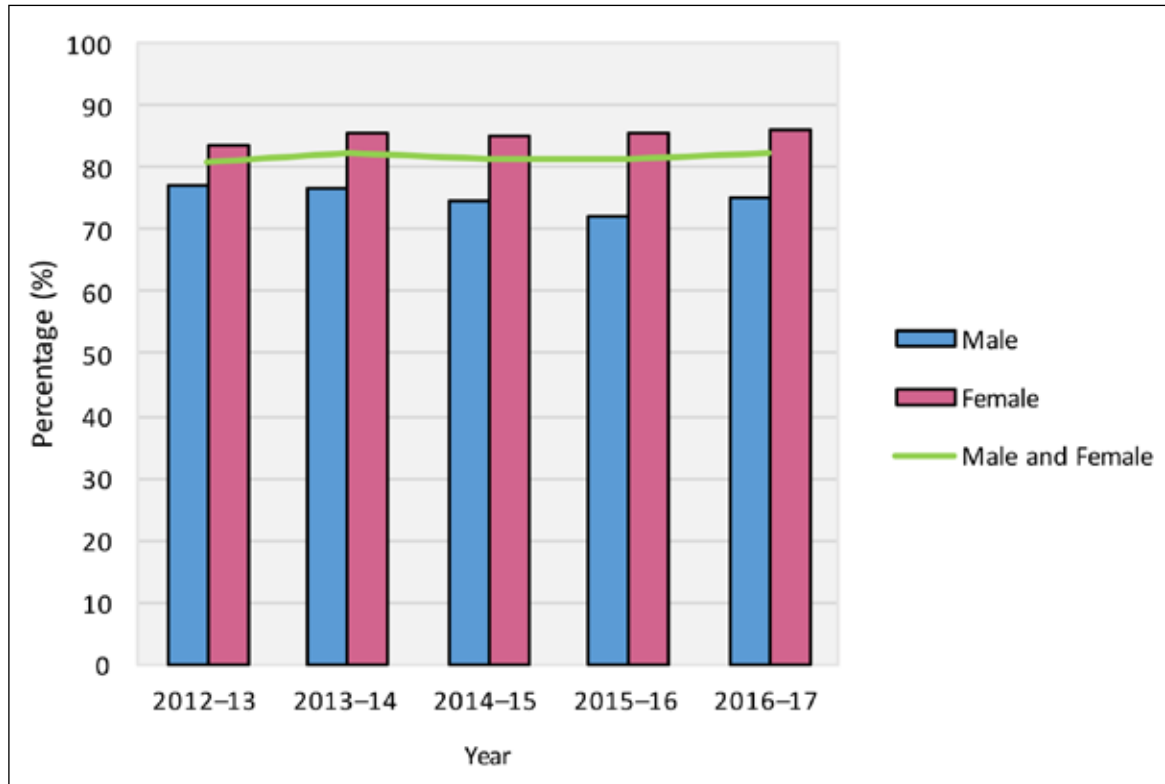
### 3.5.2 Performance

**Table 16: Cumulative A\*–C Grades for GCSE Arts and Humanities (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
Male	Total	769.1	765.6	743.9	722.5	748.7
	Average	76.9	76.6	74.4	72.3	74.9
Female	Total	837.8	856.6	851.6	854.3	861.5
	Average	83.8	85.7	85.2	85.4	86.2
Male and Female	Total	810.3	821.9	813.6	810.7	820.7
	Average	81.0	82.2	81.4	81.1	82.1

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017



**Figure 21: Cumulative A\*–C Grades for GCSE Arts and Humanities (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results

Table 16 and Figure 21 presents information on GCSE candidates' performance at grades A\*–C in Arts and Humanities over the last five academic years: 2013–2017.

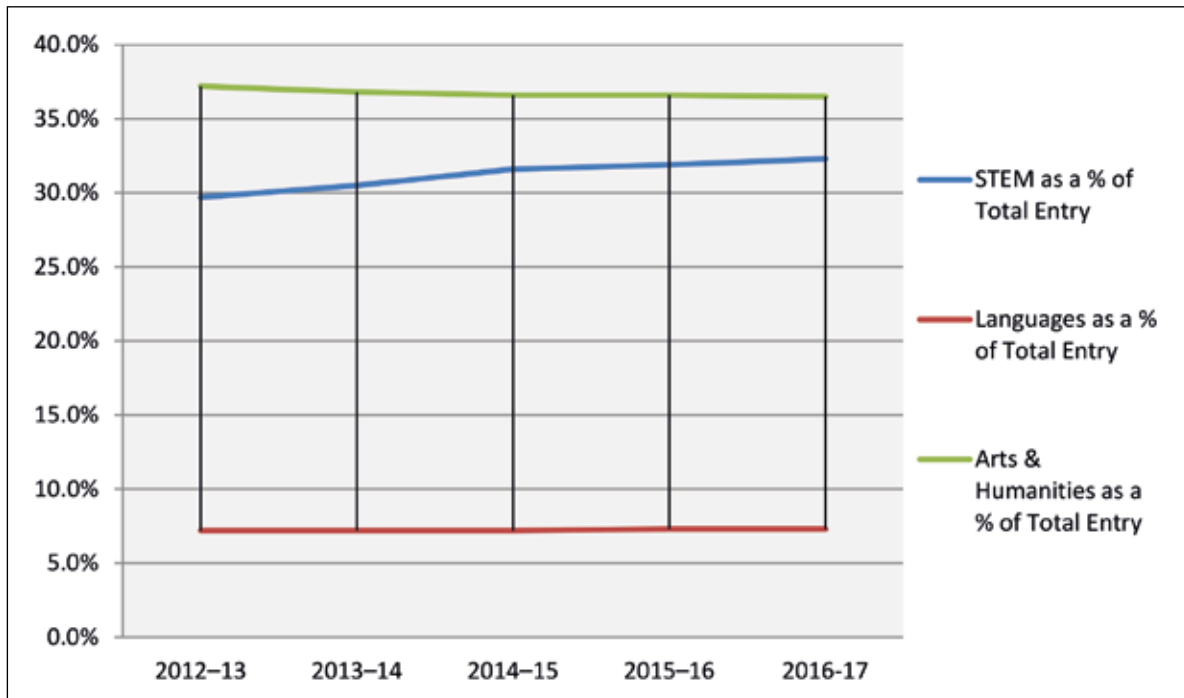
As illustrated, female candidates typically outperform their male counterparts.

It is encouraging to note that performance in Arts and Humanities has not declined over the last five years. Figure 21 indicates that performance has been relatively consistent since 2013.

However, there is still a wide performance gap between the two genders that has not narrowed over the last five years. On average, 6.2% more female than male candidates achieve at least a grade C.

### 3.6 GCSE Summary

Figure 22: GCSE Entry Summary (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

As noted above, over the last five years the Arts and Humanities have been the most popular subjects based on the overall percentage entry. However, the Arts and Humanities share of the total candidature has been in decline since 2013 at GCSE. Since 2013, the overall proportion of Arts and Humanities candidates has declined from 37.2% to 36.5% (-0.7%).

Conversely, for STEM subjects the proportional entry has increased steadily over the last five years from 29.7% to 32.3%. This indicates that STEM subjects are becoming a more popular choice for candidates at this level.

GCSE languages have maintained a level of popularity over the last five academic years. Proportional entry has been just over 7% over this period.

**Figure 23: Cumulative A\*–C Grades for GCSE (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

GCSE candidates tend to perform better in languages, compared to other subject categories. On average, 89.3% of all candidates achieved at least a Grade C at GCSE.

Arts and Humanities experienced the poorest performance levels at grades A\*–C. On average, 81.6% of all candidates achieved at least a grade C at GCSE. On average, 84.3% of all STEM candidates achieved at least a grade C.

There is an element of prescription in subject choices at GCSE. Trends identified in this section could be explained by this prescription. It is important to identify whether these trends carry on at both AS and A level, where candidates have more autonomy when selecting subjects.

This is covered in subsequent sections of this report.

## 4

# AS Level

## 4.1 AS Entries and Performance (Overall)

Revised A level specifications were introduced in schools across Northern Ireland in September 2016. The first award of the revised AS qualifications took place this summer. Legacy AS qualifications were also awarded for candidates resitting examinations. Figures included in this section are from Joint Council for Qualifications (JCQ) data files and therefore combine figures from both legacy and revised qualifications.

In 2017, Northern Ireland entries in AS declined by 8.1% from 2016. This equates to 3,696 fewer AS grades being awarded. In the combined Three Countries, AS entry has declined by 39.1%, equating to 468,341 fewer grades being awarded. This can be explained by the recent policy decision to decouple AS from reformed A level qualifications, meaning that the AS no longer counts towards the final mark of the full A level.

**Table 17: Three Country, Northern Ireland and CCEA Entries and Performance**

2017 2016 data in brackets	Three Country	NI Only	CCEA
<b>ENTRIES</b>	728,039 (1,196,380)	41,961 (45,657)	35,173 (36,488)
<b>%A</b>	23.8 (21.3)	27.7 (27.3)	29.2 (28.6)
<b>%A–E</b>	89.6 (90.1)	94.8 (94.8)	95.5 (95.2)

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland and UK), 2017 and CCEA Internal AS Full Course Results, 2017

CCEA AS entries experienced the smallest reported decline (-3.6%). AS results in CCEA showed an increase of 0.6% at Grade A. This follows on from a decrease of 0.5% in the previous year.

CCEA outcomes were higher than the Three Country results at Grade A by 5.4% and were 1.5% higher than the total Northern Ireland outcomes.

CCEA showed a pass rate at A–E that was 5.9% greater than the Three Country outcome. CCEA also exceeded the Northern Ireland pass rate by 0.7%.

**Table 18: Three Country, Northern Ireland and CCEA Performance by Gender**

2017 2016 data in brackets	Three Country		NI Only		CCEA	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
<b>%A</b>	24.6 (21.5)	23.1 (21.1)	25.5 (24.6)	29.6 (29.6)	27.0 (25.9)	30.9 (30.9)
<b>%A–E</b>	88.3 (88.7)	90.9 (91.4)	93.8 (93.5)	95.6 (95.9)	94.5 (93.9)	96.2 (96.3)

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland and UK), 2016 and CCEA Internal AS Full Course Results, 2017

In 2017, the Three Country results show the gender difference at grade A is 1.5% in favour of males. In Northern Ireland the difference has decreased from 5% to 4.1% points in favour of females. In CCEA, the difference is 3.9% in favour of females, a decrease of 1.1% from the previous year.

Three Country overall pass rate (grades A–E) gender differences are 2.6% in favour of females. In Northern Ireland the difference in performance at this level is 1.8% in favour of females, a decrease of 0.6% from the previous year. In CCEA, the gender difference is 1.7% in favour of females; a decrease of 0.7% from the previous year.

In Northern Ireland, female candidates are 6.5% ahead of the Three Country figure at grade A, and 4.7% ahead at grades A–E. Male candidates in Northern Ireland are 0.9% ahead of the Three Country figure at grade A and 5.5% ahead at grades A–E.

With CCEA, female candidates are 7.8% ahead of the Three Country figure at grade A, and 5.3% ahead at Grades A–E. Male CCEA candidates are 2.4% ahead of Three Country males at grade A and 6.2% ahead at grades A–E.

CCEA female candidates are ahead of Northern Ireland at grade A by 1.3%, and by 0.6% at grades A–E. Male candidates are ahead by 1.5% at grade A, and by 0.7% at grades A–E.

Overall, although Northern Ireland and CCEA candidates outperform the Three Countries at grade A and grades A–E, the gap has largely narrowed at grade A and widened at grades A–E over the last academic year.

The five most popular subjects at AS in N. Ireland are:

**Table 19: Most Popular AS Subjects**

	Overall	Males	Females
1	Mathematics (11.3%)	Mathematics (14.2%)	Biology (11.3%)
2	Biology (10.0%)	Physics (8.4%)	Mathematics (8.9%)
3	Chemistry (6.7%)	Biology (8.3%)	Religious Studies (8.4%)
4	Religious Studies (6.2%)	Chemistry (6.6%)	English Literature (7.8%)
5	History (6.1%)	History (6.3%) / Business Studies (6.3%)	Chemistry (6.7%)

Source: Joint Council for Qualifications (JCQ) – Provisional AS-Level Full Course Results (Northern Ireland), 2012–2016

As before, additional analysis will be based on various subject categories. This is covered in subsequent sections.

## 4.2 AS STEM (Entries and Performance)

As stated in the introduction of this report, the STEM subjects assessed below are almost identical to those which were assessed at GCSE Level in the previous section. The only exception being the removal of Engineering as it is not a subject option at this level.

### 4.2.1 Entries

**Table 20: AS STEM Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
Biology	4,627	4,634	4,833	4,565	4,178
Chemistry	2,945	3,239	3,251	3,043	2,795
Computing	171	262	386	430	526
Design and Technology	1,329	1,413	1,415	1,506	1,369
Mathematics	4,396	4,679	5,119	4,907	4,735
Further Mathematics	246	271	236	265	300
ICT	1,872	1,939	2,111	2,211	1,695
Physics	2,571	2,668	2,709	2,440	2,232
<b>Total</b>	<b>18,157</b>	<b>19,105</b>	<b>20,060</b>	<b>19,367</b>	<b>17,830</b>
<b>Total Entry</b>	<b>43,472</b>	<b>45,751</b>	<b>47,005</b>	<b>45,657</b>	<b>41,961</b>
<b>STEM as a % of Total Entry</b>	<b>41.8%</b>	<b>41.8%</b>	<b>42.7%</b>	<b>42.4%</b>	<b>42.5%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

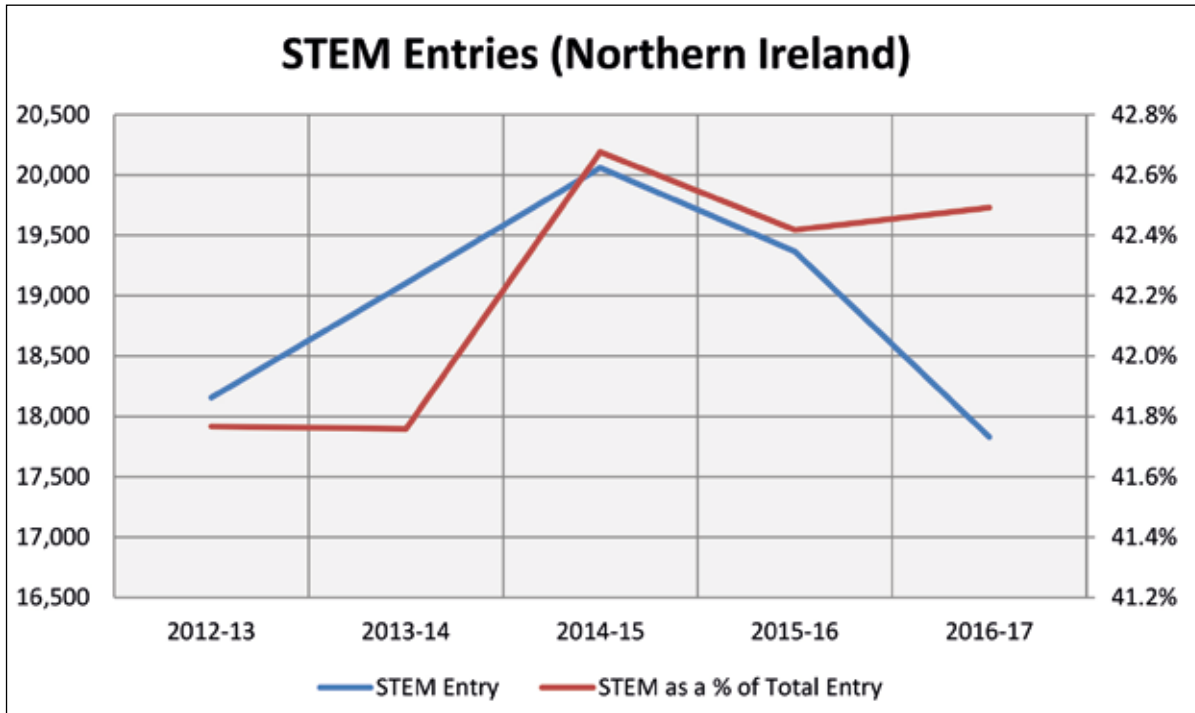
Table 20 shows that, before 2017, the total number of candidates studying AS STEM subjects increased from 18,157 to 20,060 (+1,903) between 2013 and 2015.

However, since 2015, the total STEM entries have declined by 2,230. This is a decrease of approximately 11.1% in numerical terms. This reduction in STEM entry has been driven by decreases in the following subjects:

- ICT (-516 in 2017);
- Biology (-387 in 2017);
- Chemistry (-248 in 2017);
- Physics (-208 in 2017); and
- Mathematics (-172 in 2017).

Proportional entry largely reflects these trends. There has been an increase of +0.9% in STEM share from 2013 to 2015. In 2016, STEM candidature declined by 0.3%, however there has been a slight increase of 0.1% in proportional candidature in the last year.

**Figure 24: AS STEM Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Table 21 below considers entry trends for both male and female candidates.

**Table 21: AS STEM Subject Trends by Gender (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
STEM Entry	9,914	10,327	10,716	10,471	9,730
Total Entry	19,681	20,362	20,915	20,814	18,891
STEM as a % of Total Entry	50.4%	50.7%	51.2%	50.3%	51.5%
<b>Female</b>					
STEM Entry	8,243	8,778	9,344	8,896	8,100
Total Entry	23,791	25,589	26,090	24,843	23,070
STEM as a % of Total Entry	34.6%	34.3%	35.8%	35.8%	35.1%

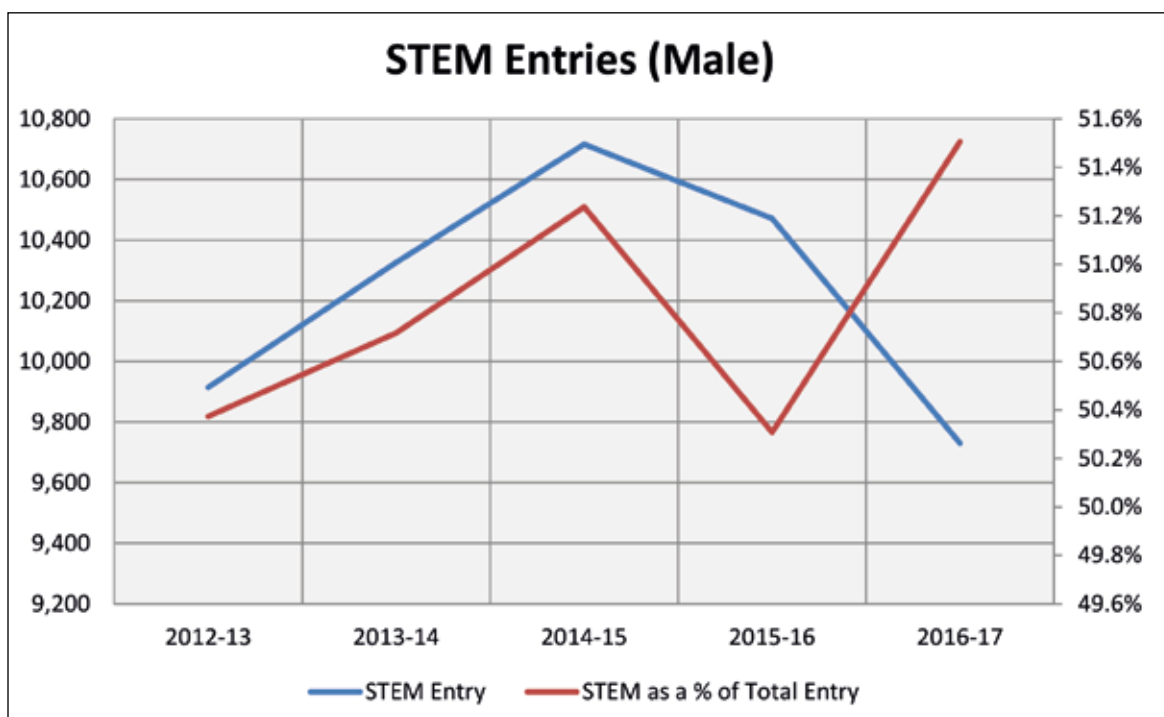
Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

As expected, because of the changes in total STEM candidature identified earlier, the total number of male STEM candidates increased from 9,914 to 10,716 (+802) between 2013 and 2015 and declined by 986 between 2015 and 2017.

The total share of male candidates declined by 0.9% in 2016. However, in 2017 the proportional entry for male candidates increased to 51.5%, its highest level in five years.

The total proportion of male candidates taking STEM subjects at AS has not dropped below 50%. As such, the overall share of AS male candidature for STEM subjects has maintained a consistent level of popularity over the last five academic years.

**Figure 25: AS Male STEM Entry (2013–2017)**



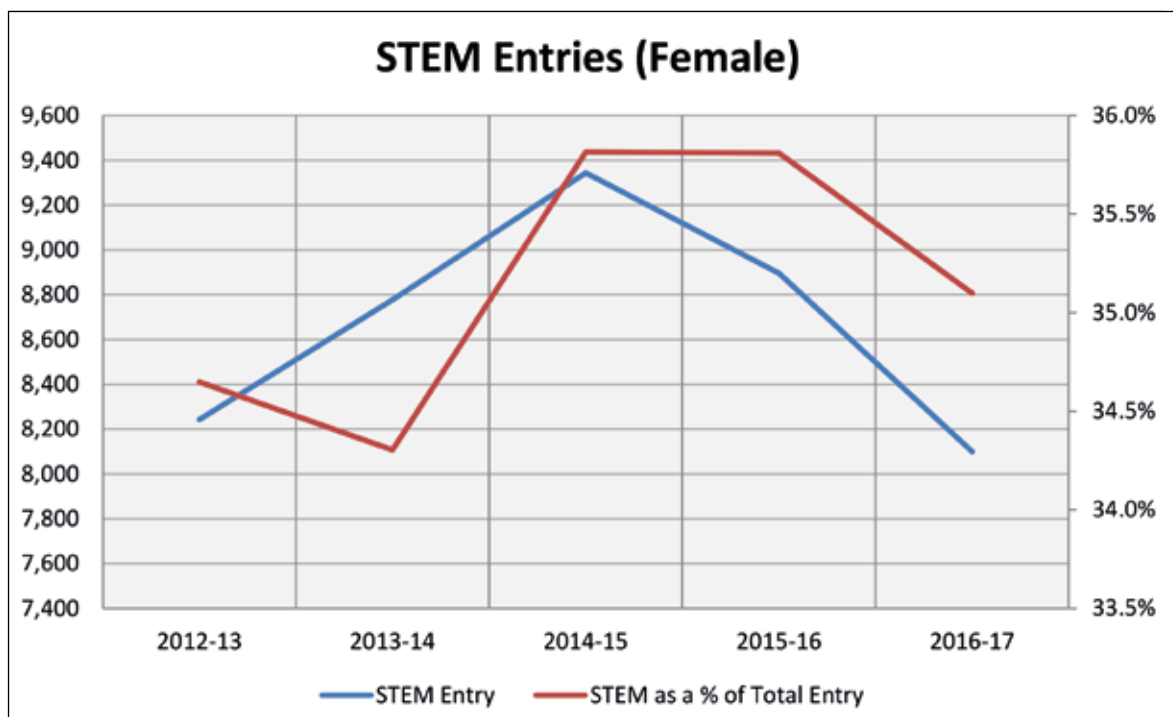
Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017



For female candidates, the same trends can be identified: an increase in candidature between 2013 and 2015 and a subsequent decline in 2016 and 2017.

Unlike male candidates, the proportion of female candidates has declined by 0.7% in 2017 (35.1%). This is still a higher proportion than was reported on five years ago. Over one-third of female candidates now study STEM at AS. This is considerably higher than the proportion at GCSE (29.4%).

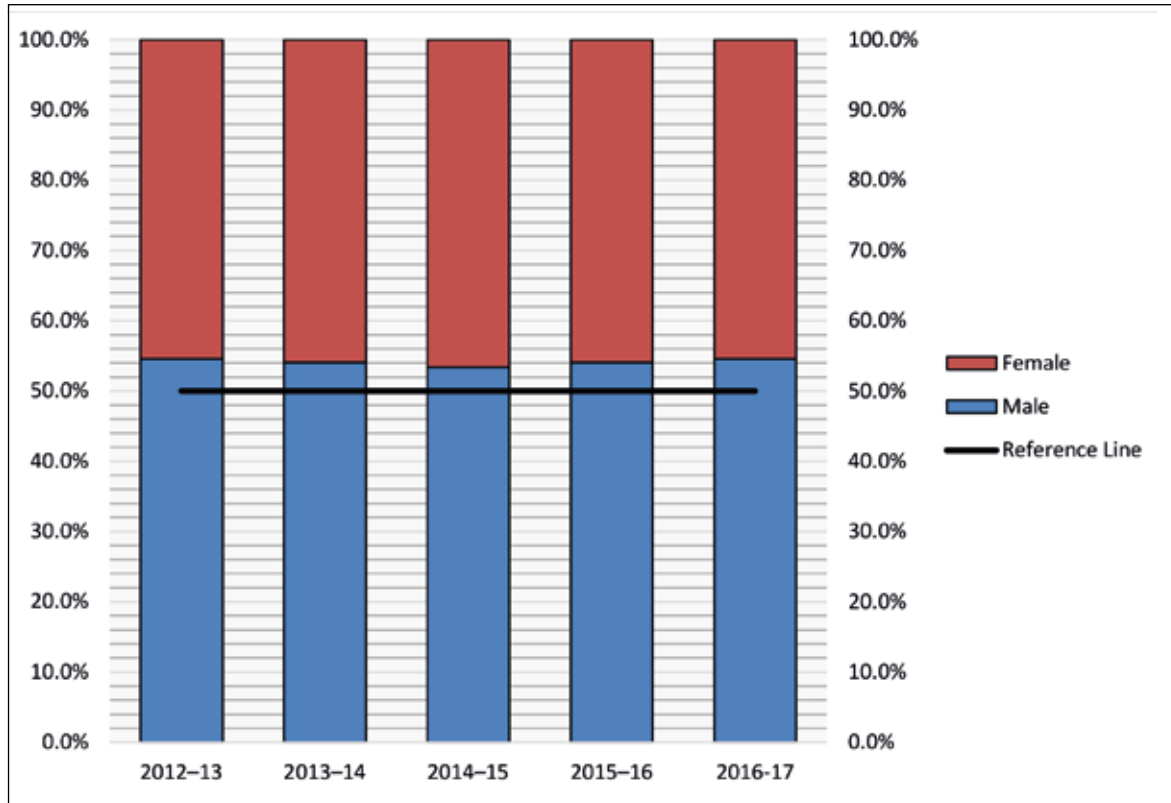
**Figure 26: AS Female STEM Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Similar to what was observed at GCSE, the split between male and female STEM candidates has remained consistent. This is unsurprising, given that both genders are experiencing the same entry trends. Figure 27 overleaf indicates roughly a 55/45 split in favour of male candidates.

**Figure 27: AS STEM Entry Breakdown (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

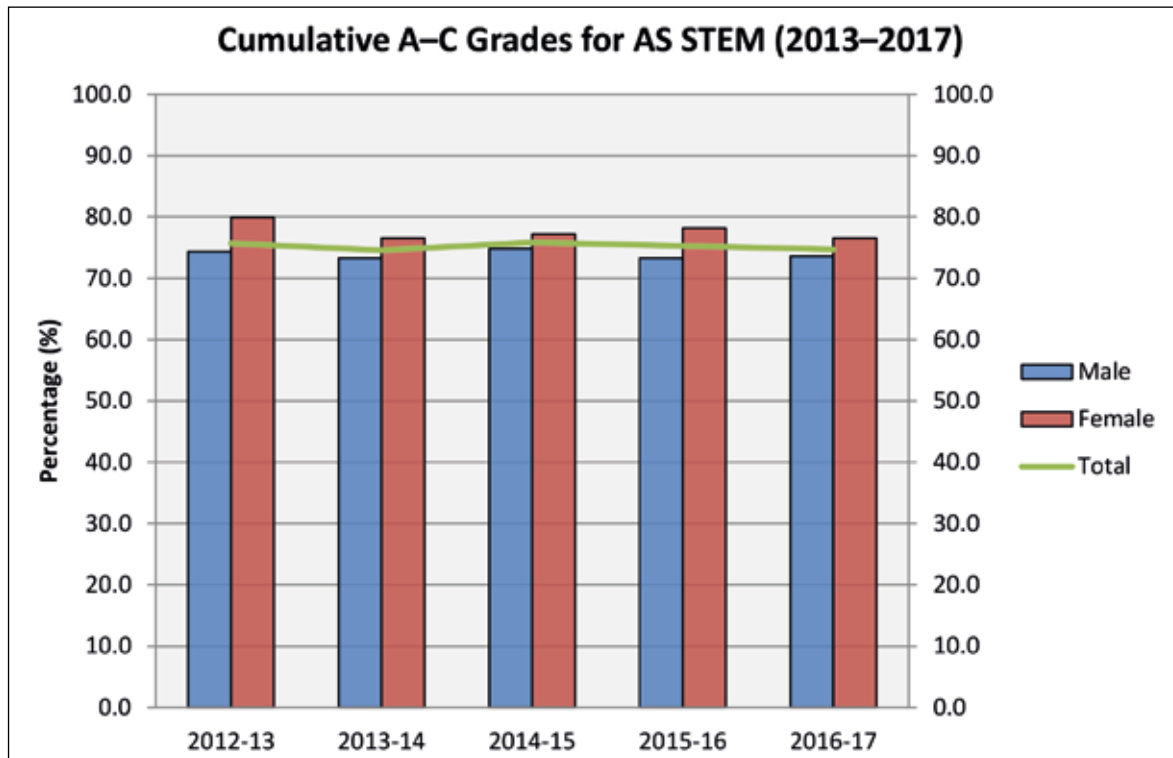
### 4.2.2 Performance

**Table 22: Cumulative A–C Grades for AS STEM (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
Male	Total	595.0	586.3	598.6	586.4	588.8
	Average	74.4	73.3	74.8	73.3	73.6
Female	Total	639.2	612.1	617.7	625.5	612.1
	Average	79.9	76.5	77.2	78.2	76.5
Male and Female	Total	605.6	596.7	606.7	602.4	597.7
	Average	75.7	74.6	75.8	75.3	74.7

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

**Figure 28: Cumulative A–C Grades for AS STEM (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Table 22 presents information on AS candidates’ performance at Grades A–C in STEM subjects over the last five academic years: 2013–2017.

As illustrated in Figure 28, female candidates tend to outperform their male counterparts in STEM subjects. The performance gap narrowed between 2013 and 2015 by 5.5% to 2.4%, then increased again by 4.9% in 2016. Subsequent to this, the gap narrowed again to 2.9% in 2017.

Overall performance is relatively consistent year on year.

## 4.3 AS Languages (Entries and Performance)

### 4.3.1 Entries

**Table 23: AS Language Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
French	879	917	886	815	771
German	204	186	170	178	191
Irish	374	461	454	437	455
Spanish	692	816	820	884	754
<b>Total</b>	<b>2,149</b>	<b>2,380</b>	<b>2,330</b>	<b>2,314</b>	<b>2,171</b>
<b>Total Entry</b>	<b>43,472</b>	<b>45,751</b>	<b>47,005</b>	<b>45,657</b>	<b>41,961</b>
<b>Languages as a % of Total Entry</b>	<b>4.9%</b>	<b>5.2%</b>	<b>5.0%</b>	<b>5.1%</b>	<b>5.2%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

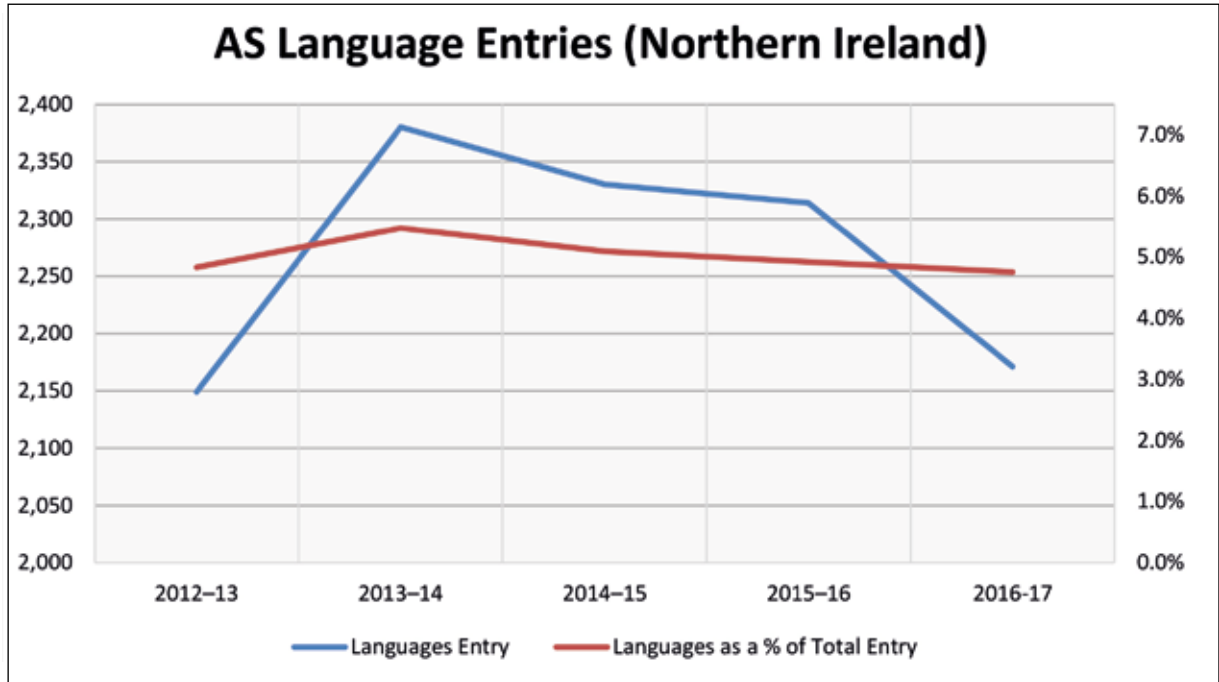
In AS languages, both French and Spanish have experienced declines in entries in the last year (-44 and -130 respectively). German and Irish entry, on the other hand, has increased (+13 and +18 respectively).

Entries in languages, with the exception of Spanish and French, have typically fluctuated year-on-year, most likely influenced by changes in the total candidature. Spanish has experienced an increase in candidature between 2013 and 2016 (+192) followed by the aforementioned decline. French has experienced a consistent decline in candidature over the same period (-108).

These trends mean that the proportional entry for languages has remained consistent over the last five years. This reflects proportional entry trends for languages at GCSE.

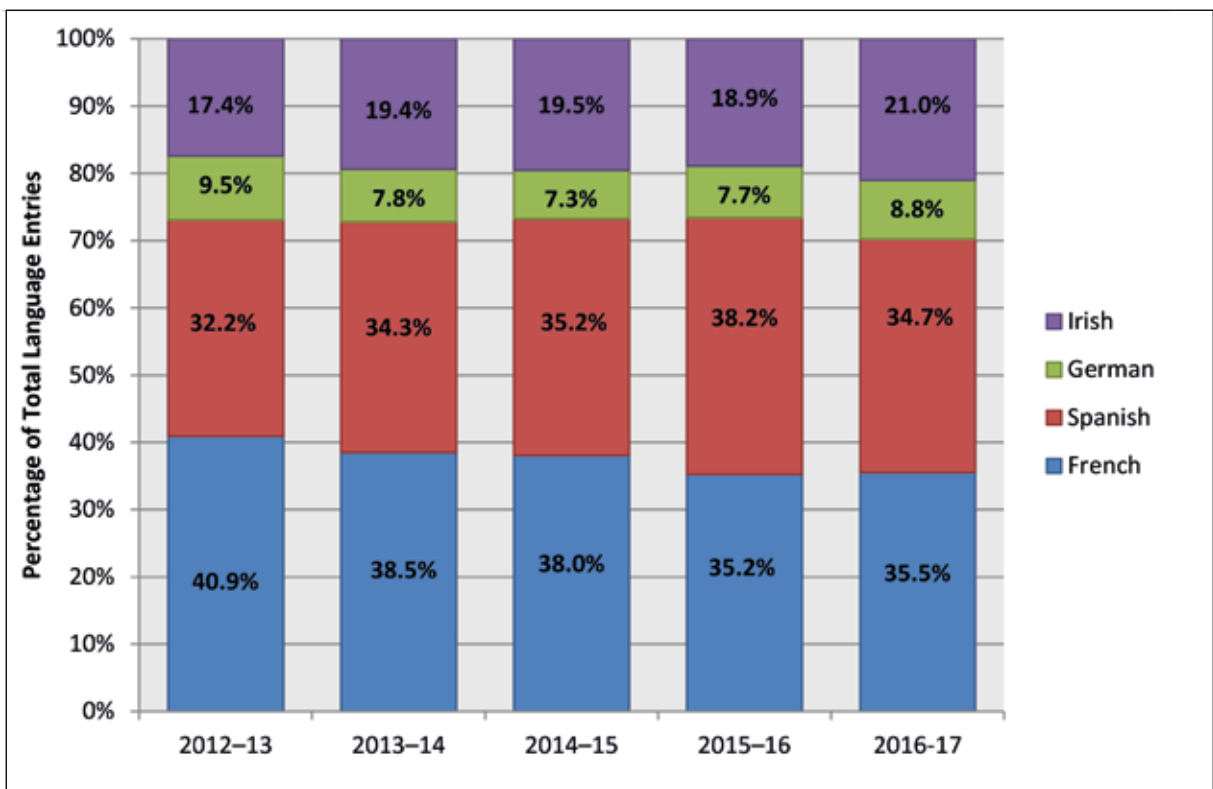
The table above is detailed graphically in Figures 29 and 30.

Figure 29: AS Language Entry (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Figure 30: AS Language Entry Breakdown (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

French is becoming a less popular choice. Between 2013 and 2016, French, as a share of language candidature, has declined from 40.9% to 35.2%. In 2017, however, there was a small increase resulting in French becoming the most popular AS language.

Conversely, Spanish entry increased from 32.2% to 38.2% between 2013 and 2016. In 2017, Spanish experienced a -3.5% drop in its market share, becoming the second most popular subject choice at AS.

German has maintained a consistent share of the language candidature over the last five years. Irish has increased its share of the language candidature from 17.4% to 21% over the five year period.

Table 24 below considers entry trends for both male and female candidates.

**Table 24: AS Language Subject Trends by Gender (2013–2017)**

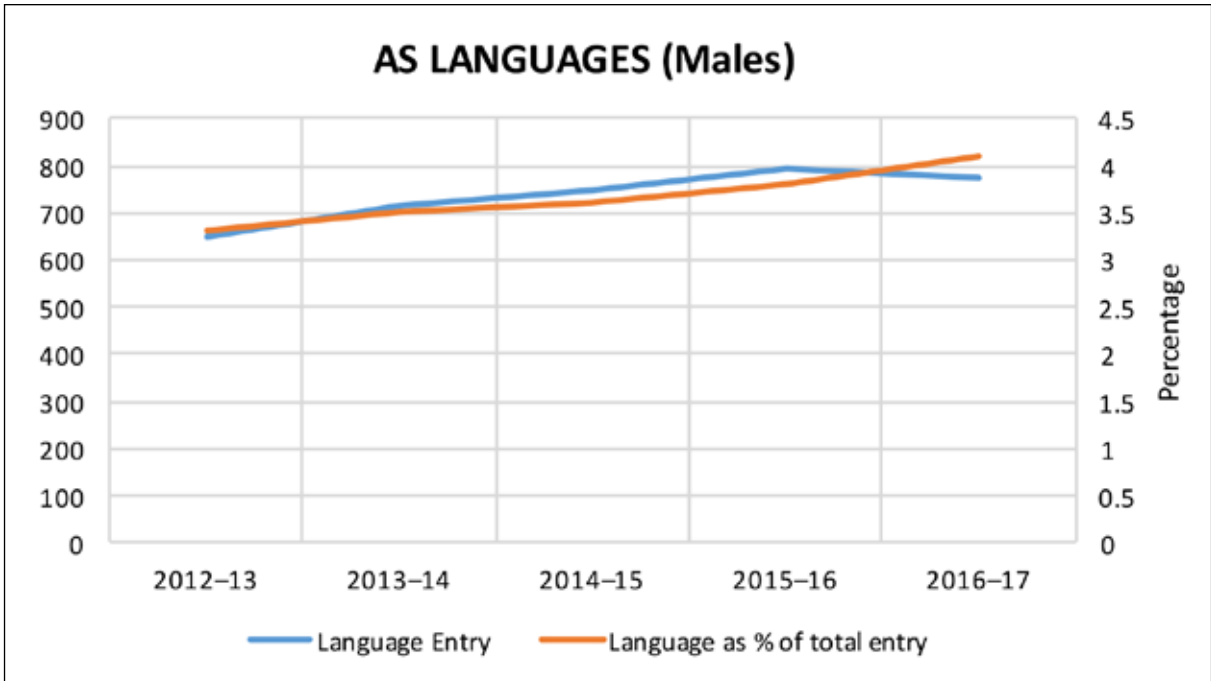
	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
Languages Entry	648	716	748	794	771
Total Entry	19,681	20,362	20,915	20,814	18,891
Languages as a % of Total Entry	3.3%	3.5%	3.6%	3.8%	4.1%
<b>Female</b>					
Languages Entry	1,604	1,501	1,664	1,582	1,400
Total Entry	23,791	25,589	26,090	24,843	23,070
Languages as a % of Total Entry	6.3%	6.5%	6.1%	6.1%	6.1%

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

As the table shows, male and female candidature in languages has decreased by 23 and 182 candidates respectively over the last year.

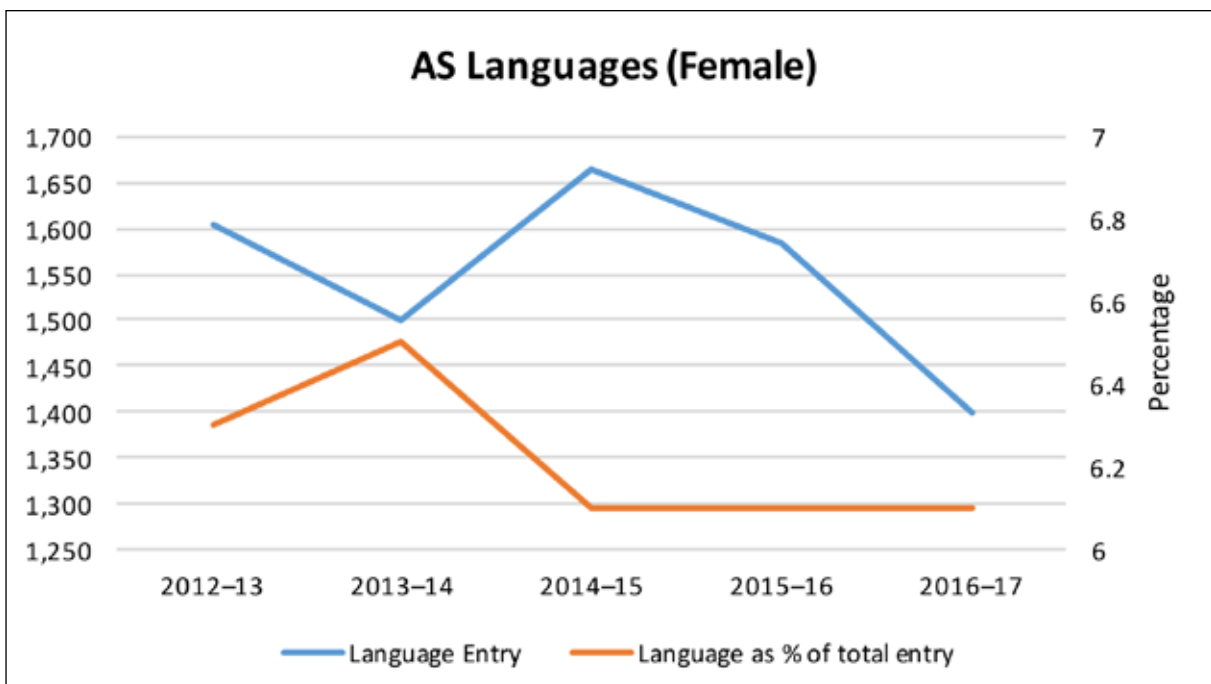
The overall proportion of male candidates studying at least one language at AS has increased by 0.3% to 4.1% over the last academic year. Before this, proportional entry increased by 0.5% from 2013 to 2016. Although roughly half as many male candidates study a language at AS, compared to female candidates, there appears to be a slight increase in male candidates choosing to study languages at AS.

**Figure 31: AS Male Language Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

**Figure 32: AS Female Language Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

The number of female candidates has declined year-on-year since 2015. However, the proportion of female candidates (as a percentage of total candidature) studying AS languages has not changed since 2015. This indicates that languages have maintained a level of consistency after a decline of 0.4% from 2014–2015.

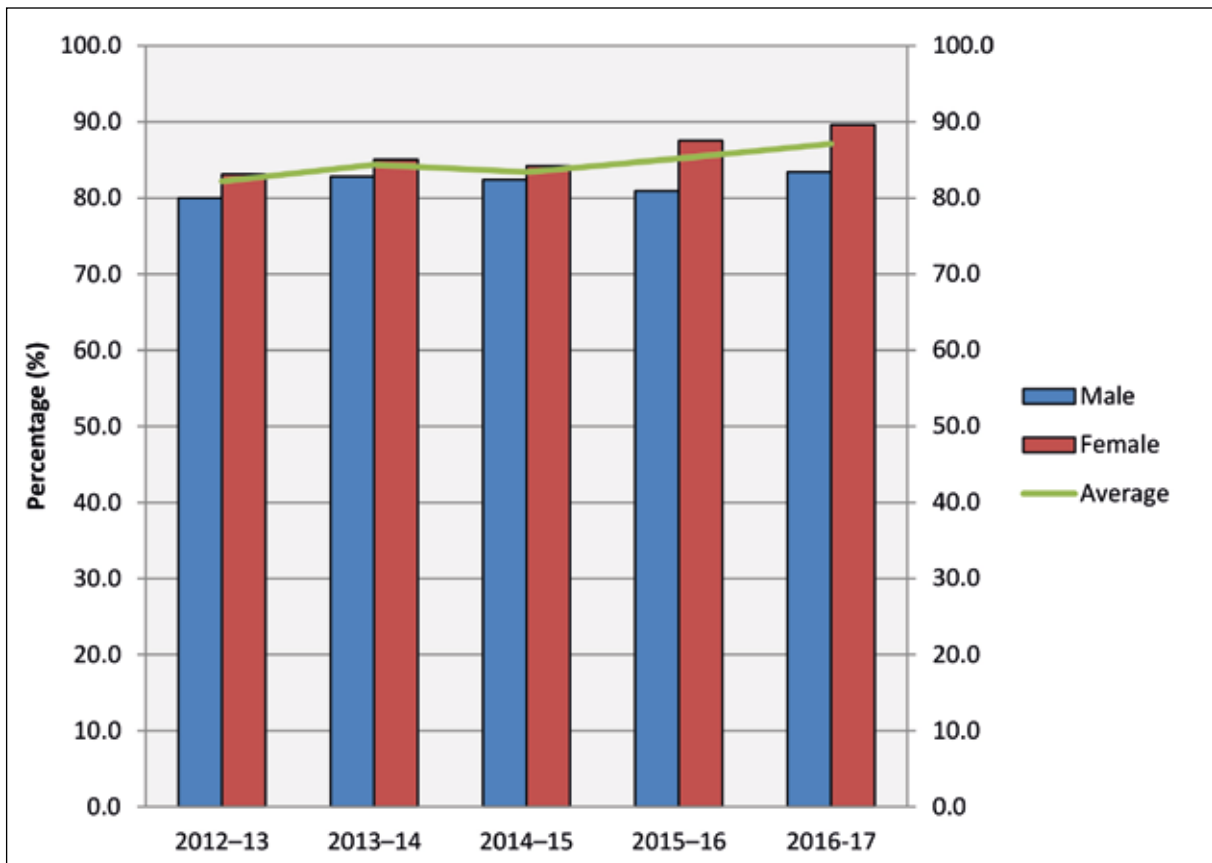
### 4.3.2 Performance

**Table 25: Cumulative A–C Grades for AS Languages (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
Male	Total	319.8	331.3	329.4	323.6	333.6
	Average	80.0	82.8	82.4	80.9	83.4
Female	Total	332.3	339.9	336.7	349.8	358.3
	Average	83.1	85.0	84.2	87.5	89.6
Male and Female	Total	328.6	337.6	333.7	340.8	348.3
	Average	82.2	84.4	83.4	85.2	87.1

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

**Figure 33: Cumulative A–C Grades for AS Languages (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Table 25 shows information on AS candidates' performance at Grades A–C in languages over the last five academic years: 2013–2017.



As illustrated in Figure 33, overall attainment has largely been increasing over the last five years. This appears to be driven by improvements in female candidates' performance over this period.

Similar to the trends identified in STEM, Figure 33 shows that female candidates outperform their male counterparts in languages. The performance gap had narrowed from 3.1% to 1.8% between 2013 and 2015, however it increased again to 6.6% in 2016. Though male performance improved by 2.5% at Grades A–C in 2017, the gender performance gap is still over 6% (6.2%) in favour of female candidates.

## 4.4 AS Arts and Humanities (Entries and Performance)

### 4.4.1 Entries

As stated previously, the Arts and Humanities subjects considered at AS are almost exactly the same as those assessed at GCSE. The only differences are the inclusion of Political Studies and Law and the removal of English Language.

**Table 26: AS Arts and Humanities Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
Art and Design	1,248	1,188	1,100	993	924
Classical Subjects	118	153	148	174	106
Drama	661	655	557	556	276
English	2,921	2,895	2,922	2,812	2,536
History	2,885	3,049	3,261	3,188	2,571
Law	53	63	62	72	53
Music	621	635	541	513	514
Performing/Expressive Arts	17	108	134	179	248
Political Studies	1,192	1,262	1,356	1,439	1,384
Religious Studies	2,639	2,813	2,702	2,685	2,603
Sociology	1,227	1,246	1,298	1,206	951
<b>Total</b>	<b>13,582</b>	<b>14,067</b>	<b>14,081</b>	<b>13,817</b>	<b>12,166</b>
<b>Total Entry</b>	<b>43,472</b>	<b>45,751</b>	<b>47,005</b>	<b>45,657</b>	<b>41,961</b>
<b>Arts and Humanities as a % of Total Entry</b>	<b>31.2%</b>	<b>30.7%</b>	<b>30.0%</b>	<b>30.3%</b>	<b>29.0%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

With the exception of Performing and Expressive Arts and Music, all Arts and Humanities subjects have experienced a decline in entries at AS over the last year. This has resulted in an overall decline in Arts and Humanities candidates of 1,651.

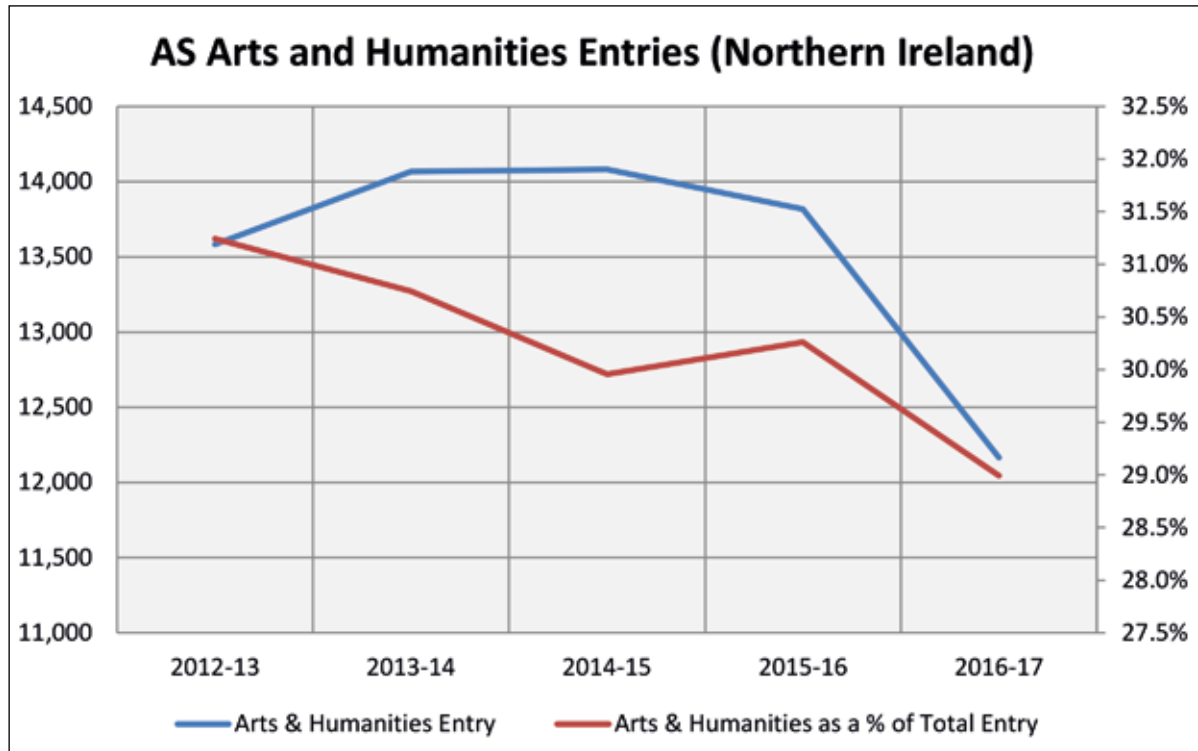
Over a five year period, most subject entries for AS Arts and Humanities have fluctuated year-on-year, indicating no real trend in entries. However, individual subjects detailed in the table above show the following trends:

- **Art and Design:** subject entries have been in constant decline since 2013 (–324);
- **English:** subject entries have been in decline since 2013 (excluding a small increase in 2015) and are at their lowest level in five years;
- **History:** History candidature in 2017 has experienced a significant decrease in its total number of candidates (–617);
- **Drama:** Drama candidature in 2017 has halved (–280); and
- **Performing and Expressive Arts:** subject entries have consistently increased year-on-year since 2013 (+231).

Excluding a slight increase in 2016, proportional entry for Arts and Humanities has been in constant decline since 2013 (–2.2%), indicating that this subject area has become less popular at this level of study.

This is depicted in Figure 34.

**Figure 34: AS Arts and Humanities Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

**Table 27: AS Arts and Humanities Subject Trends by Gender (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
Arts and Humanities Entry	4,828	4,798	4,838	4,838	3,971
Total Entry	19,681	20,362	20,915	20,814	18,891
Arts and Humanities as a % of Total Entry	24.5%	23.6%	23.1%	23.2%	21.0%
<b>Female</b>					
Arts and Humanities Entry	8,754	9,269	9,243	8,979	8,195
Total Entry	23,791	25,589	26,090	24,843	23,070
Arts and Humanities as a % of Total Entry	36.8%	36.2%	35.4%	36.1%	35.5%

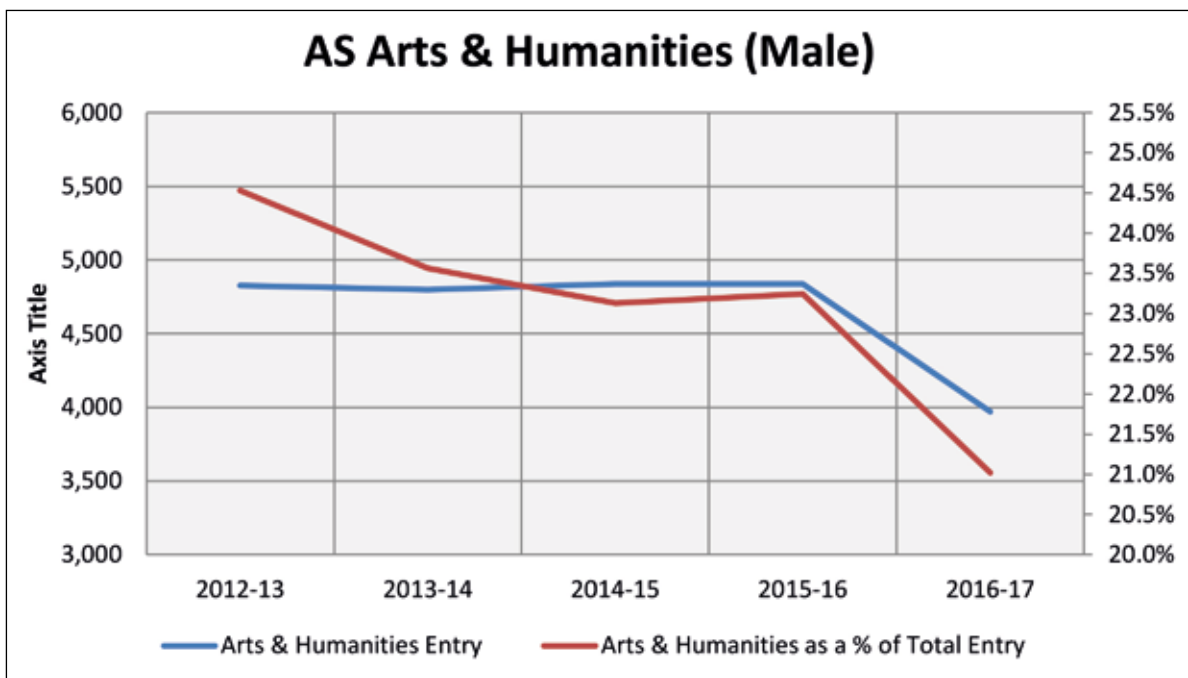
Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

From the table above, the overall number of male candidates has changed very little between 2013 and 2016. The last year saw a decline of 867 male candidates.

However, the overall proportion of male candidates studying Arts and Humanities subjects decreased from 24.5% in 2013 to 21% in 2017 (-3.5%).

It would appear that for male candidates Arts and Humanities are becoming less popular in real terms. This mirrors the trends at GCSE identified in the previous chapter.

**Figure 35: AS Male Arts and Humanities Entry (2013–2017)**

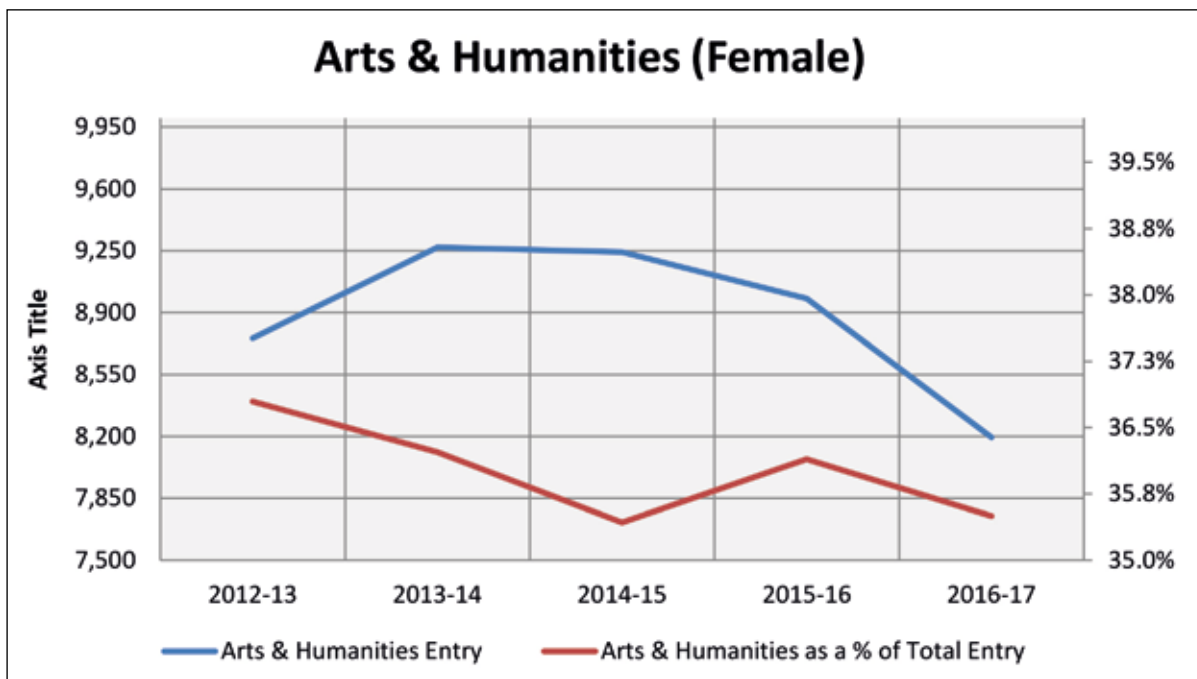


Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

For female candidates, numbers have fluctuated year-on-year since 2013. There are no identifiable trends in entry numbers over this period.

When proportional entry is considered the same fluctuations are observed. Arts and Humanities as a proportion of the total female candidature declined between 2013 and 2015 from 36.8% to 35.4% (-2.2%) and increased to 36.1% in 2016 (+0.7%). In 2017, the proportion of female Arts and Humanities candidates dropped to 35.5%. The overall decline appears to be mostly male driven.

**Figure 36: AS Female Arts and Humanities Entry (2013–2017)**



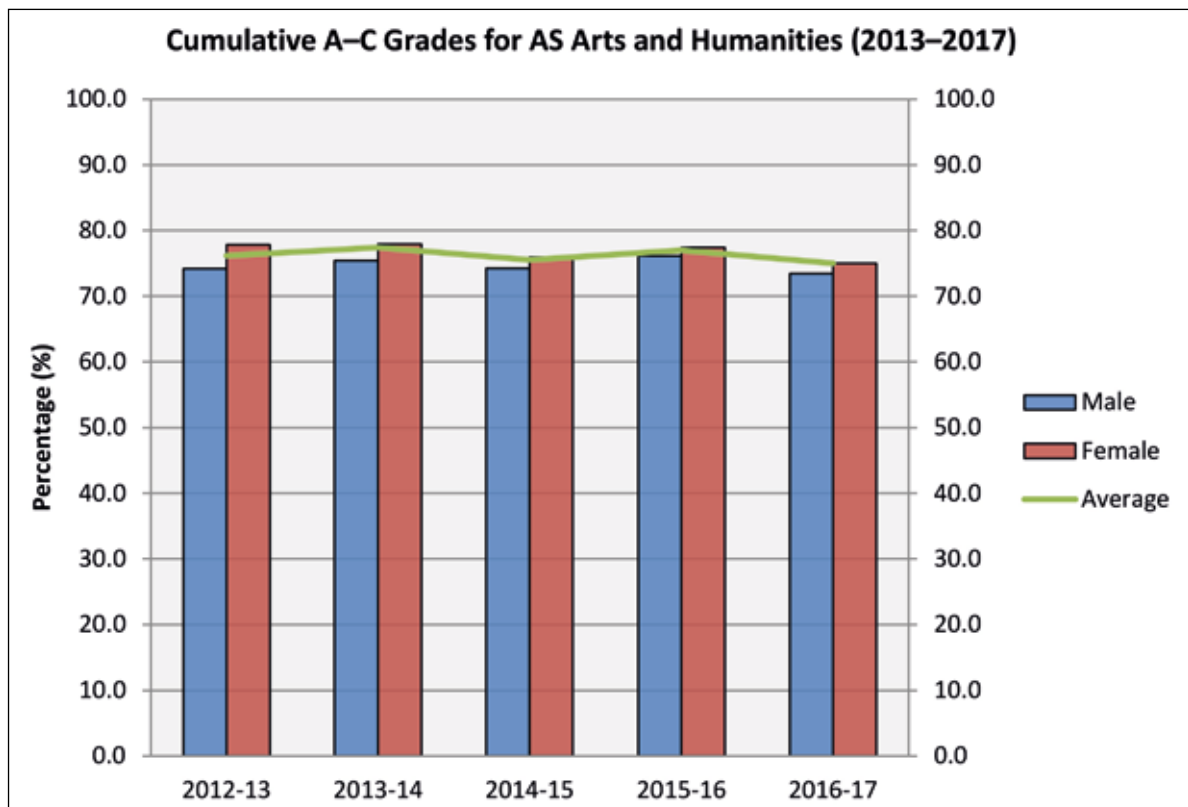
Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

#### 4.4.2 Performance

**Table 28: Cumulative A–C Grades for AS Arts and Humanities (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>	Total	816.2	829.9	817.0	837.0	807.3
	Average	74.2	75.4	74.3	76.1	73.4
<b>Female</b>	Total	856.0	857.1	835.8	851.7	825.2
	Average	77.8	77.9	76.0	77.4	75.0
<b>Male and Female</b>	Total	837.7	851.5	830.8	847.0	824.8
	Average	76.2	77.4	75.5	77.0	75.0

Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

**Figure 37: Cumulative A–C Grades for AS Arts and Humanities (2013–2017)**

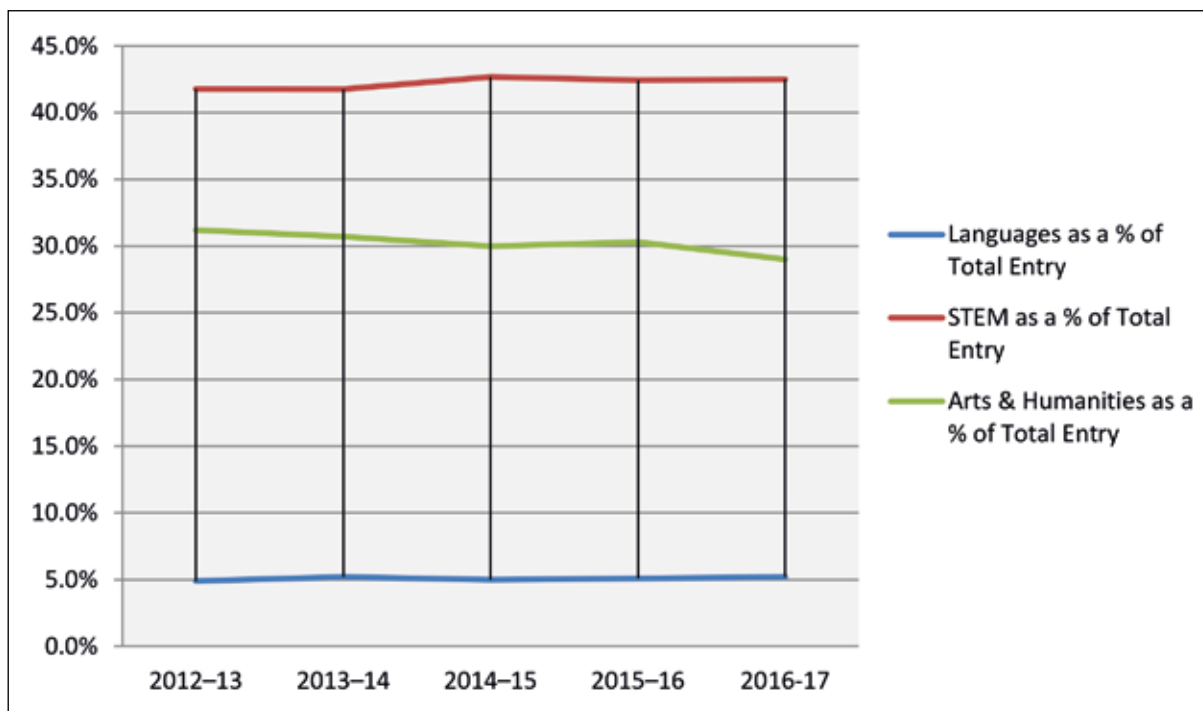
Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Table 28 shows information on AS candidates' performance at Grades A–C in Arts and Humanities over the last five academic years: 2013–2017.

As illustrated in Figure 37, female candidates outperform their male counterparts in Arts and Humanities subjects. The performance gap narrowed from 3.6% to 1.3% between 2013 and 2016 and then increased by 1.6% again in 2017.

## 4.5 AS Summary

**Figure 38: AS Entry Summary (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional AS Full Course Results (Northern Ireland), 2013–2017

Over the last five years, STEM subjects have been the most popular based on the overall percentage entry. On average, 42.2% of total entry for AS subjects has been in STEM subjects.

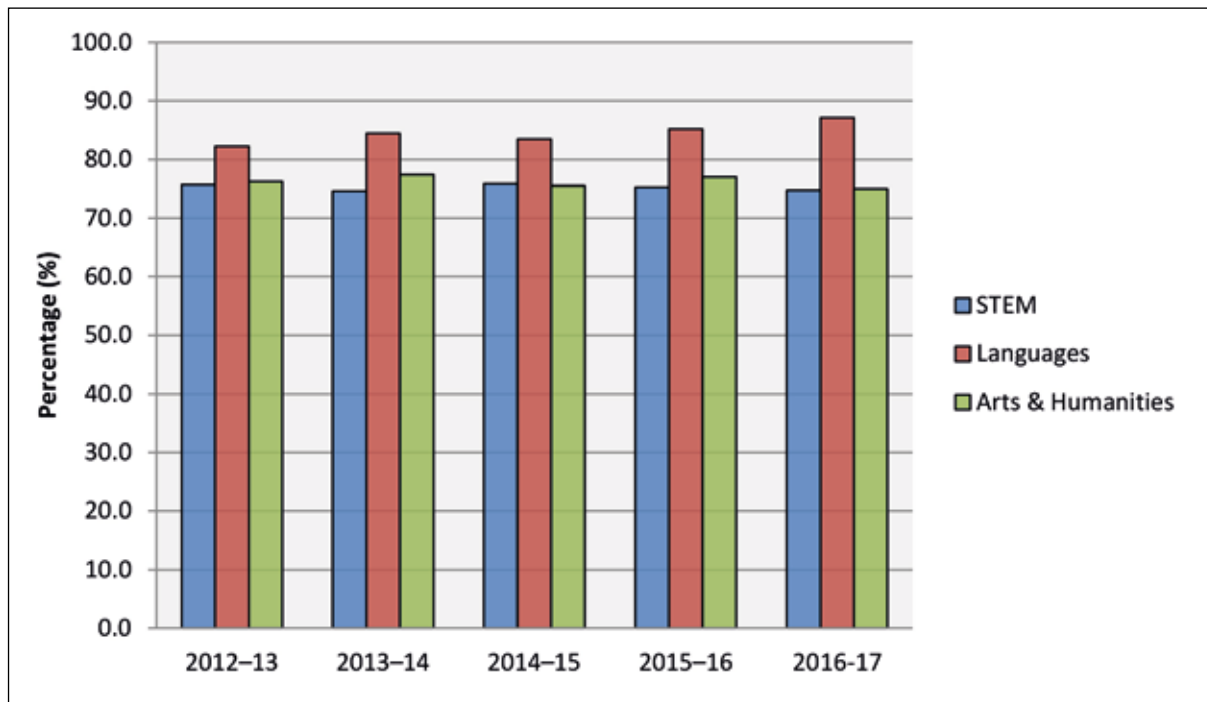
This contradicts the trend noted at GCSE, where the Arts and Humanities were the most popular subject choice. At AS, Arts and Humanities make up on average 30.2% of the total entry.

This would seem to indicate that given more autonomy, candidates tend to opt for STEM subjects. There could be many reasons behind this trend; further research is recommended in this area.

Similarly to GCSE, the overall proportion of Arts and Humanities candidates has slowly declined over the previous five years. Conversely, for STEM subjects the proportional entry has tended to increase over the last five years.

Similar to what was observed at GCSE, this implies that STEM is becoming a more popular subject choice for candidates at this level, while the opposite is observed for the Arts and Humanities.

AS languages have maintained a level of popularity over the last five academic years. Proportional entry has been around 5% over this time period.

**Figure 39: Cumulative A–C Grades for AS (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2013–2017

AS candidates perform better in languages compared to other subject categories. On average, 84.5% of all candidates achieved at least a Grade C at this level.

In STEM and Arts and Humanities subjects, performance is comparable. On average 76.2% of Arts and Humanities candidates achieved at least a Grade C. 75.2% of STEM candidates achieved at least a Grade C.





## 5

# A Level

## 5.1 A Level Entries and Performance (Overall)

In 2017, the overall A level entry decreased by 3.6% in Northern Ireland. This equates to 1144 fewer candidates. The decrease is less pronounced than that experienced at AS. The Three Country entry experienced a decrease of 1%.

The A\* grade was introduced eight years ago. To achieve an A\*, candidates must gain an A overall for their A level and score 90% or more of the total uniform marks available in A2 units. A\* is not awarded for AS or for individual units.

**Table 29: Three Country, N. Ireland and CCEA Entries / Performance**

<b>2017</b> 2016 data in brackets	<b>Three Country</b>	<b>NI Only</b>	<b>CCEA</b>
<b>ENTRIES</b>	828,355 (836,705)	30,684 (31,828)	24,709 (24,157)
<b>%A*</b>	8.3 (8.1)	8.1 (7.7)	8.9 (8.7)
<b>%A*–A</b>	26.3 (25.8)	30.4 (29.5)	32.7 (32.2)
<b>%A–E</b>	97.9 (98.1)	98.3 (98.2)	98.6 (98.5)

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland and UK), 2017. And, CCEA Internal A Level Full Course Results, 2017

Overall in the Three Countries, there was a slight (0.2%) increase at Grade A\* from last year. Grades A\*–A increased by 0.5% to (26.3%), and there was a 0.2% decrease at Grades A\*–E to (97.9%).

In Northern Ireland, 8.1% of candidates achieved a grade A\*, an increase of 0.4 percentage points from last year. There was a 0.9% increase at Grades A\*–A, and a 0.1% increase at Grades A\*–E to (98.3%).

In CCEA 8.9% of candidates achieved a Grade A\*, an increase of 0.2%, with an increase of 0.5% at Grades A\*–A. There was a slight increase of 0.1% at Grades A\*–E from 98.5% to 98.6%.

**Table 30: Three Country, N. Ireland and CCEA Performance (Gender)**

2017 2016 data in brackets	Three Country		NI Only		CCEA	
	Males	Females	Males	Females	Males	Females
%A*	8.8 (8.5)	7.8 (7.7)	7.2 (7.5)	8.7 (7.8)	7.8 (8.3)	9.8 (9.0)
%A*-A	26.6 (25.7)	26.1 (26.0)	26.8 (27.2)	33.3 (31.3)	28.6 (29.6)	36.1 (34.4)
%A-E	97.3 (97.6)	98.3 (98.5)	97.9 (98.0)	98.6 (98.3)	98.2 (98.3)	98.8 (98.7)

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland and UK), 2016: And, CCEA Internal A Level Full Course Results, 2017

Three Country results show the gender difference at Grade A\* is 1%. In Northern Ireland it is 1.5% and with CCEA it is 2%.

Three Country results show the gender difference at Grades A\*-A is 0.5%. In Northern Ireland, it is 6.5% and with CCEA it is 7.5%.

The overall A\*-E gender difference is 1% in the Three Countries. In Northern Ireland it is 0.7% and with CCEA it is 0.6%.

In Northern Ireland, female candidates' outcomes are 0.9% higher than the Three Country female candidates' outcomes at Grade A\*, 7.2% higher at Grades A\*-A and 0.3% higher at Grades A\*-E.

In Northern Ireland, male candidates perform less well than those in the Three Countries at Grade A\* by 1.6%. However they are 0.2% higher at Grades A\*-A and 0.6% higher at Grades A\*-E.

With CCEA, outcomes for female candidates are 2% higher than the Three Country figure at Grade A\*, 10% higher at Grades A\*-A, and 0.5% higher at Grades A\*-E.

At A\*, grades for male candidates are 1% lower than the Three Country figure. At A\*-A, male candidates' grades are 2% higher than the Three Country figure and 0.9% higher at Grades A\*-E.

With CCEA, outcomes for female candidates are 1.1% higher than Northern Ireland at Grade A\*, 2.8% higher at Grades A\*-A, and 0.2% higher at Grades A\*-E. CCEA male candidates are 0.6% higher than Northern Ireland at Grade A\*, 1.8% higher at Grades A\*-A, and 0.3% higher at Grades A\*-E.

For N. Ireland and CCEA candidates, female students outperform their male counterparts across all grades. However, the Three Country figures indicate that, although females outperform males at Grades A\*-E (98.3% to 97.3%), a larger proportion of males achieved a Grade A\* (8.8% to 7.8%) and Grades A\*-A (26.6% to 26.1%) in 2017.

The five most popular subjects at A Level in N. Ireland are:

**Table 31: Most Popular A Level Subjects**

	Overall	Males	Females
1	Mathematics (10.2%)	Mathematics (12.9%)	Biology (10.8%)
2	Biology (9.4%)	History (7.8%)	Religious Studies (9.0%)
3	History (7.0%)	Biology (7.7%)	English Literature (8.8%)
4	Religious Studies (6.9%)	Physics (6.8%)	Mathematics (8.1%)
5	English Literature (6.5%)	ICT (6.7%)	History (6.4%)

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2017

As with GCSE and AS, additional analysis will be based on various subject categories.

## 5.2 A Level STEM (Entries and Performance)

The STEM analysis for A level focuses on the same subjects as those analysed at AS.

### 5.2.1 Entries

**Table 32: A Level STEM Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
Biology	3,359	3,158	3,111	3,107	2,889
Chemistry	1,920	1,845	1,843	1,864	1,743
Computing	67	106	168	245	315
Design and Technology	998	939	1,022	987	1,017
Mathematics	3,176	3,065	3,328	3,376	3,129
Further Mathematics	173	191	181	189	199
ICT	1,524	1,434	1,498	1,479	1,455
Physics	1,577	1,549	1,532	1,414	1,293
<b>Total</b>	<b>12,794</b>	<b>12,287</b>	<b>12,683</b>	<b>12,661</b>	<b>12,040</b>
<b>Total Entry</b>	<b>32,836</b>	<b>31,600</b>	<b>32,390</b>	<b>31,828</b>	<b>30,684</b>
<b>STEM as a % of Total Entry</b>	<b>39%</b>	<b>38.9%</b>	<b>39.2%</b>	<b>39.8%</b>	<b>39.2%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

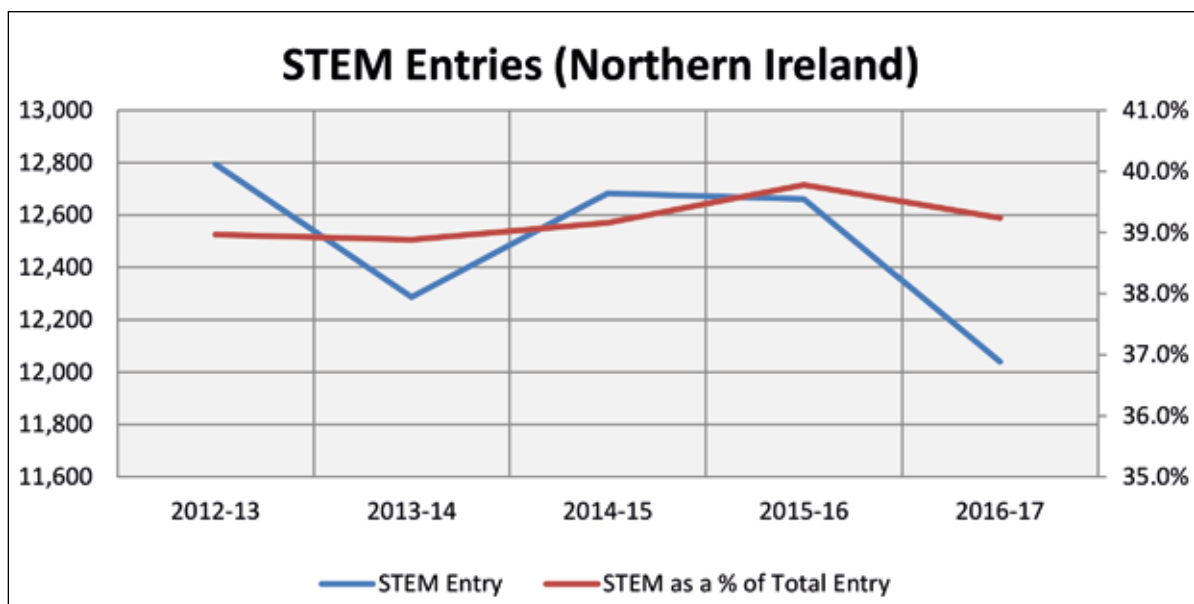
Most subject entries for A Level STEM subjects have typically fluctuated year-on-year, indicating no real trend for this area. This implies that numbers are largely affected by the size of the student cohort for that particular year. However, the following subjects show trends that can be observed:

- **Biology:** Subject entries have been in constant decline since 2013 (-470);
- **Chemistry:** Subject entries have been in decline since 2013 (-177); and
- **Physics:** Subject entries have been in decline since 2013 (-284).

Proportionally STEM subjects have remained relatively consistent, with the 2017 entry showing a slight increase (0.2%) on the 2013 figure.

In 2017, STEM candidature decreased by 0.6%. This could be explained by the decline in Biology, Chemistry and Physics entries. Although the bullets above detail a decline in entries, the proportional shares have not been affected, remaining relatively stable.

Figure 40: A Level STEM Entry (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2017

Table 33 below considers entry trends for both male and female students.

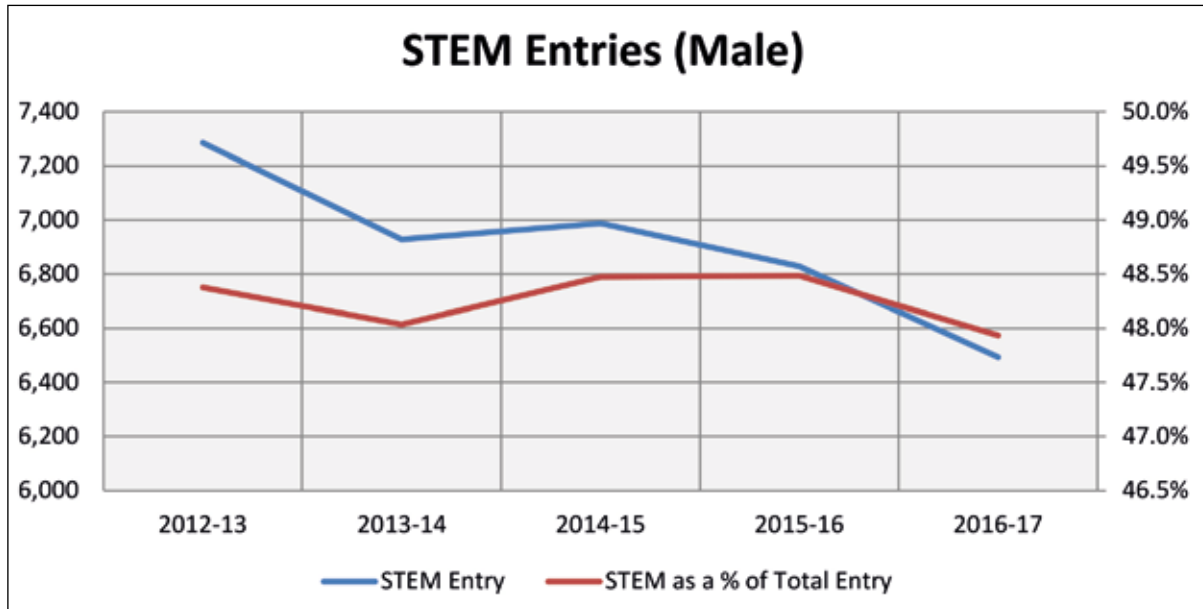
Table 33: A Level STEM Subject Trends by Gender (2013–2017)

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
<b>Male</b>					
STEM Entry	7,285	6,928	6,987	6,829	6,493
Total Entry	15,059	14,423	14,414	14,085	13,546
STEM as a % of Total Entry	48.4%	48.0%	48.5%	48.5%	47.9%
<b>Female</b>					
STEM Entry	5,509	5,359	5,696	5,832	5,547
Total Entry	17,777	17,177	17,976	17,743	17,138
STEM as a % of Total Entry	31.0%	31.2%	31.7%	32.9%	32.4%

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

As expected, because of the changes in total candidature identified earlier, the total number of male STEM candidates has fluctuated year-on-year. The total share of male candidates decreased by 0.5% between 2013 and 2017.

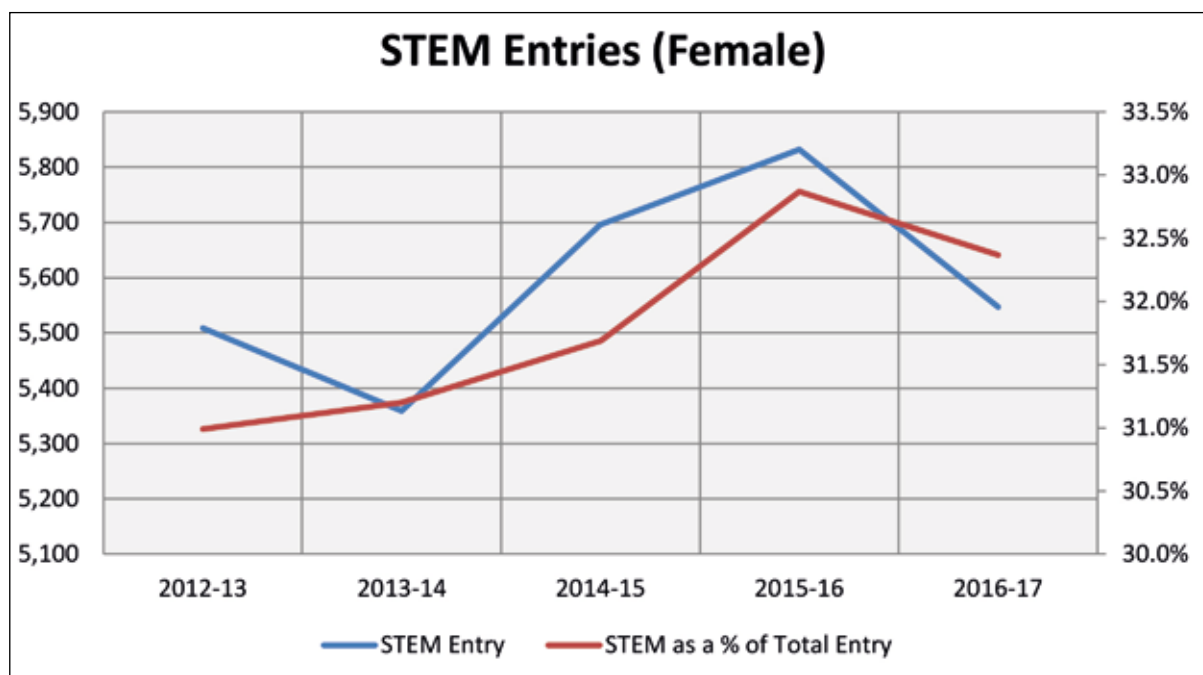
**Figure 41: A Level Male STEM Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-17

In keeping with their male counterparts, the total number of female STEM candidates has fluctuated year-on-year. The proportion of female candidates studying STEM subjects at A Level has increased by 1.4% since 2013. Just under one third of female candidates (32.4%) now study STEM subjects at A Level, indicating that STEM subjects have maintained their popularity over the five year period.

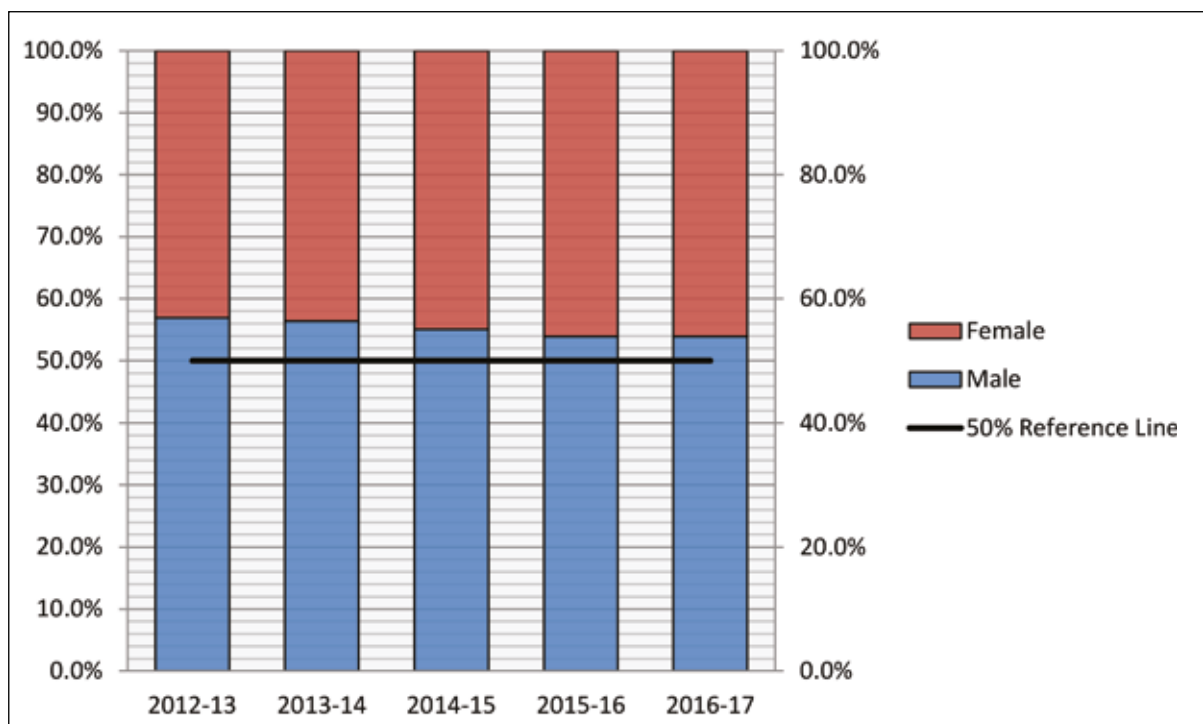
**Figure 42: A level Female STEM Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-17

At A Level, the gender gap between STEM candidates has narrowed over time. Figure 43 indicates that the gap has narrowed from 57 (male) to 43 (female) in 2013 to a 54:46 split in 2017. This differs from what was observed at GCSE and AS, where the male to female gap remained consistent over five years.

**Figure 43: A Level STEM Entry Breakdown (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-17

## 5.2.2 Performance

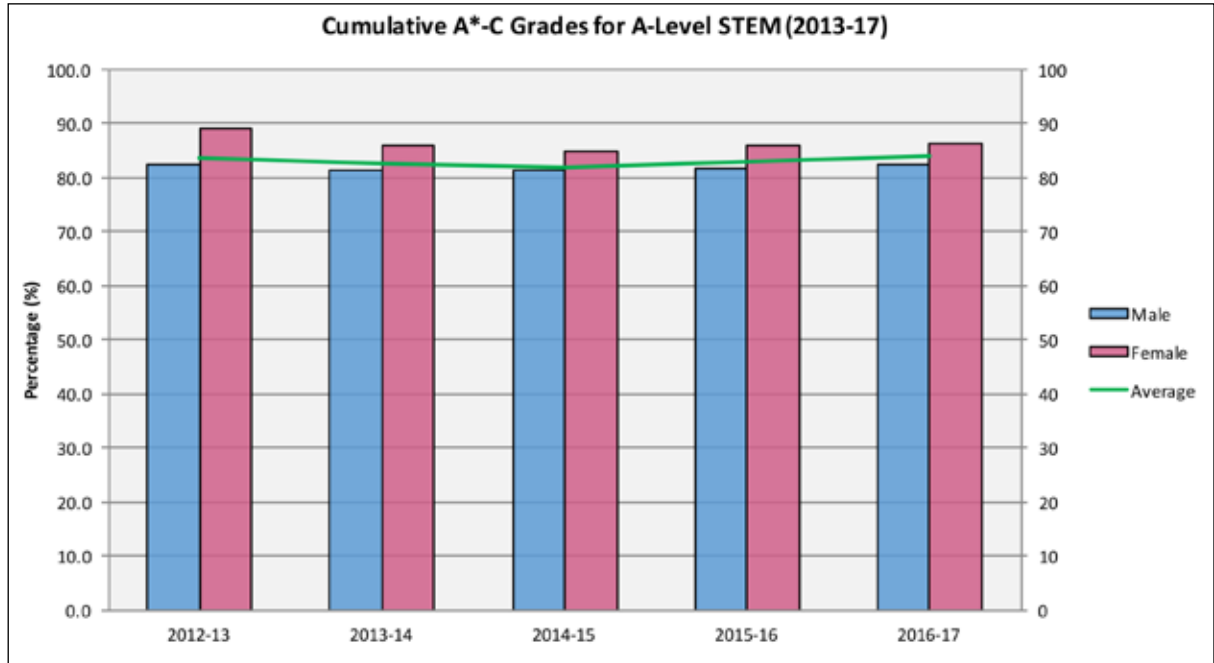
**Table 34: Cumulative A\*-C Grades for A Level STEM (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
Male	Total	658.1	650.4	649.6	653.5	659.4
	Average	82.3	81.3	81.2	81.7	82.4
Female	Total	711.6	686.1	677.8	687.3	688.5
	Average	89.0	85.8	84.7	85.9	86.1
Male and Female	Total	670.0	659.4	654.7	663.7	671.4
	Average	83.8	82.4	81.8	83.0	83.9

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017



**Figure 44: Cumulative A\*–C Grades for A Level STEM (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

The table and chart above present information on A level candidates’ performance at Grades A\*–C in STEM subjects over the last five academic years (from 2013–2017).

As is highlighted, female candidates tend to outperform their male counterparts in STEM subjects. A performance gap opened up between male and female candidates between 2013 and 2016, although this gap narrowed in 2017.

## 5.3 A Level Languages (Entries and Performance)

### 5.3.1 Entries

**Table 35: A Level Language Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016–17
French	550	543	536	503	473
German	99	120	97	102	100
Irish	309	313	330	331	333
Spanish	513	436	534	524	529
<b>Total</b>	<b>1,471</b>	<b>1,412</b>	<b>1,497</b>	<b>1,460</b>	<b>1,435</b>
<b>Total Entry</b>	<b>32,836</b>	<b>31,600</b>	<b>32,390</b>	<b>31,828</b>	<b>30,684</b>
<b>Languages as a % of Total Entry</b>	<b>4.5%</b>	<b>4.5%</b>	<b>4.6%</b>	<b>4.6%</b>	<b>4.7%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-17

Entries for German, Irish and Spanish showed little change in 2017 compared to 2016. French entries continued to fall - down by 30 from 2016

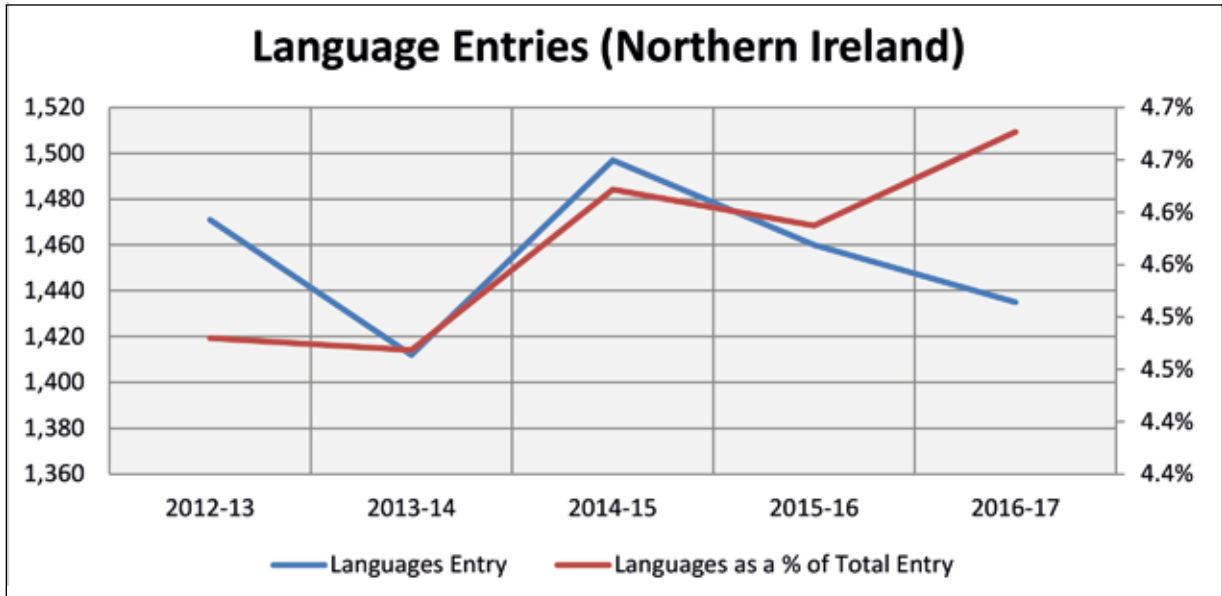
Languages, with the exception of French and Irish, have typically fluctuated year-on-year, influenced most likely by changes in the total candidature. French has experienced a 14% (-77) decline in candidature over the same period. Irish has experienced small year-on-year increases since 2013 (+24).

The number of candidates taking Spanish has fluctuated year-on-year. It experienced a large increase in candidature between 2014 and 2015 (+98).

These trends mean that the proportional entry for languages has remained consistent over the last five years. This reflects proportional entry experienced for languages at GCSE and AS.

The table above is detailed graphically in Figure 45.

Figure 45: A Level Language Entry (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional A level-Level Full Course Results (Northern Ireland), 2013-2017

Table 36 below considers entry trends for both male and female students.

Table 36: A Level Language Subject Trends by Gender (2013–2017)

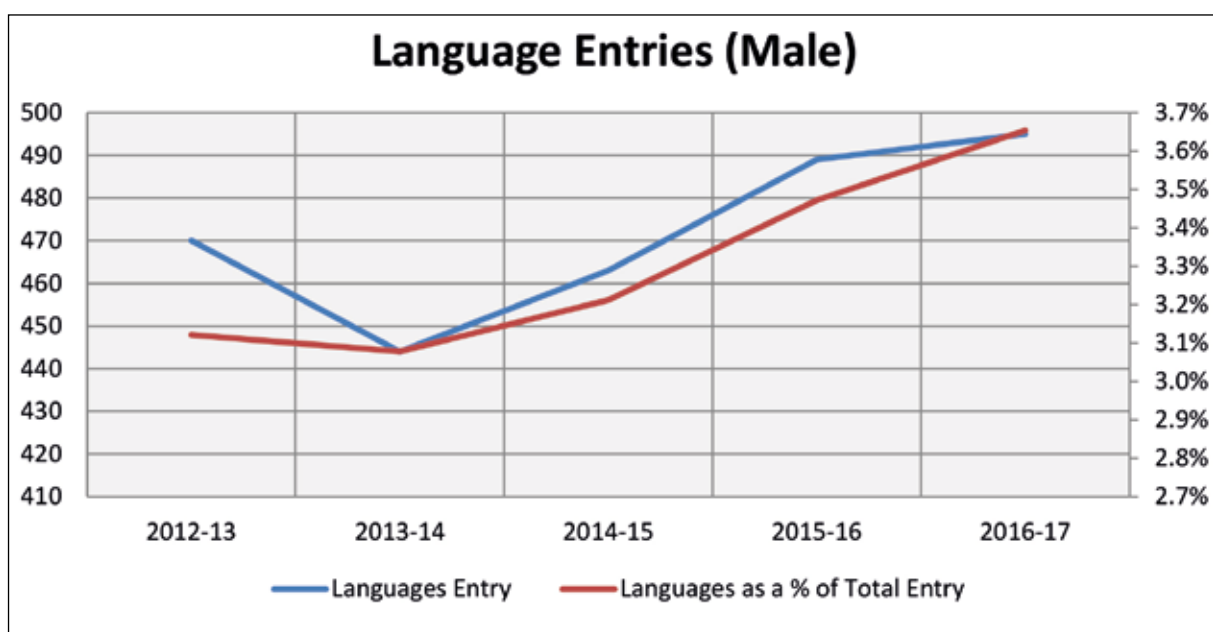
	Year				
	2012–13	2013–14	2014–15	2015–16	2016-17
<b>Male</b>					
Languages Entry	470	444	463	489	495
Total Entry	15,059	14,423	14,414	14,085	13,546
Languages as a % of Total Entry	3.1%	3.1%	3.2%	3.5%	3.7%
<b>Female</b>					
Languages Entry	1,001	968	1,034	971	940
Total Entry	17,777	17,177	17,976	17,743	17,138
Languages as a % of Total Entry	5.6%	5.6%	5.8%	5.5%	5.5%

Source: Joint Council for Qualifications (JCQ) – Provisional A level-Level Full Course Results (Northern Ireland), 2013-2017

Male candidature in languages has increased over the last year (+6). Male candidature in languages has increased over the last three years (+51). The overall proportion of male candidates studying at least one language at A level has increased by 0.2% over the last academic year to 3.7%.

Though a smaller number of male candidates study a language at A Level compared to female candidates, there is a slight increase in male candidates choosing to study a language at A Level, similar to the trend noted at AS.

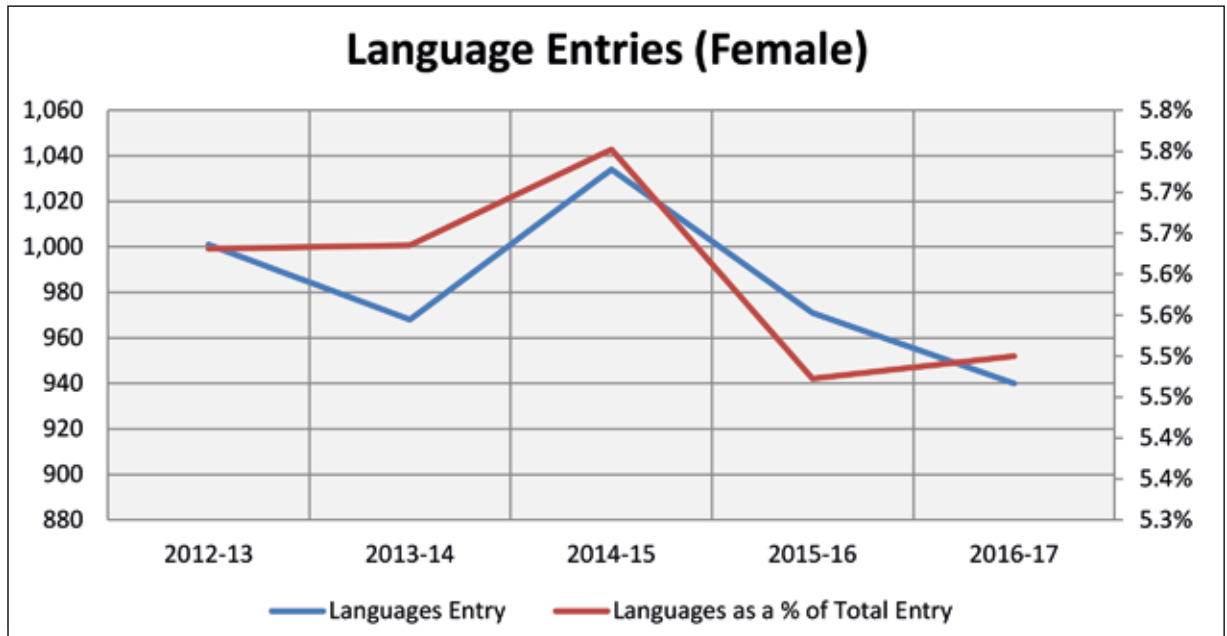
**Figure 46: A Level Male Language Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

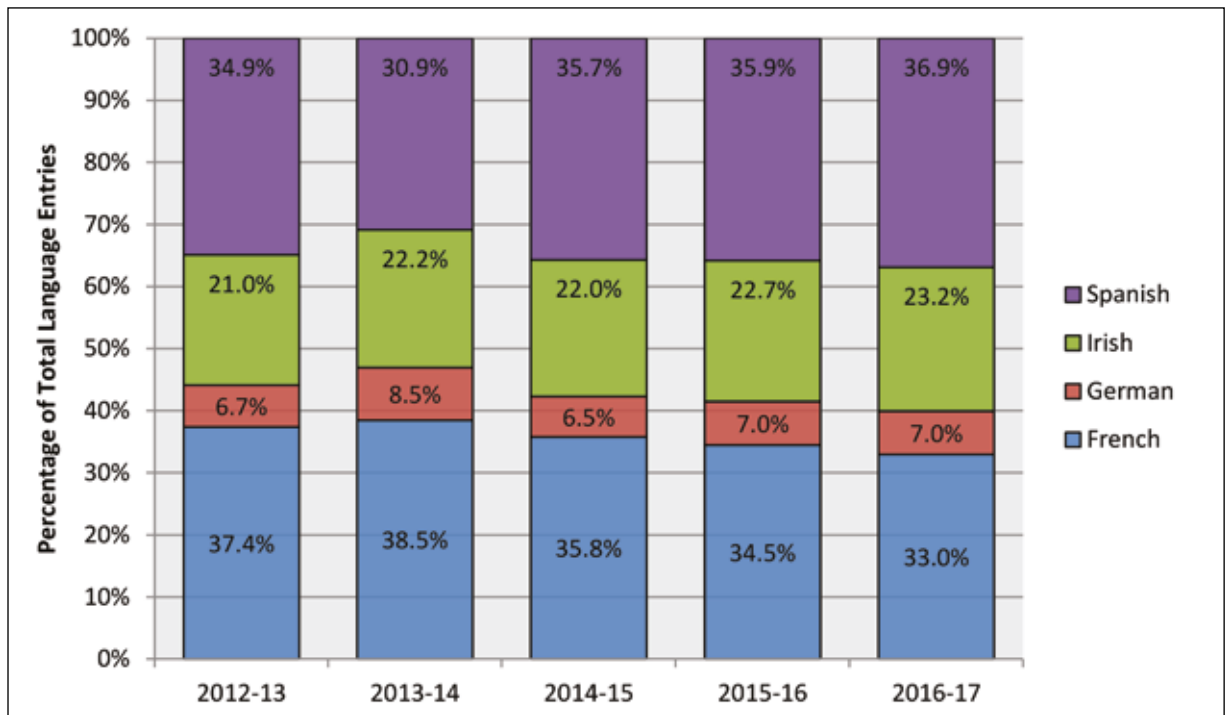
Total numbers of female candidates have typically fluctuated year-on-year since 2013. However, the proportion of female candidates (as a % of total candidature) studying A level Languages has, excluding an increase in 2015, experienced a slight decline since 2013 (-0.1%). This indicates that languages are becoming a less popular subject option for female candidates at this level of study.

Figure 47: A Level Female Language Entry (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

Figure 48: A Level Language Entry Breakdown (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

As illustrated above, French is becoming a less popular subject choice at A level. Since 2013, French as a share of all language candidature has declined from 37.4% to 33%.

This is similar to trends noted at GCSE and AS.

Conversely, Spanish entry has increased from 34.9% to 36.9% over the same period, making it the most popular language at A Level.

German and Irish (in spite of its year-on-year increase) have maintained a consistent share of the language candidature over the last five years.

This mirrors the trends observed at AS, indicating that follow-on levels for individual languages remains stable between AS and A level.

### 5.3.2 Performance

**Table 37: Cumulative A\*-C Grades for A Level Languages (2013–2017)**

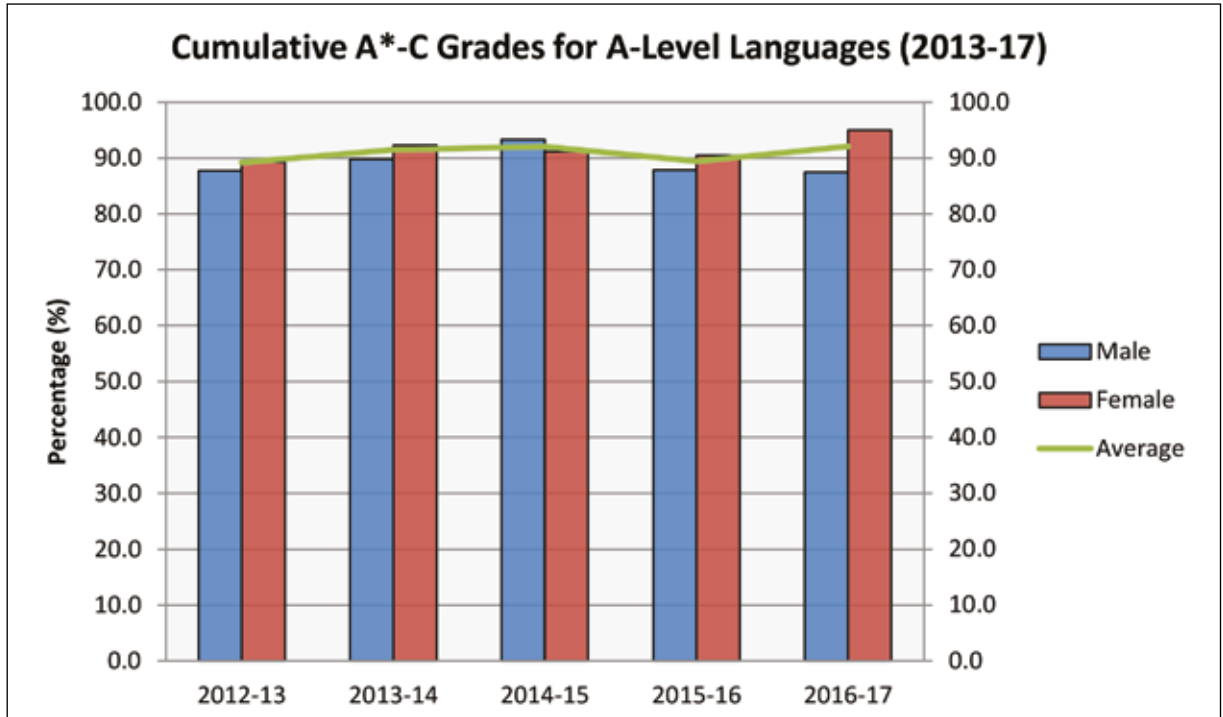
		Year				
		2012–13	2013–14	2014–15	2015–16	2016-17
<b>Male</b>	Total	350.8	359.1	373.2	351.5	349.7
	Average	87.7	89.8	93.3	87.9	87.4
<b>Female</b>	Total	357.1	369.1	364.6	361.8	380
	Average	89.3	92.3	91.2	90.5	95
<b>Male and Female</b>	Total	356.7	365.9	368.2	357.6	368.3
	Average	89.2	91.5	92.1	89.4	92.1

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

Table 37 presents information on A level candidates' performance at Grades A\*–C in Languages over the last five academic years (2013–2017).

As illustrated in Figure 49, (excluding 2015) female candidates outperform their male counterparts in languages.

**Figure 49: Cumulative A\*-C Grades for A Level Languages (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

## 5.4 A Level Arts and Humanities (Entries and Performance)

### 5.4.1 Entries

**Table 38: A Level Arts and Humanities Subject Trends (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016-17
Art and Design	1,042	1,078	1,029	921	915
Classical Subjects	119	91	95	108	118
Drama	540	545	539	463	458
English	2,287	2,268	2,182	2,148	2,089
History	2,363	2,260	2,301	2,322	2,144
Law	39	44	37	62	46
Music	494	480	455	358	326
Performing / Expressive Arts	13	8	87	120	160
Political Studies	1,091	868	1,016	1,005	998
Religious Studies	2,503	2,275	2,401	2,066	2,114
Sociology	1,007	937	880	914	918
<b>Total</b>	<b>11,498</b>	<b>10,854</b>	<b>11,022</b>	<b>10,487</b>	<b>10,286</b>
<b>Total Entry</b>	<b>32,836</b>	<b>31,600</b>	<b>32,390</b>	<b>31,828</b>	<b>30,684</b>
<b>Arts and Humanities as a % of Total Entry</b>	<b>35.0%</b>	<b>34.3%</b>	<b>34.0%</b>	<b>32.9%</b>	<b>33.5%</b>

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

Over the last year there has been an overall decline in the number of candidates studying Arts and Humanities (-201). In individual subjects, the largest reductions have been noted in:

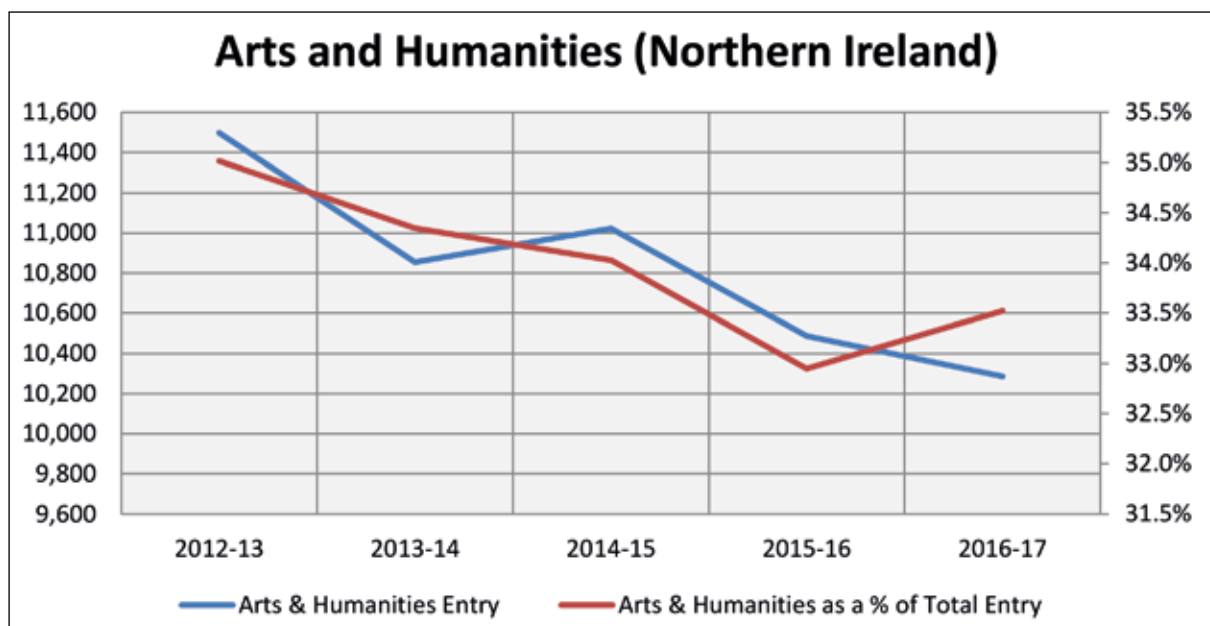
- History (-178);
- English (-59);
- Music (-32); and
- Law (-16).

Over the last five years subjects such as History, English and Music have been in consistent decline. Please note that this was also observed for English and History at AS. This has largely driven a gradual reduction in the number of candidates studying Arts and Humanities at this level.



Proportional entry has also been in decline since 2013 (-1.5%). The Arts and Humanities are becoming less popular at this level of study. Again this mirrors the trends identified at AS. This is shown in Figure 50 below.

**Figure 50: A Level Arts and Humanities Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

Table 39 below considers entry trends for both male and female students.

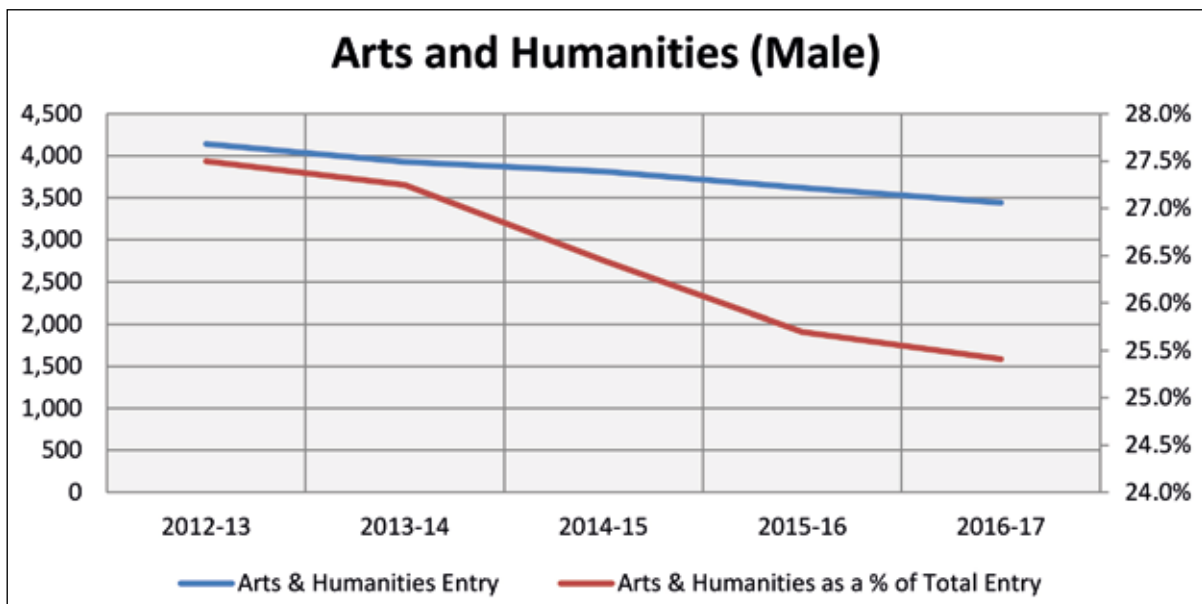
**Table 39: A Level Arts and Humanities Subject Trends by Gender (2013–2017)**

	Year				
	2012–13	2013–14	2014–15	2015–16	2016-17
<b>Male</b>					
Arts and Humanities Entry	4,141	3,930	3,812	3,619	3,442
Total Entry	15,059	14,423	14,414	14,085	13,546
Arts and Humanities as a % of Total Entry	27.5%	27.2%	26.4%	25.7%	25.4%
<b>Female</b>					
Arts and Humanities Entry	7,357	6,924	7,210	6,868	6,844
Total Entry	17,777	17,177	17,976	17,743	17,138
Arts and Humanities as a % of Total Entry	41.4%	40.3%	40.1%	38.7%	39.9%

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

The total number and overall proportion of male candidates studying Arts and Humanities has decreased year-on-year between 2013 and 2017 (-699; -2.1%). Therefore, it would appear that for male candidates, Arts and Humanities are becoming less popular in real terms. This mirrors the trends noted at GCSE and AS.

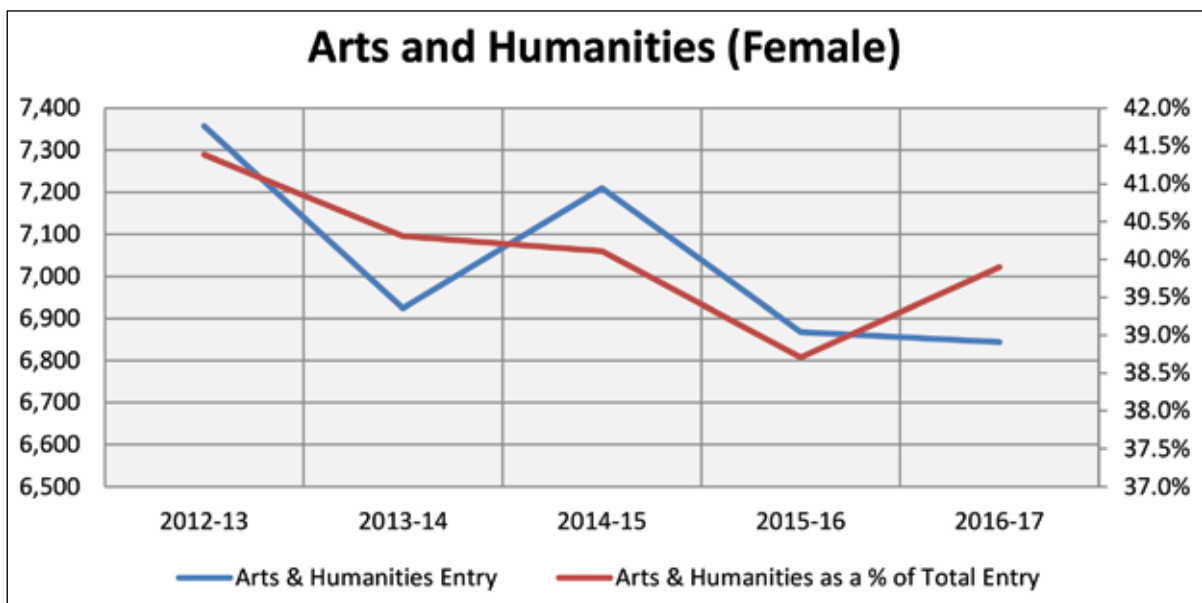
**Figure 51: A Level Male Arts and Humanities Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

For female candidates, numbers have fluctuated year-on-year since 2013. There are no identifiable trends in entry numbers over this period. Nevertheless, when proportional entry is considered, Arts and Humanities as a proportion of the total female candidature has dropped by 1.5% over the last five years.

**Figure 52: A Level Female Arts and Humanities Entry (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

Both groups have contributed to the overall trends identified earlier. As such, the Arts and Humanities seem to be becoming less popular for both sets of candidates.

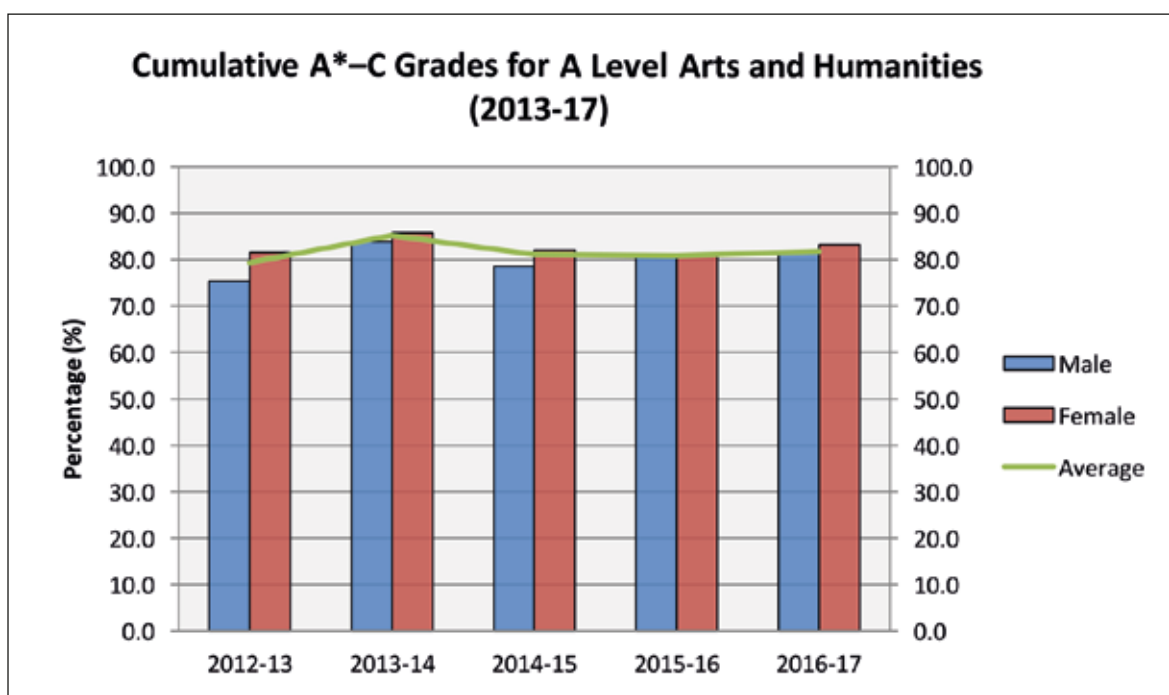
### 5.4.2 Performance

**Table 40: Cumulative A\*-C Grades for A Level Arts and Humanities (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016-17
Male	Total	828.3	923.2	863.7	886.2	894.6
	Average	75.3	83.9	78.5	80.6	81.3
Female	Total	896.1	943.1	901.8	887.1	914.7
	Average	81.5	85.7	82.0	80.6	83.2
Male and Female	Total	872.6	937.3	891.3	888.4	899.5
	Average	79.3	85.2	81.0	80.8	81.8

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

**Figure 53: Cumulative A\*-C Grades for A Level Arts and Humanities (2013–2017)**



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

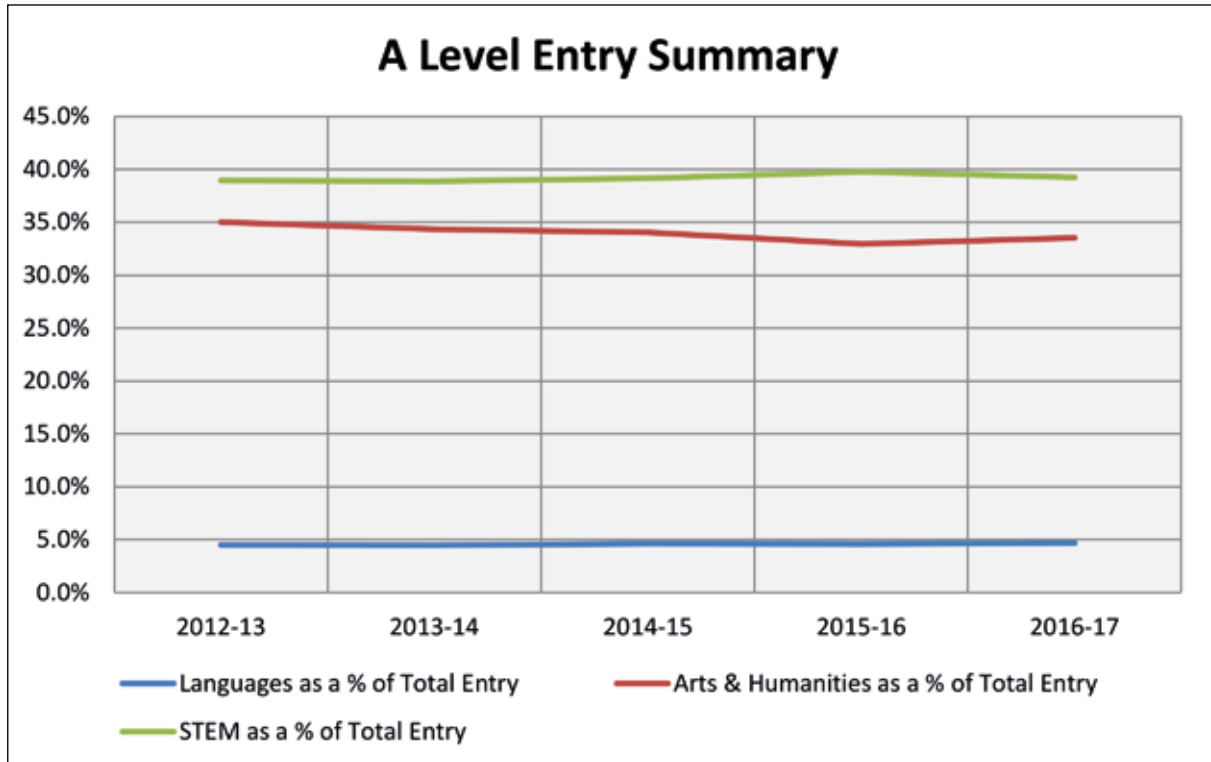
Table 40 presents information on A level candidates’ performance at Grades A\*–C in Arts and Humanities over the last five academic years (2013–2017).

As illustrated in Figure 53, female candidates outperform their male counterparts in Arts and Humanities.

The performance gap between male and female candidates has narrowed over time at this level. As illustrated in the figure above, in 2016, the same proportion of male and female candidates achieved at least a Grade C at this level.

## 5.5 A Level Summary

Figure 54: A Level Entry Summary (2013–2017)



Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

Over the last five years, STEM subjects have been the most popular based on the overall percentage entry. On average, 39.2% of total entry for A level subjects has been in STEM subjects.

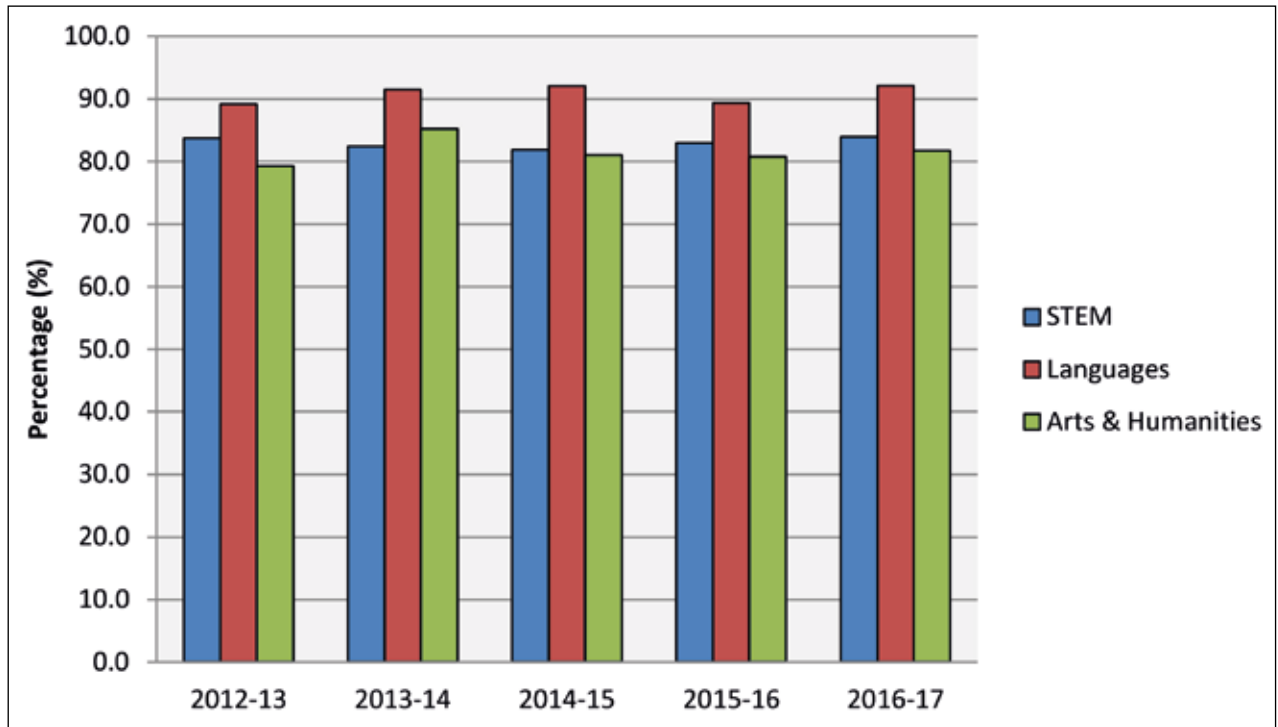
This mirrors the trends noted at AS.

At A level Arts and Humanities make up on average 33.9% of the total entry.

Again this would appear to indicate that, when given more autonomy, candidates tend to opt for STEM subjects.

As noted at all preceding levels of study, the overall proportion of Arts and Humanities candidates has been slowly declining over the previous five years. For STEM subjects the opposite has been noted, despite a slight decrease in 2017.

A level Languages have maintained a level of popularity over the last five academic years. Proportional entry has been between 4.5%– 4.7% over this time period.

**Figure 55: Cumulative A\*-C Grades for A Level (2013–2017)**

Source: Joint Council for Qualifications (JCQ) – Provisional A Level Full Course Results (Northern Ireland), 2013-2017

- A level candidates, on average, tend to perform better in languages when compared to other subject categories. On average, 90.9% of all candidates achieved at least a Grade C at this Level. This trend has persisted across all three levels of study.
- Similar to GCSE, but not at AS, Arts and Humanities recorded the poorest performance levels among candidates. On average, 81.6% of all candidates achieved at least a Grade C at this level.

For STEM, on average 83% of all candidates achieved at least a Grade C at this level.

Over 85% of all candidates achieved at least a Grade C across these subject categories. This suggests that there is a high level of performance for Northern Ireland candidates, regardless of subject choice at this level.

## 6 Other subjects (GCSE, AS and A level)

### 6.1 Business Studies

- At GCSE, Business Studies entry numbers and their proportional share of total entry for male, female and total cohorts has remained relatively consistent over the last five years.
- At AS, Business Studies entry numbers for the male cohort and their proportional share of total entry have increased over the last five years. Proportional share has increased from 5.1% to 6.3% over this period.
- Female proportional entry at AS has ranged from 4.2% to 4.6%. There has been no apparent trend observed in this group.
- Similar to AS, entry numbers and their proportional share of total entry have increased between 2013 and 2017 for male students at A level. Proportional share has increased from 4.8% to 5.7% over this period.
- Proportional entry for female students at A level has ranged from between 3.9% and 4.4%. Again, there has been no apparent trend observed in this group.
- Overall increases in Business Studies proportional candidature at AS and A level appear to be largely male driven.

**Table 41: Business Studies Entry Trends (GCSE, AS and A level) (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
<b>GCSE</b>						
Business Studies Entry	M	1,859	2,012	1,841	1,833	2,046
	F	1,556	1,556	1,581	1,564	1,612
	T	3,415	3,593	3,404	3,367	3,658
Total Entry	M	85,921	84,302	84,668	80,218	77,723
	F	90,380	88,390	86,657	81,757	79,083
	T	176,301	172,692	171,325	161,975	156,806
% Total Entry	M	2.2%	2.4%	2.2%	2.3%	2.6%
	F	1.7%	1.8%	1.8%	1.9%	2.0%
	T	1.9%	2.1%	2.0%	2.1%	2.3%
<b>AS</b>						
Business Studies Entry	M	1,012	1,039	1,107	1,161	1,187
	F	1,039	1,065	1,095	1,005	1,062
	T	2,051	2,104	2,202	2,166	2,249
Total Entry	M	19,681	20,362	20,915	20,814	18,891
	F	23,791	25,389	26,090	24,843	23,070
	T	43,472	45,751	47,005	45,657	41,961
% Total Entry	M	5.1%	5.1%	5.3%	5.6%	6.3%
	F	4.4%	4.2%	4.2%	4.0%	4.6%
	T	4.7%	4.6%	4.7%	4.7%	5.4%

Table 41 Continued

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
<b>A Level</b>						
Business Studies Entry	M	718	697	691	744	766
	F	721	755	699	717	661
	T	1,439	1,452	1,390	1,461	1,427
Total Entry	M	15,059	14,423	14,414	14,085	13,546
	F	17,777	17,177	17,976	17,743	17,138
	T	32,836	31,600	32,390	31,828	30,684
% Total Entry	M	4.8%	4.8%	4.8%	5.3%	5.7%
	F	4.1%	4.4%	3.9%	4.0%	3.9%
	T	4.4%	4.6%	4.3%	4.6%	4.7%

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE, AS and A Level Full Course Results (Northern Ireland), 2013–2017

## 6.2 Geography

**Table 42: Geography Entry Trends (GCSE, AS and A Level) (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
<b>GCSE</b>						
Geography Entry	M	3,852	3,753	3,624	3,191	3,161
	F	3,278	3,054	2,964	2,857	2,665
	T	7,130	6,807	6,588	6,048	5,826
Total Entry	M	85,921	84,302	84,668	80,218	77,723
	F	90,380	88,390	86,657	81,757	79,083
	T	176,301	172,692	171,325	161,975	156,806
% Total Entry	M	4.5%	4.5%	4.3%	4.0%	4.1%
	F	3.6%	3.5%	3.4%	3.5%	3.4%
	T	4.0%	3.9%	3.8%	3.7%	3.7%
<b>AS</b>						
Geography Entry	M	1,200	1,223	1,268	1,290	1,020
	F	1,268	1,431	1,481	1,243	1,260
	T	2,468	2,654	2,749	2,533	2,280
Total Entry	M	19,681	20,362	20,915	20,814	18,891
	F	23,791	25,389	26,090	24,843	23,070
	T	43,472	45,751	47,005	45,657	41,961
% Total Entry	M	6.1%	6.0%	6.1%	6.2%	5.4%
	F	5.3%	5.6%	5.7%	5.0%	5.5%
	T	5.7%	5.8%	5.8%	5.5%	5.4%
<b>A Level</b>						
Geography Entry	M	946	917	895	871	806
	F	1,055	979	1,079	993	896
	T	2,001	1,896	1,974	1,864	1,702
Total Entry	M	15,059	14,423	14,414	14,085	13,546
	F	17,777	17,177	17,976	17,743	17,138
	T	32,836	31,600	32,390	31,828	30,684
% Total Entry	M	6.3%	6.4%	6.2%	6.2%	6.0%
	F	5.9%	5.7%	6.0%	5.6%	5.2%
	T	6.1%	6.0%	6.1%	5.9%	5.5%

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE, AS and A Level Full Course Results (Northern Ireland), 2013–2017

- At GCSE, Geography entry numbers for male students have been in decline since 2014. Proportional entry for males declined by 0.3% in 2016, then rose again slightly (0.1%) in 2017. Female entry has been declining year-on-year since 2013, but proportional share has remained consistent during the period.
- At AS and A level, Geography entry numbers and their proportional share of total entry has fluctuated year-on-year since 2013 for the male, female and total cohorts.
- There are no apparent trends noted at either level of study.



## 6.3 Media/Film Studies

**Table 43: Media and Film Studies Entry Trends (GCSE, AS and A level) (2013–2017)**

		Year				
		2012–13	2013–14	2014–15	2015–16	2016–17
<b>GCSE</b>						
Media/Film Studies Entry	M	662	695	806	941	941
	F	788	749	800	830	776
	T	1,450	1,444	1,606	1,771	1717
Total Entry	M	85,921	84,302	84,668	80,218	77,723
	F	90,380	88,390	86,657	81,757	79,083
	T	176,301	172,692	171,325	161,975	156,806
% Total Entry	M	0.8%	0.8%	1.0%	1.2%	1.2%
	F	0.9%	0.8%	0.9%	1.0%	1.0%
	T	0.8%	0.8%	0.9%	1.1%	1.1%
<b>AS</b>						
Media/Film Studies Entry	M	639	714	747	764	757
	F	795	822	871	846	888
	T	1,434	1,536	1,618	1,610	1645
Total Entry	M	19,681	20,362	20,915	20,814	18,891
	F	23,791	25,389	26,090	24,843	23,070
	T	43,472	45,751	47,005	45,657	41,961
% Total Entry	M	3.2%	3.5%	3.6%	3.7%	4.0%
	F	3.3%	3.2%	3.3%	3.4%	3.8%
	T	3.3%	3.4%	3.4%	3.5%	3.9%
<b>A Level</b>						
Media/Film Studies Entry	M	487	498	562	571	574
	F	586	636	645	679	701
	T	1,073	1,134	1,207	1,250	1275
Total Entry	M	15,059	14,423	14,414	14,085	13,546
	F	17,777	17,177	17,976	17,743	17,138
	T	32,836	31,600	32,390	31,828	30,684
% Total Entry	M	3.2%	3.5%	3.9%	4.1%	4.2%
	F	3.3%	3.7%	3.6%	3.8%	4.1%
	T	3.3%	3.6%	3.7%	3.9%	4.2%

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE, AS and A Level Full Course Results (Northern Ireland), 2013–2017

- At GCSE, Media and Film Studies entry numbers and their proportional share of total entry for the female cohort has remained relatively consistent over the last five years.
- There have been increases in male students' total and proportional entry at GCSE. Entry has increased by 0.4% over the last five years (+279).
- At AS, Media and Film Studies entry numbers and their proportional share of total entry have increased over the last five years for the male cohort. Proportional share has increased from 3.2% to 4.0% over this period.

- Female proportional entry at AS has ranged from between 3.2% and 3.8%. There has been no apparent trend observed in this group.
- Similar to AS, entry numbers and their proportional share of total entry have increased for male students at A level. Proportional share has increased from 3.2% to 4.2% over this period.
- Proportional entry for female students at A level has ranged from between 3.3% and 4.1%, with the last three years showing year-on-year proportional increases.



## 7

# Gender Differences (A level)

## 7.1 Introduction

The previous insight report, published in 2016, presented an analysis of gender differences in GCSE subject choice and examination outcomes. This section of the report expands on the 2016 analysis by focusing on gender/sex differences in subject choice and examination outcomes in A levels taken in Northern Ireland.

This section is an expansion of the analysis carried out in Sections 2 to 6 of this report. As before, this work also complements previous analyses conducted by Bramley, Vidal Rodeiro and Vitello (2015)<sup>1</sup>, who examined gender/sex differences in GCSE outcomes in England. Dot plots are used throughout to simplify the data presented.

As summarised by Bramley et al. (2015), this topic is of perennial interest as it is related to issues, including:

- gender equality in the workplace (opportunities and remuneration);
- the proportion of women in STEM-related jobs;
- gender choices and outcomes in subjects studied at Higher Education level;
- gender stereotypes;
- whether there are gender/sex differences in cognitive ability, and the role of genes and the environment in creating and maintaining them;
- whether certain types of school structure, for example single-sex schools, curriculum, teaching or assessment style are better suited to one or other gender; and
- whether there are gender gaps in exam performance and whether such gaps are closing or widening.

This section has two sub-sections:

- Subject choice at A level in Northern Ireland (2007 and 2017); and
- Subject outcomes (grades) at A level in Northern Ireland (2007 and 2017).

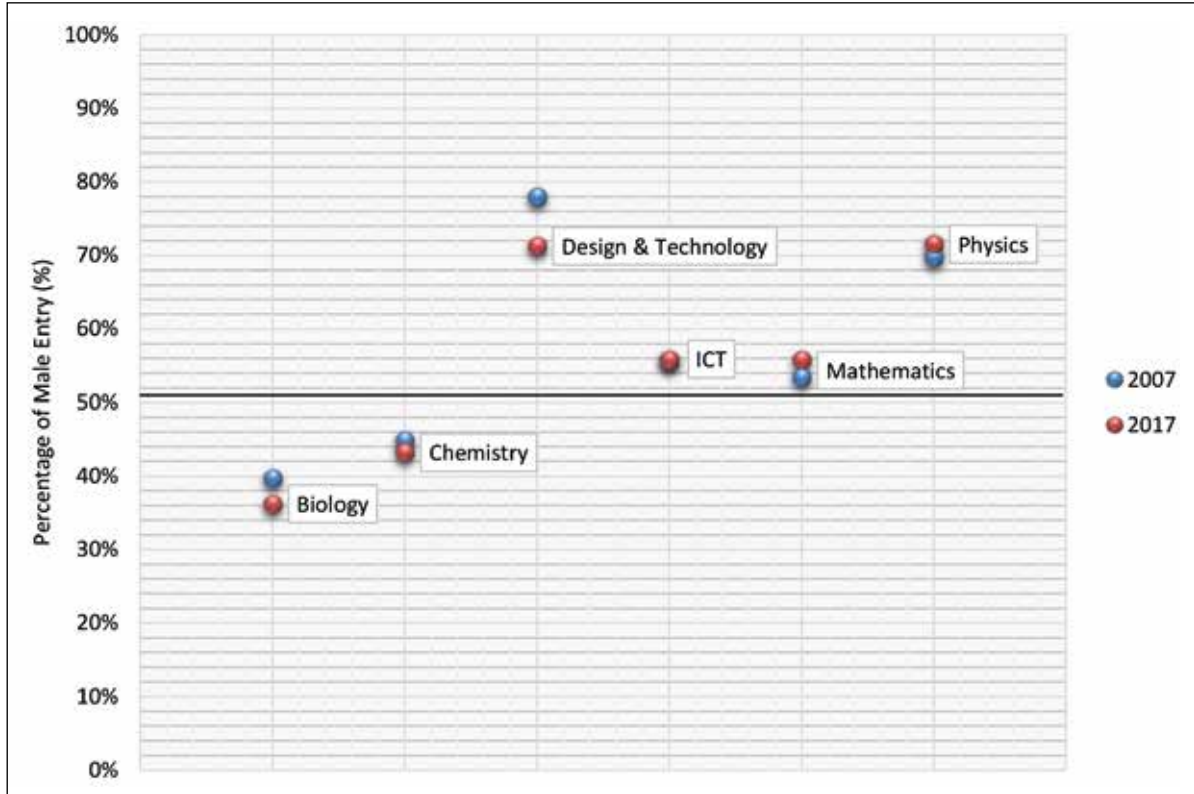
## 7.2 Subject choice at A level in Northern Ireland

The first area explored was the proportion of males and females taking A levels across different subject categories. The data source was the Joint Council for Qualifications (JCQ).

Data was examined from two time points: 2007 and 2017, extracting subjects for inclusion in the analysis with an entry exceeding 400. Subjects are categorised using the method employed previously in Sections 2 to 5. Note that some of the syllabuses available in 2017 were not available in 2007. The horizontal reference line of note is that at 50% – subjects above this line had a greater proportion of the male entries; those below had a greater proportion of female entries.

<sup>1</sup> Bramley, T., Vidal Rodeiro, C.L., and Vitello, S. (2015). Gender differences in GCSE. Cambridge Assessment Research Report. Cambridge, UK: Cambridge Assessment.

**Figure 56: Percentage of Exam Entry that were Male (STEM) in 2007 and 2017**



Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

Figure 56 shows that the proportion of males and females taking the three single sciences (Biology, Chemistry, and Physics) has changed in the last ten years. Female entry outnumbered male entry in both Chemistry and Biology in 2007. This gap increased further in 2017. The proportion of males studying Physics has remained consistently greater than the proportion of females entered for this subject. This proportion of male candidates has increased slightly in the last 10 years, as noted in the figure above.

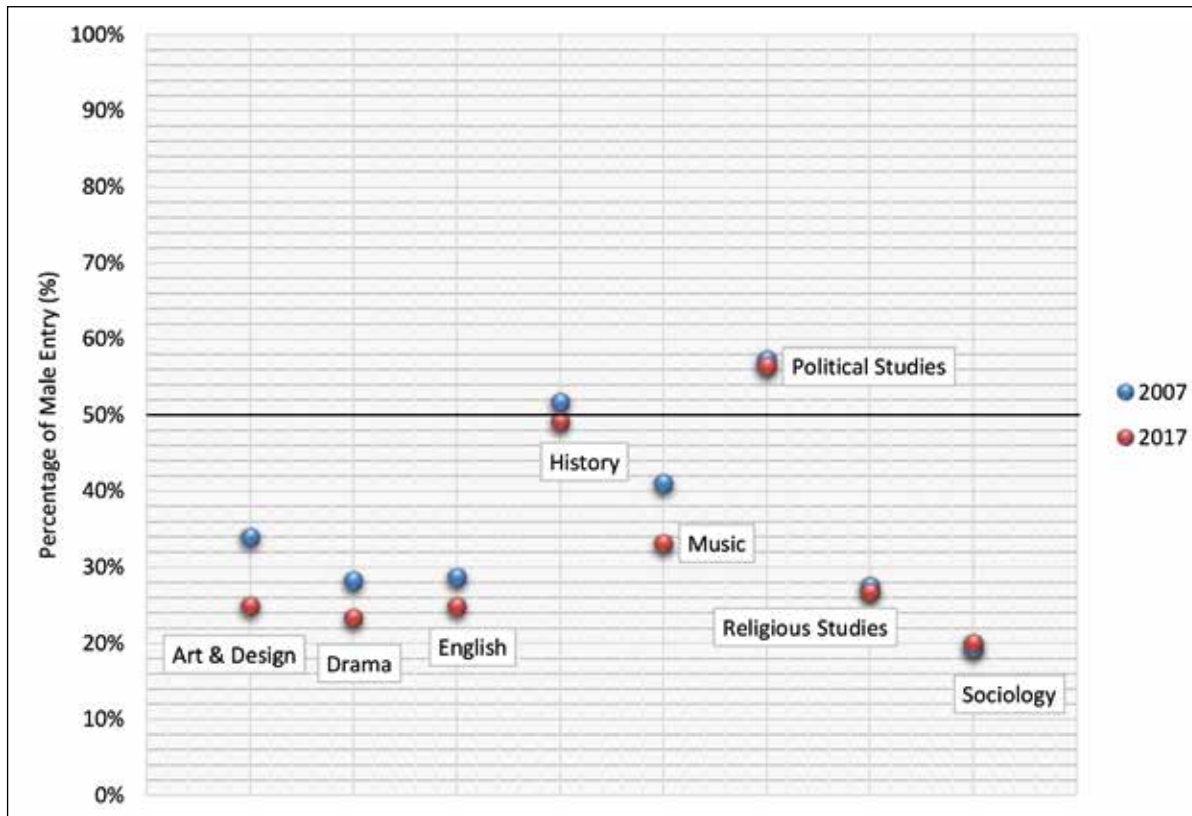
This trend is different to what was noted in the previous Insight report at GCSE where males consistently outnumbered females across all sciences at both intervals.

Entries for Mathematics, ICT and Design and Technology were proportionally in favour of males at both time points. Mathematics entry for males has increased in the last 10 years (53.4% to 55.8%), while the proportional split for ICT has largely remained the same.

Design and Technology has experienced the largest change in the last 10 years.

Although male entry remains strong, there has been a large increase in the proportion of female candidates studying the subject at this level. In 2007, the total entry was 78% male. In 2017 this reduced to 71.3%.

**Figure 57: Percentage of Male Exam Entry (Humanities) in 2007 and 2017**

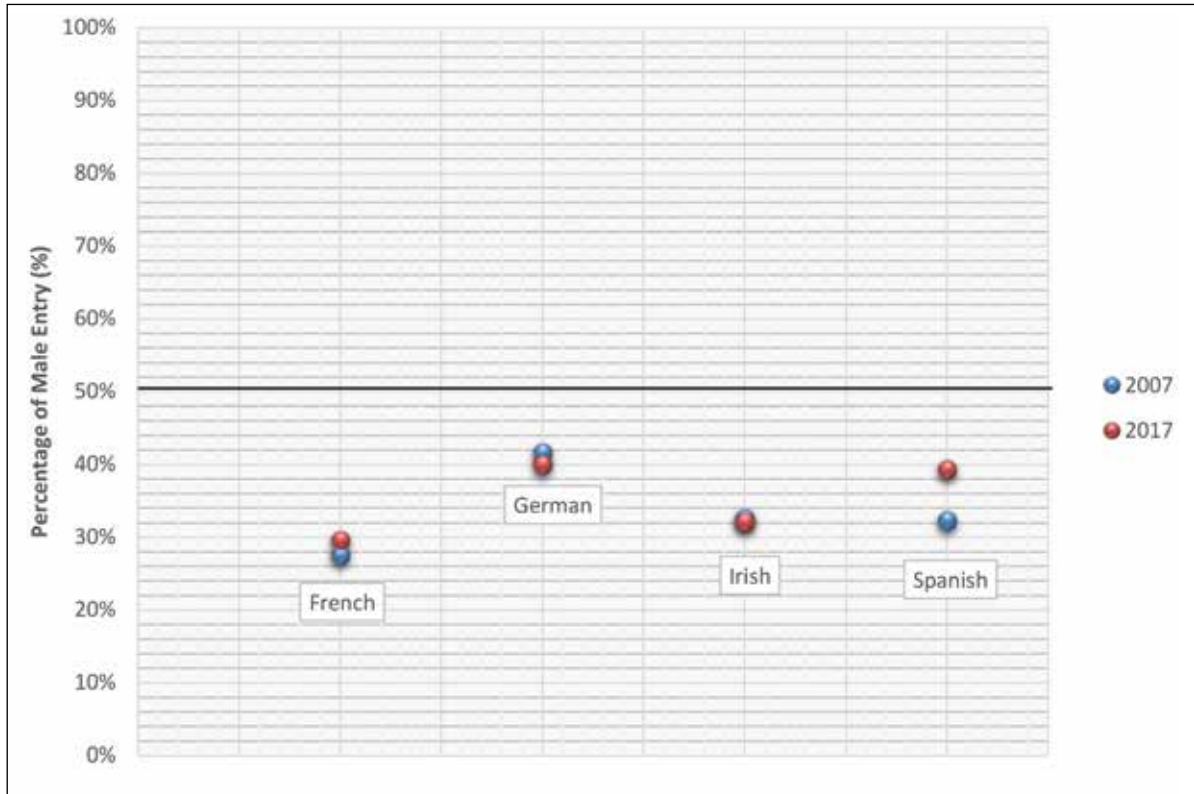


Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

Figure 57 shows that entry for most of the Humanities (Art and Design, Drama, English, Music, Religious Studies and Sociology) was largely weighted towards female candidates. These subjects (with the exception of Sociology) have all experienced a proportional increase in female entry between 2007 and 2017, with Art and Music experiencing the largest increases (+9.1% and +7.9% respectively).

History has attracted approximately equivalent proportions of entries from both genders in 2007 and 2017. Female entry outnumbered that of males in 2017. In 2007, the opposite trend was observed. Political Studies is the only subject where there has been a greater proportion of male candidates in both 2007 and 2017, approximately 56% of all Political Studies candidates.

**Figure 58: Percentage of Male Exam Entry (Languages) in 2007 and 2017**

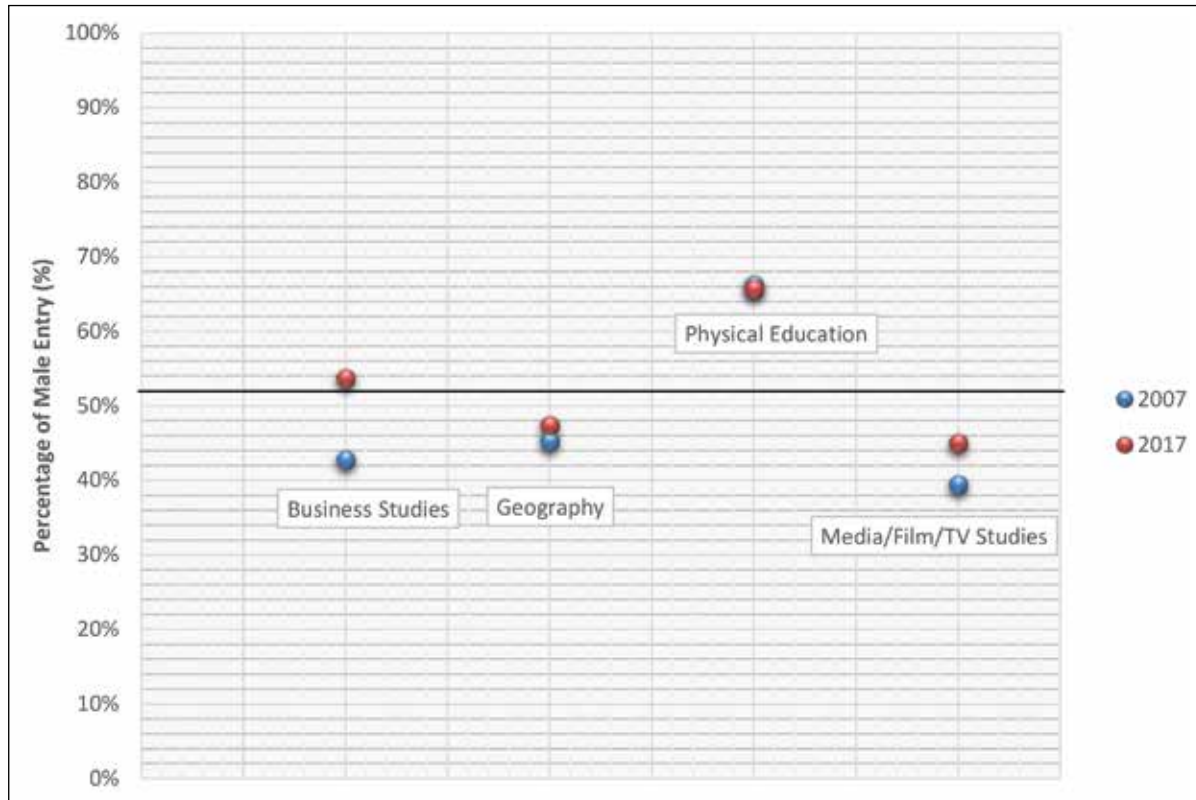


Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

Figure 58 shows that the proportional share of male candidates in Spanish, Irish, German and French was lower than the female share in both 2007 and 2017.

There has not been much change over time. The proportions studying French have experienced a small swing in favour of male candidates, whereas with German the opposite was observed.

The only subject that has experienced a significant change in its gender split is Spanish. In 2007, 32.2% of the cohort were male, this increased to 39.3% in 2017, indicating that Spanish is becoming a more popular subject choice for this group.

**Figure 59: Percentage of Male Exam Entry (Other) in 2007 and 2017**

Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

Figure 59 indicates that Business Studies is becoming a more popular subject choice for male candidates. In 2007, the male share of the Business Studies cohort was 42.8%. In 2017 this increased to 53.7%.

The gender split for Geography and Physical Education has not changed much in the last 10 years, with Geography being a more popular subject option for female candidates and Physical Education being a more popular subject option for male candidates.

Media, Film and Television Studies had a greater proportion of female candidates in both 2007 and 2017. However, there has been a slight swing in the total Media, Film and Television Studies cohort in favour of male candidates (+5.5%).



### 7.3 Subject Outcomes (Grades) at A level

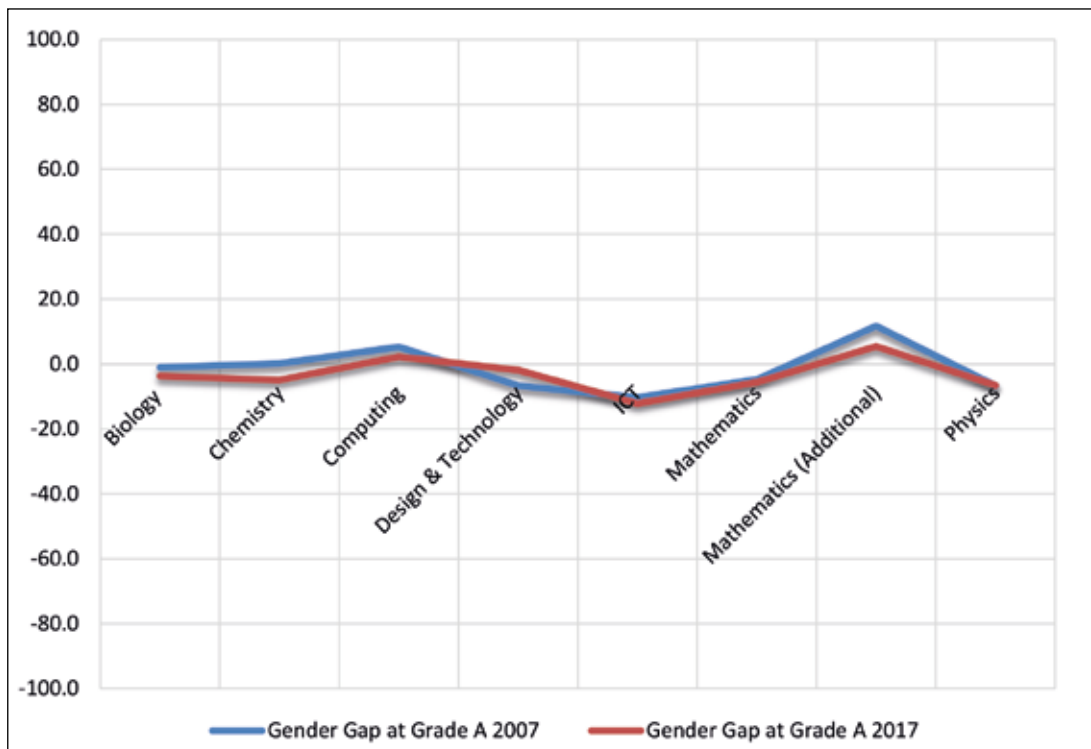
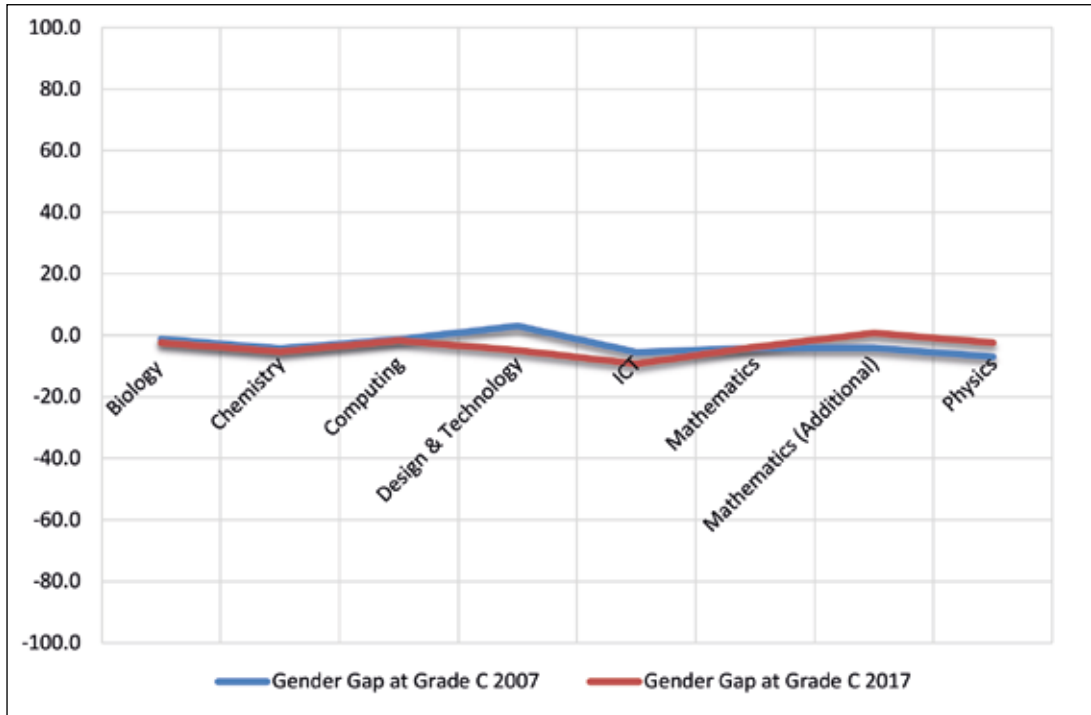
The graphs show the difference in the percentage (males minus females) gaining a Grade C or above (upper graph) or A (lower graph) in 2007 and 2017. That is, if in subject X 12% of the male candidates achieved a Grade C or above and 10% of the female candidates got a Grade C or above, the dot for that subject would be at a value of +2 percentage points. The vertical line at 0 thus represents subjects where the same proportion of male and female candidates achieved at or above the grade in question. Subjects above the line are those where the gender gap was in favour of males; those below the line where the gender gap was in favour of females.

Comparisons with performance at GCSE (detailed in the previous Insight report) will also be made in this section.

The analyses show that:

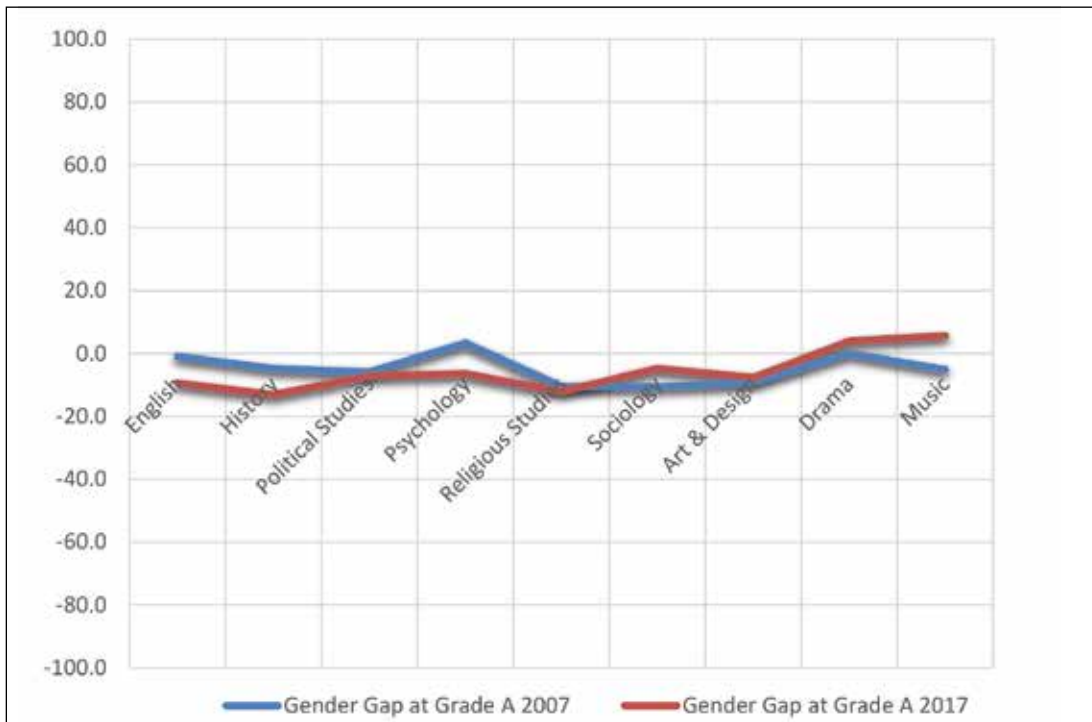
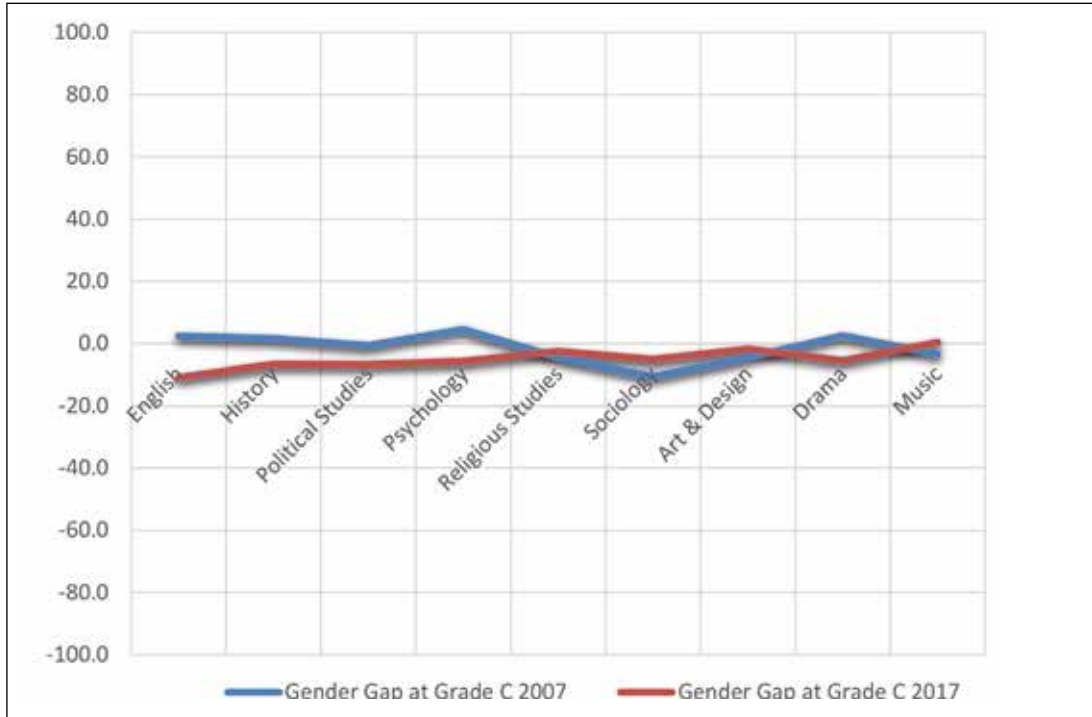
- For STEM subjects, the gender gap at C grade has remained consistent over the period with only a slight increase in females outperforming male candidates. At A grade, female candidates outperform males by 3.41 percentage points, an increase (1.86 percentage points) from 1.55 percentage points in 2007.
- For Languages, at grade C, female candidates outperformed males by 7.58 percentage points, an increase of 4.55 percentage points from 2007. The gap at grade A has increased more substantially over the period from 4.30 percentage points in 2007 to 9.37 percentage points in 2017.
- At grade C, Arts and Humanities subjects show a 3.59 percentage points increase over the ten year period. Performance at grade A has been more consistent with only a slight increase of 0.8 percentage points over the period.
- Other subjects (Business Studies, Geography, Physical Education and Media Studies) have shown a narrowing of the gap at C (1.6 percentage points) but a much larger fluctuation at grade A from 4.7 in 2007 to 13.6 in 2017.

**Figure 60: Difference in % (Males minus Females) Achieving Grade C or Above (Upper Graph) or A (Lower Graph) in 2007 and 2017 (STEM)**



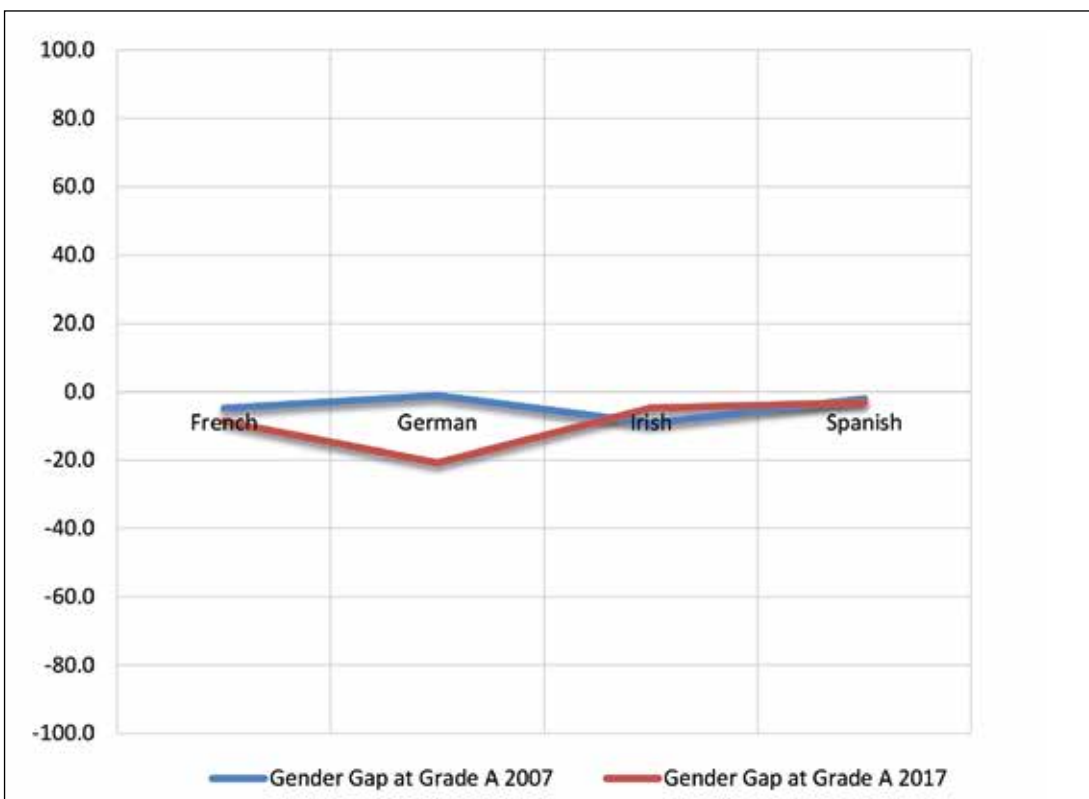
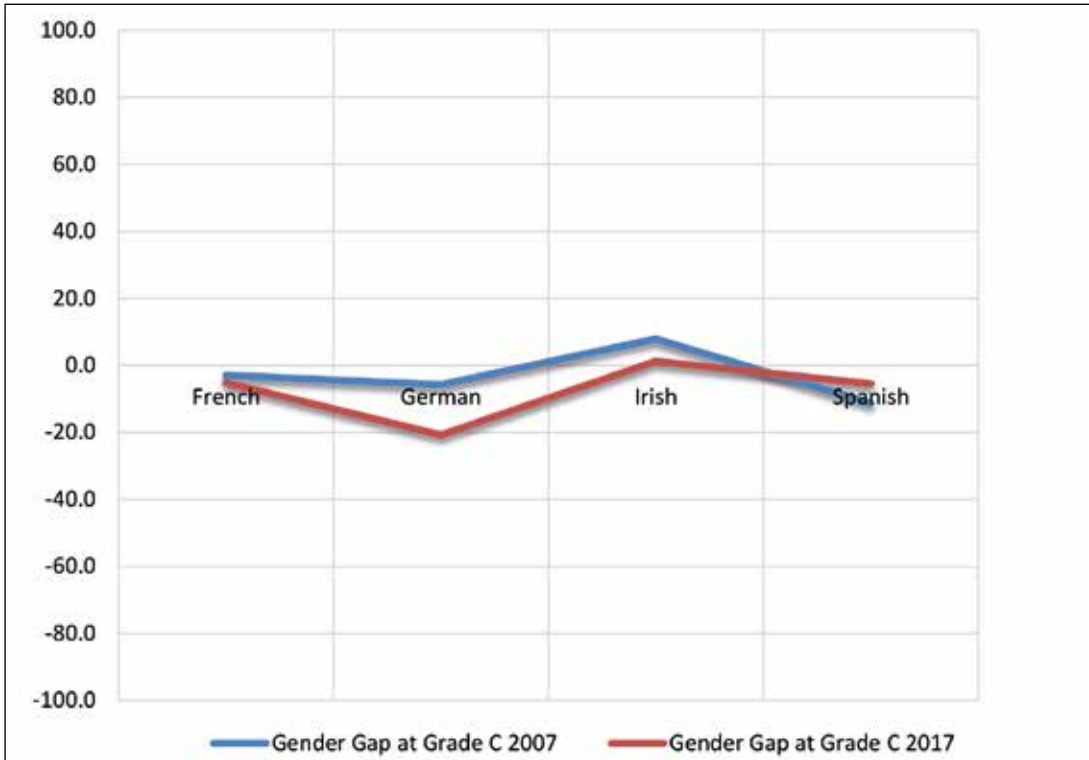
Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

**Figure 61: Difference in % (Males minus Females) Achieving Grade C or Above (Upper Graph) or A (Lower Graph) in 2007 and 2017 (Humanities)**



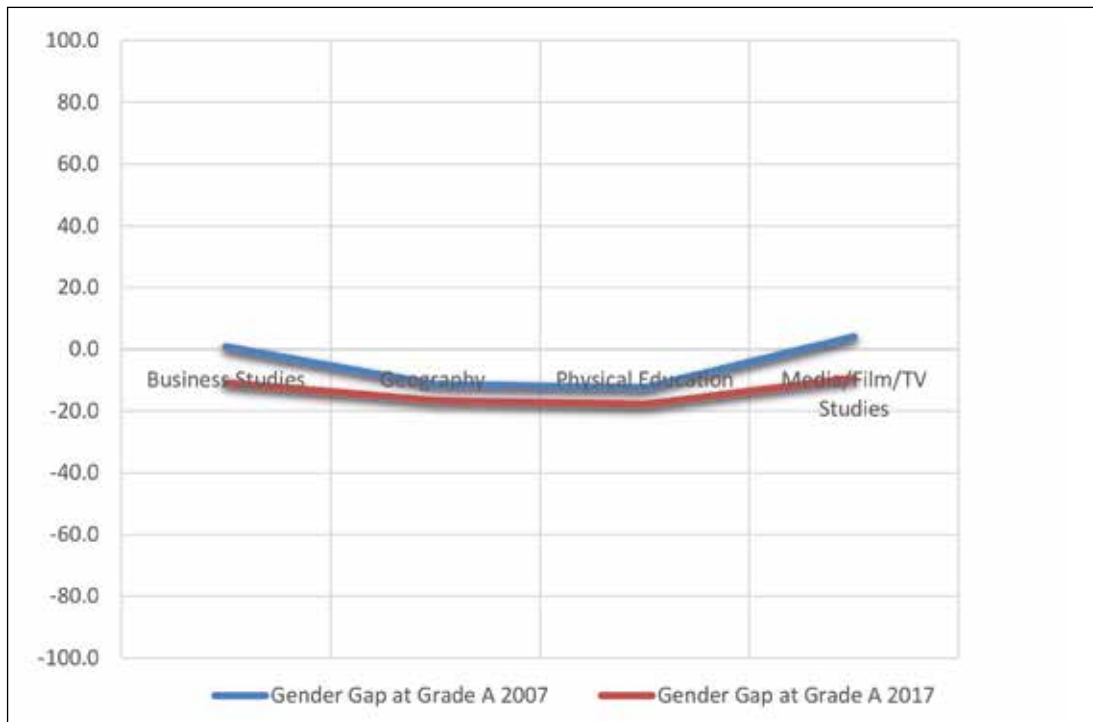
Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

**Figure 62: Difference in % (Males minus Females) Achieving Grade C or Above (Upper Graph) or A (Lower Graph) in 2007 and 2017 (Humanities)**



Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

**Figure 63: Difference in % (Males minus Females) Achieving Grade C or Above (Upper Graph) or A (Lower Graph) in 2007 and 2017 (Other Subjects)**



Source: Joint Council for Qualifications (JCQ) – Provisional A level Full Course Results (Northern Ireland), 2007 and 2017

**Table 44: Average Gender Gap at Grade C and Above (percentage points) in Subjects with an Entry of 400 or More**

Category	Year	N	Mean	SD	Minimum	Maximum
STEM	2007	8.00	-3.09	3.11	-7.00	3.00
	2017	8.00	-3.64	2.98	-9.30	0.70
Languages	2007	4.00	-3.03	8.07	-11.30	7.90
	2017	4.00	-7.58	9.34	-20.80	1.20
Arts and Humanities	2007	9.00	-1.37	4.80	-10.60	4.60
	2017	9.00	-4.96	3.30	-10.90	0.40
Other	2007	4.00	-5.20	2.41	-7.30	-2.20
	2017	4.00	-3.63	2.84	-6.50	-0.80

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2007 and 2017

**Table 45: Average Gender Gap at Grade A and above (percentage points) in Subjects with an Entry of 400 or More**

Category	Year	N	Mean	SD	Minimum	Maximum
STEM	2007	8.00	-1.55	7.23	-10.30	11.70
	2017	8.00	-3.41	5.44	-12.18	5.43
Languages	2007	4.00	-4.30	3.65	-9.20	-1.10
	2017	4.00	-9.37	7.96	-20.80	-3.19
Arts and Humanities	2007	9.00	-4.84	4.91	-10.60	3.40
	2017	9.00	-5.64	6.53	-13.10	5.70
Other	2007	4.00	-4.70	8.38	-12.40	4.10
	2017	4.00	-13.63	4.20	-17.80	-9.30

Source: Joint Council for Qualifications (JCQ) – Provisional GCSE Full Course Results (Northern Ireland), 2007 and 2017



## 8 Projected Entries

This section of the report uses putative information to forecast subject entries for the next five years. This analysis was conducted using prior entry data, and population and economic projections.

It sets out the economic, educational and political context of Northern Ireland, including graphs depicting estimated changes in entry over the next five years.

### 8.1 Economic Context for Northern Ireland

The Northern Ireland Composite Economic Index (NICEI)<sup>1</sup> is an experimental quarterly measure of the performance of the Northern Ireland economy based on available official statistics. Results from NICEI show that economic activity was estimated to have grown, in real terms, by 0.3% from Quarter 4 (October–December) 2016 to Quarter 1 (January–March 2017). The index also increased by 2.4% in real terms between Quarter 1 2016 and Quarter 1 2017.

The increase in the NICEI (0.3%) was driven by an increase in the services sector. Output in the construction sector fell over the quarter, making a contribution of -0.1 purchasing power standard (pps) to the index. Production sector and public sector jobs have remained relatively static.

Over the last two years annual output (averaged over the four quarters to Quarter 1 2017, compared to the previous four quarters) increased by 1.9%. Although the measures are not produced on a fully equivalent basis, comparisons with the UK over the same period show that the NICEI grew at the same rate (1.9%) compared to UK GDP growth (1.9%). In the UK, quarterly growth was 0.2% compared with growth of 0.3% recorded for Northern Ireland.

The Northern Ireland private sector index was estimated to have increased by 0.4% over the quarter and by 3.4% over the year to Quarter 1 2017.

The public sector jobs index decreased by 0.1% over the quarter, following an increase last quarter. The index decreased by 0.9% over the year to Quarter 1 2017.

The Annual Survey of Hours and Earnings (ASHE)<sup>2</sup> is a UK-wide survey that provides data on hourly, weekly and annual earnings by gender, work patterns, industry and occupation, including public versus private sector pay comparisons. The most recently published ASHE (October 2016) provides a number of key points for Northern Ireland. In April 2016, median gross weekly earnings for full-time employees were £495, up 2.2% from £485 in 2015. This increase was the same as that of other UK employees and the second consecutive annual increase in inflation-adjusted earnings. However, the Northern Ireland average of £495 still falls short of the UK average of £539. It should be noted that the UK average figure is distorted by the high levels of pay in the London area.

Concerns have long been expressed over what leaving the EU could mean for Northern Ireland's economy. Economic forecasts suggest that the effects will be negative, at least in the short and medium term, and under most scenarios to be greater than for most of the rest of the UK. On some models Brexit is expected to have a disproportionate impact on Northern Ireland's economy, which is reliant on exports to the EU, including in the food and agriculture sectors, which would be hit hardest if the UK ends up paying EU tariffs. Some economists have also warned of a decline in foreign direct investment, off-setting the benefits of Northern Ireland's lower corporation tax rates.

<sup>1</sup>[www.nisra.gov.uk/statistics/economy/economic-output-statistics](http://www.nisra.gov.uk/statistics/economy/economic-output-statistics)

<sup>2</sup>[www.nisra.gov.uk/statistics/labour-market-and-social-welfare/annual-survey-hours-and-earnings](http://www.nisra.gov.uk/statistics/labour-market-and-social-welfare/annual-survey-hours-and-earnings)



The pursuit of foreign direct investment (FDI) has always been a major objective for Northern Ireland policymakers. FDI has a much wider outreach than just company/business investment. It also includes mergers, acquisitions and property.

Many companies located in Northern Ireland trade internationally under EU trade agreements. It is still unclear how the UK's new trade arrangements outside the EU will look and how they will compare. The referendum result therefore raises questions about the ability for Northern Ireland to attract FDI in the future. This will remain unclear until the new trading and immigration arrangements for the UK are clarified.

## 8.2 Educational/Skills Context for Northern Ireland

In 2013, the English government announced a reform to GCSEs and a new grading system, using numbers (9–1) rather than the letters (A\*–G). As a result, the Northern Ireland and Welsh governments reviewed their policy on grading.

In June 2016, the then Minister for Education, Peter Weir MLA, requested the following changes to the grading of GCSEs offered by CCEA:

*'the A\* grade will be realigned to reflect the level of achievement on the English 9–1 scale, and a new grade C\* will be introduced to align with the level of achievement consistent with the grade 5 on the English 9–1 scale.'*

To meet the Minister's requirements, CCEA has introduced a nine lettered scale (A\*–G, including C\*). This applies to qualifications taught from September 2017 and awarded in 2019.

The Welsh government chose to remain with the current eight letter grade (A\*–G) model, allowing 9–1 graded qualifications where an A\*–G qualification was not available.

The failure of the summer 2017 talks between Northern Ireland's political parties to restore a power-sharing executive means that important budget allocations have been on hold since January 2017.

The Department of Education has indicated that it is facing significant financial pressures to ensure that it operates within its 2017–18 budget.

A fear remains that the UK's departure from the EU will have impacts across the Northern Ireland education sector, including the cultural and linguistic diversity of the student and teacher population of the primary and post-primary sector. The EU has been an additional source of funding for education in Northern Ireland through the EU Structural Funds and EU Peace and Reconciliation funds. The Peace IV Programme (2014–20), worth €270m, with 85% of the Programme representing €229m, is provided through the European Regional Development Fund (ERDF). The remaining €41m, representing 15%, is match-funded by the Irish Government and the Northern Ireland Executive<sup>3</sup>. One area relates to capital development of schools. Another is the use of EU funds for shared education (€35.3 million is allocated from Peace IV)<sup>4</sup> projects, which include shared campuses and contact programmes between schools, that have played an important role in developing post-conflict opportunities locally. The ethos of shared education is a key priority for the Department of Education, but if access to European funding streams is lost after 2020 advancing such projects may prove difficult.

There are also implications for Northern Ireland's continued access to student and teacher exchange programmes such as Comenius, ERASMUS and ERASMUS+. These programmes provide opportunities for Northern Ireland students from primary to higher education to benefit from study, training, volunteering and professional development across Europe. The programmes also provide opportunities for institutional partnerships and exchange of ideas and best practice. It is unclear whether British students will face exclusion from the scheme following the Brexit vote.

The UK university sector participates in EU research and innovation programmes such as Horizon 2020. The UK Government published a paper entitled 'Collaboration on science and innovation'<sup>5</sup>, which sets out its plans for a future partnership with the EU. The paper states that the UK Government underwrites bids for Horizon 2020 projects submitted while the UK is still a member of the EU. Looking to the future, it indicates that association agreements will be discussed as part of the negotiations on the next Framework Programme.

<sup>3</sup> [www.seupb.eu/piv-overview](http://www.seupb.eu/piv-overview)

<sup>4</sup> [www.finance-ni.gov.uk/news/foster-welcomes-go-ahead-%E2%82%AC269million-peace-iv-funding](http://www.finance-ni.gov.uk/news/foster-welcomes-go-ahead-%E2%82%AC269million-peace-iv-funding)

<sup>5</sup> [www.gov.uk/government/publications/collaboration-on-science-and-innovation-a-future-partnership-paper](http://www.gov.uk/government/publications/collaboration-on-science-and-innovation-a-future-partnership-paper)

However, in the above context, education will be seen as a key agent in re-establishing skills, particularly for emerging opportunities in digital technology, and ensuring that these skills are portable and have global currency.

### 8.3 Political Context for Northern Ireland

Northern Ireland has no autonomy over Brexit. As such, Northern Ireland's majority vote to remain within the EU is, in constitutional terms, of no significance. The UK Supreme Court has stated that the consent of the Northern Ireland Assembly is not required for the UK government to withdraw from the EU. The 1998 Northern Ireland Act gives the Assembly the right to pass laws, but only in devolved policy areas. It does not affect the power of the UK government to make laws for Northern Ireland.

Northern Ireland has been without a functioning devolved Executive since January 2017, when the resignation of the terminally-ill Martin McGuinness triggered the collapse of the Executive and Assembly in which he and DUP leader Arlene Foster had served as deputy First Minister and First Minister respectively. The months leading up to McGuinness's resignation had seen a political crisis building around the Renewable Heat Incentive scheme. Sinn Féin declined to appoint a new deputy First Minister, bringing the Executive to an end.

The Northern Ireland Assembly elections called by the Secretary of State produced gains for Sinn Féin with the party taking 27 seats, just one behind the DUP's total. A deadline of 27 March 2017 for forming a new Executive passed without agreement between the parties. The main points of contention between the two main parties, the DUP and Sinn Féin, remain the status of the Irish language and how to deal with legacy issues. They failed to meet the Easter deadline for agreement.

The 2017 Westminster election saw the two largest parties in Northern Ireland elevated into the national spotlight. The DUP and Sinn Féin gained votes from their more centrist rivals, the UUP and SDLP. The consolidation of the vote in Northern Ireland on these two parties had implications for the formation of the next government at Westminster. The 2017 election saw the DUP and Sinn Féin dominate the electoral scene in Northern Ireland. After it became clear that the Conservatives had failed to win a majority,

attention turned to the DUP and its enhanced seat share (10 seats, up from 8 in 2015) to prop up a Conservative minority government to help pursue the UK's departure from the EU. With the support of the DUP's 10 MPs in a confidence and supply agreement, the Conservatives have a parliamentary majority of one; with Sinn Féin not taking its seven seats. The DUP agreed a confidence and supply agreement with the Conservative government, which plans to deliver £1bn in added spending in Northern Ireland.

The DUP and Sinn Féin gained seats, resulting in the continued electoral collapse of the UUP and the SDLP. The SDLP and UUP lost all their seats at Westminster, as both parties' vote shares continued their downward trend. The SDLP's vote share dropped 2.2 percentage points to 11.7 percent of the vote in Northern Ireland. The UUP saw its vote share decline 5.8 percentage points to 10.3 percent of the vote in Northern Ireland.

Talks resumed over the summer of 2017 at Stormont, but failed to reach consensus. The Secretary of State, James Brokenshire, allowed senior civil servants to run the devolved ministries as an interim measure, warning that the political deadlock cannot continue past autumn 2017.

### 8.4 Projected Increased Entries 2017/18–2021/22

Using population projections, the mean percentage change in Northern Ireland entries over the previous years, and economic forecasts, the following forecasted entry increases for Northern Ireland have been calculated.

It is estimated that Northern Ireland Gross Value Added (GVA) growth will be provided by the private sector. The largest contributions are projected to be from manufacturing with specific mention of ICT, professional services, scientific and technical sectors<sup>6</sup>.

Economic forecasts suggest that there will be growth in ICT and business sectors and that this may impact future students' choice of GCSE, AS and A level. There has been significant investment in Northern Ireland film and television productions and with HMRC Film Tax Relief now available at 25% of qualifying film production expenditure<sup>7</sup> (regardless of budget) the trend could continue.

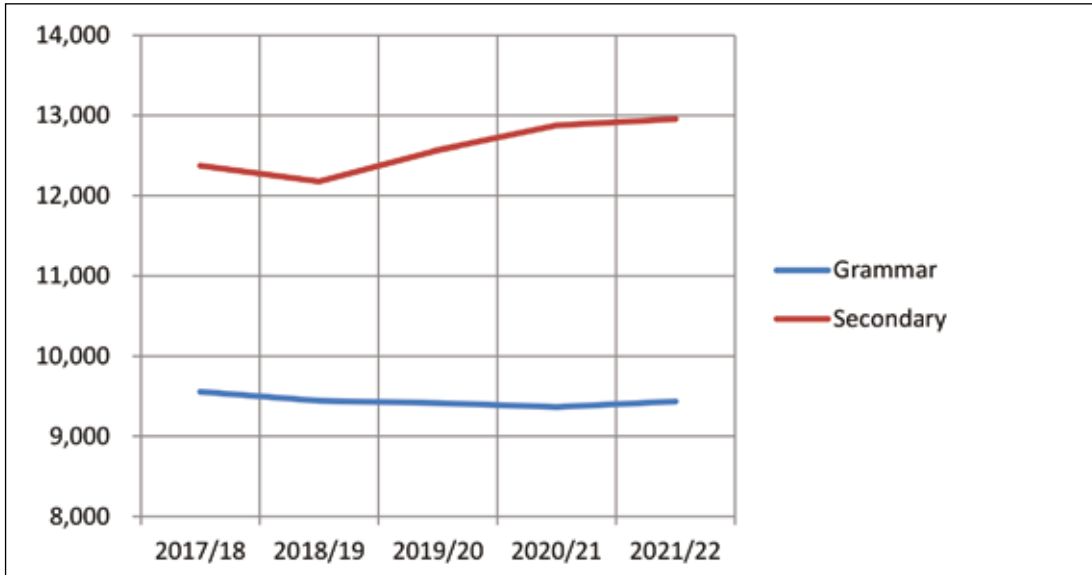
<sup>6</sup> [www.economy-ni.gov.uk/sites/default/files/publications/economy/NI-Skills-Barometer-2017-Summary-Report.pdf](http://www.economy-ni.gov.uk/sites/default/files/publications/economy/NI-Skills-Barometer-2017-Summary-Report.pdf)

Using this information and the projected growth in the private sector, it is speculated that certain STEM subjects, Film Studies (at AS and A level), and Business Studies will show growth in the coming years. This information is indicative of subject choice and does not speculate on which subjects will have decreasing entries over the next 5 years to accommodate the increases in these areas.

Overall population projections for the period 2017/18– 2021/22 show a relatively stable statutory post-primary population with a slight increase of 1.4% in the GCSE (Year 12) population. The projected populations for AS (Year 13) and A Level (Year 14) show a decrease of -3.7%.

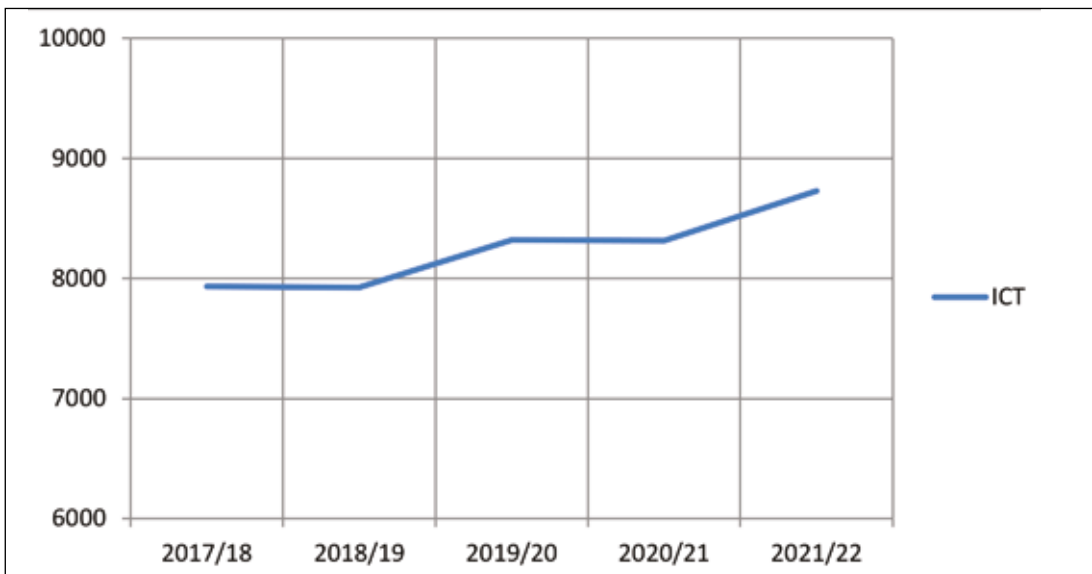
### 8.4.1 GCSE

**Figure 64: GCSE Projected Population**

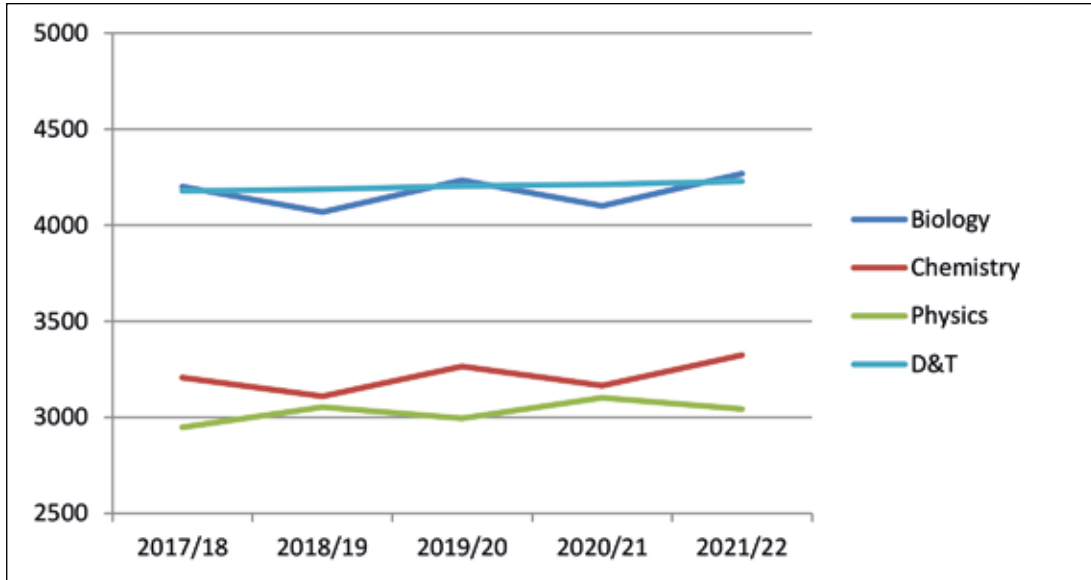


These assumptions do not account for the possible impact of potential changes to the nature of admissions within the post-primary sector.

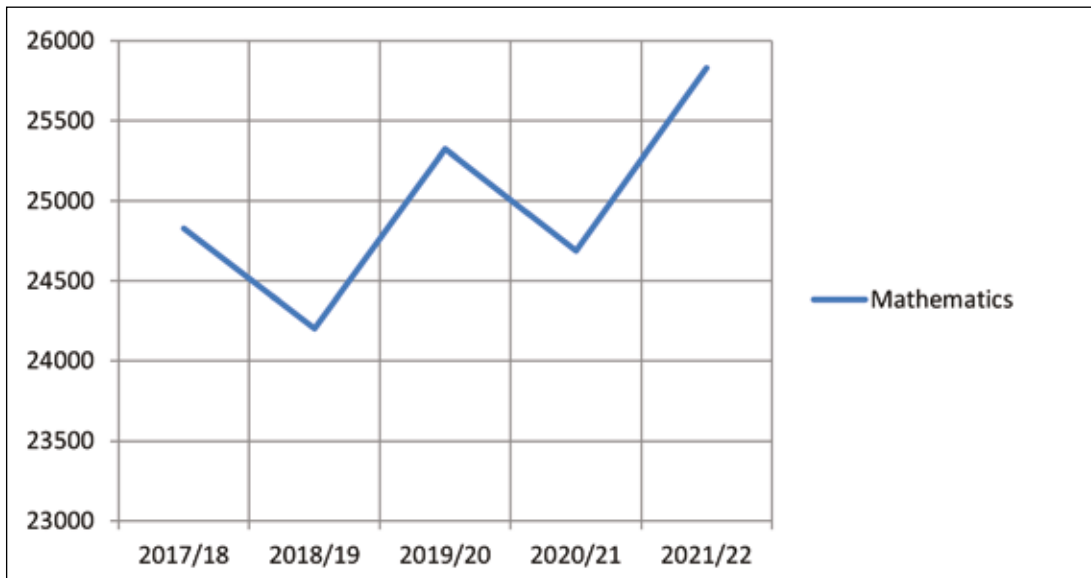
**Figure 65: GCSE Projected ICT entries**

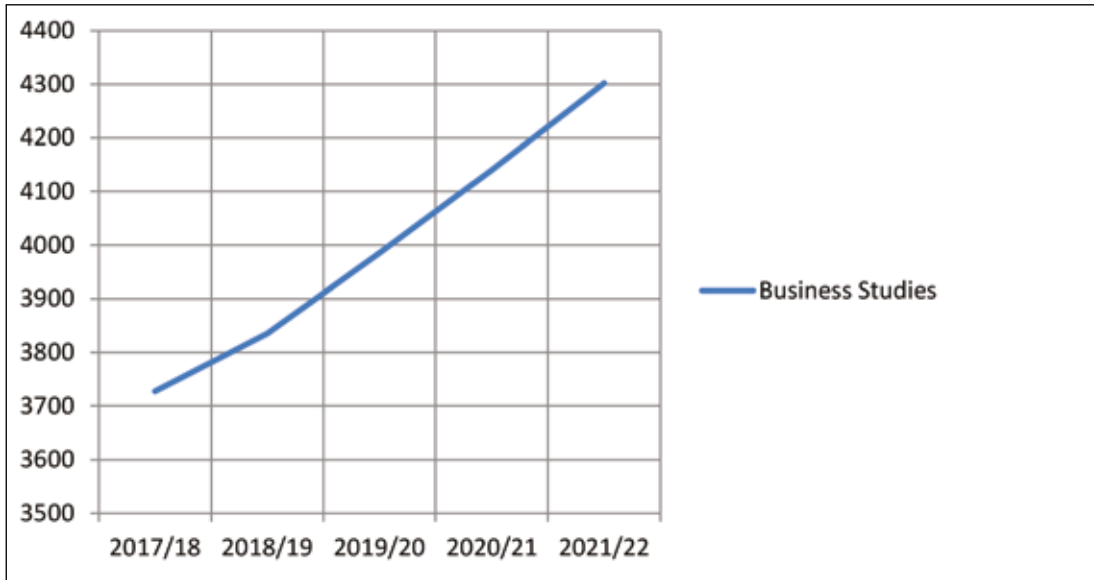
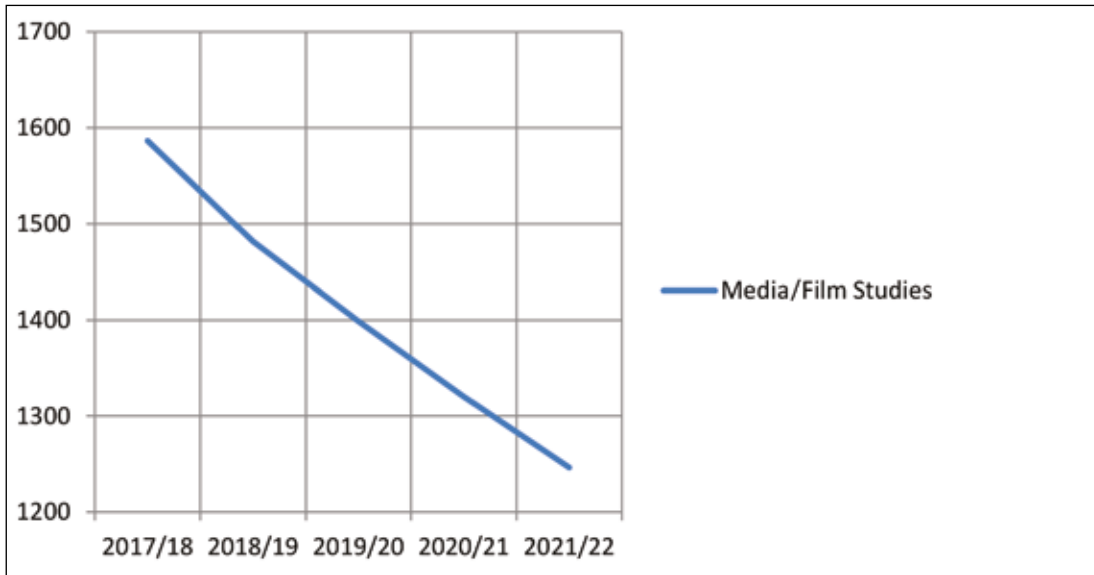


**Figure 66: GCSE Projected STEM Entries (Biology, Chemistry, Physics and Design and Technology)**



**Figure 67: GCSE Projected STEM Entries (Mathematics)**



**Figure 68: GCSE Projected Business Studies Entries****Figure 69: GCSE Projected Media/Film Studies Entries**

### GCE AS

Figure 70: GCE AS Projected Population

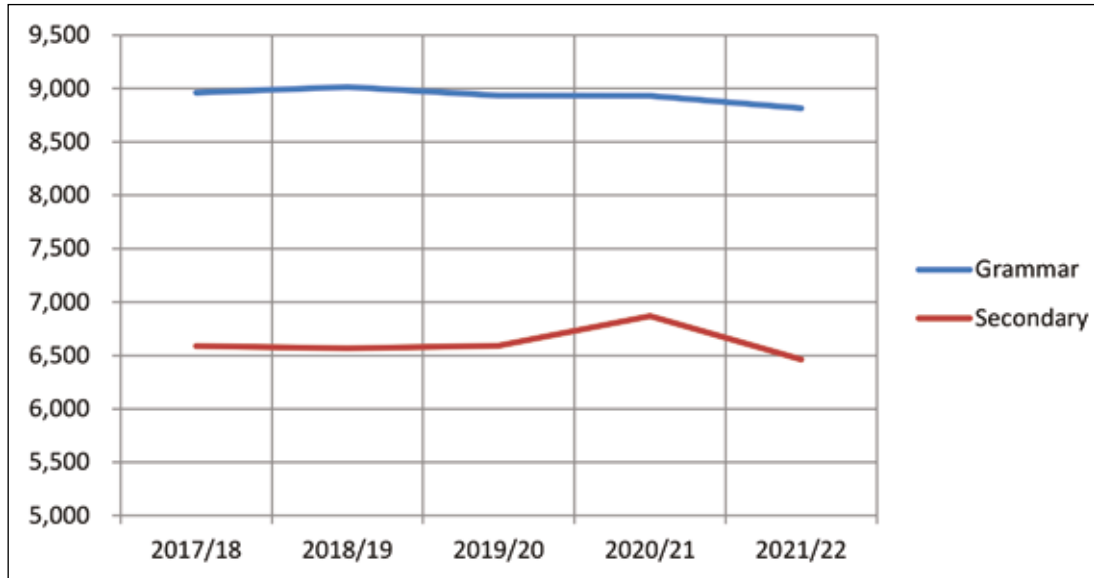
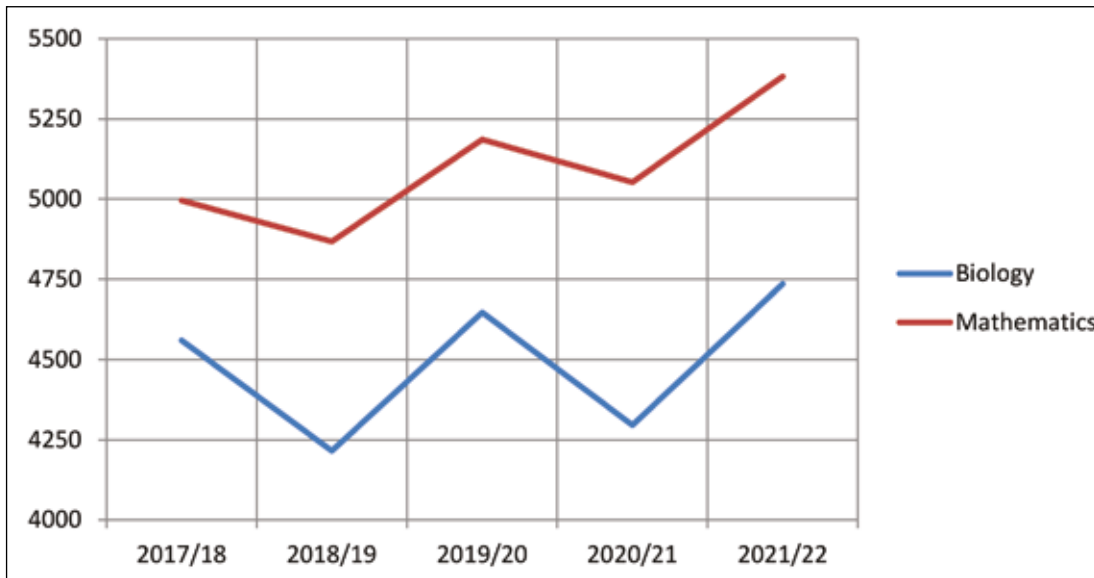
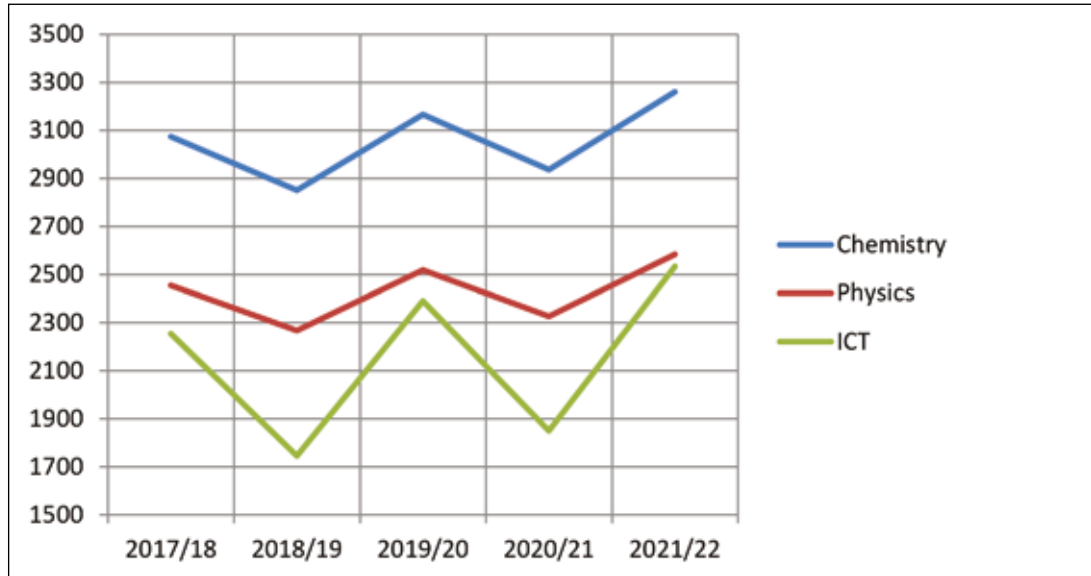
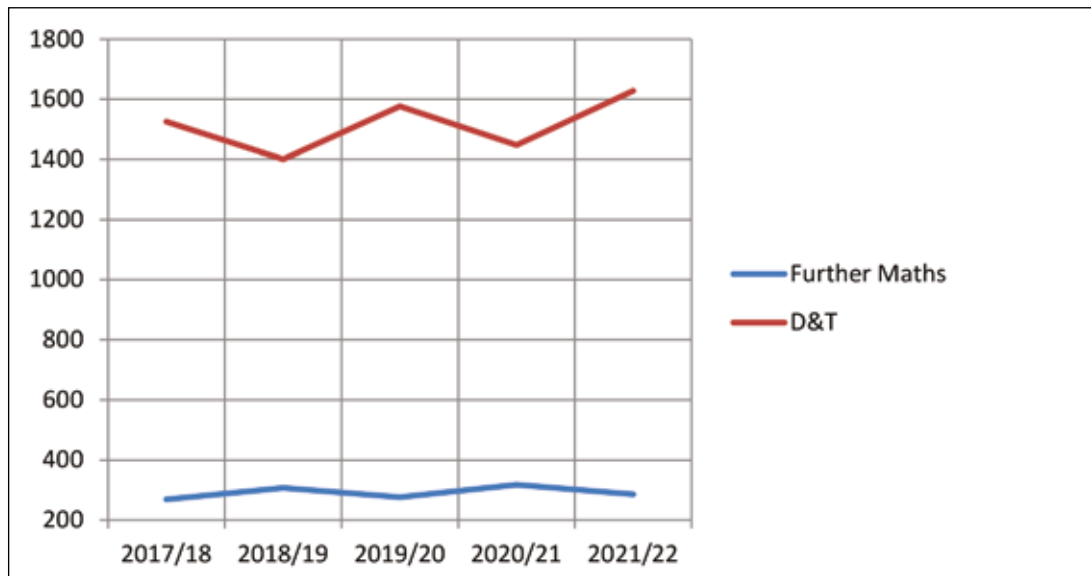


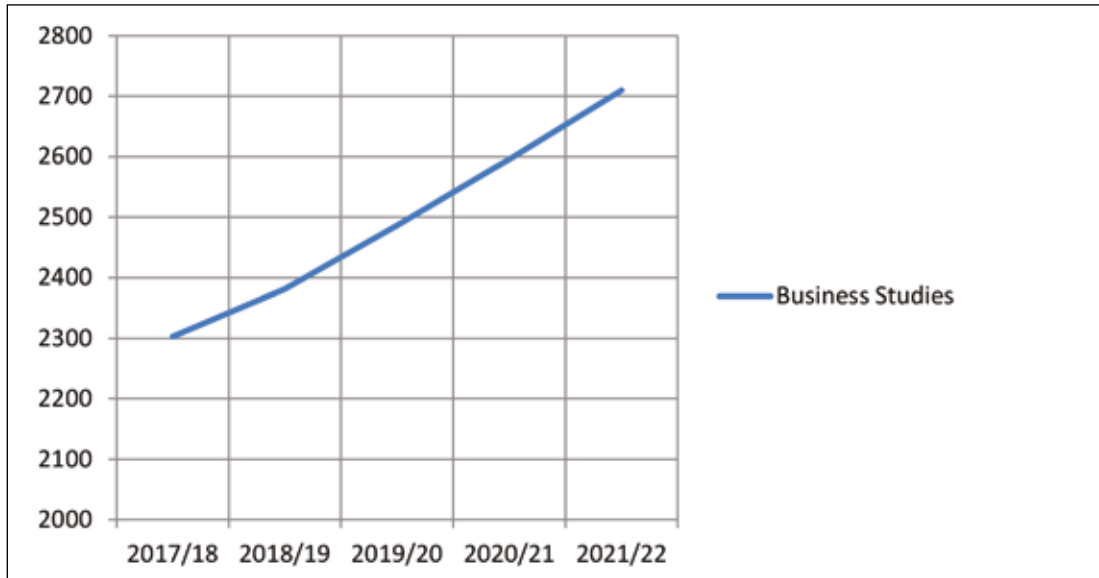
Figure 71: GCE AS Projected STEM Entries (Biology and Mathematics)



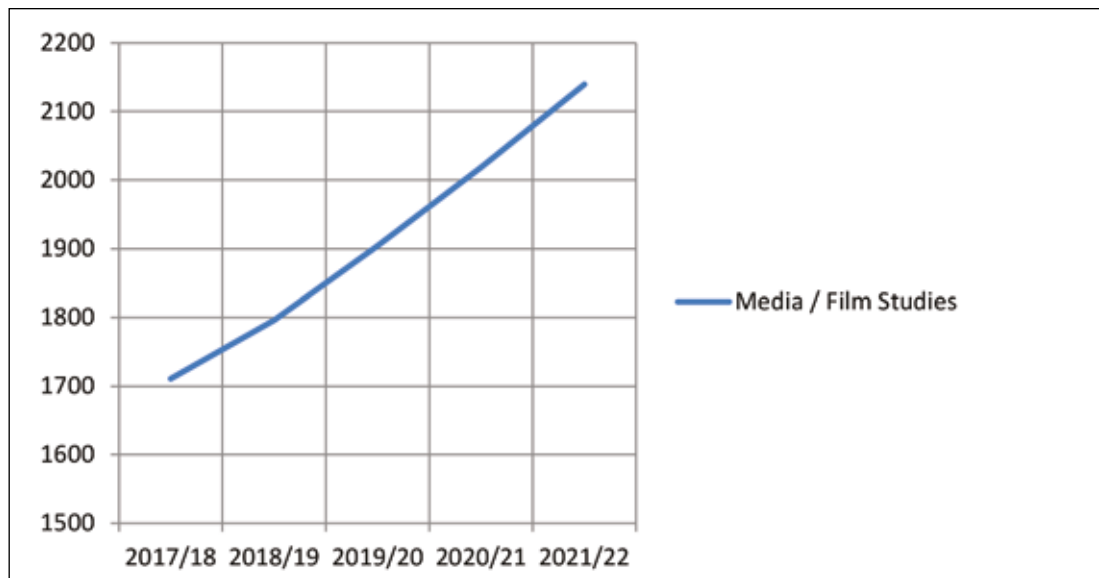
**Figure 72: GCE AS Projected STEM Entries (Chemistry, Physics and ICT)****Figure 73: GCE AS Projected STEM Entries (Further Mathematics and Design and Technology)**



**Figure 74: GCE AS Projected Business Studies Entries**



**Figure 75: GCE AS Projected Media/Film Studies Entries**



## GCE A Level

Figure 76: GCE A Level Projected Population

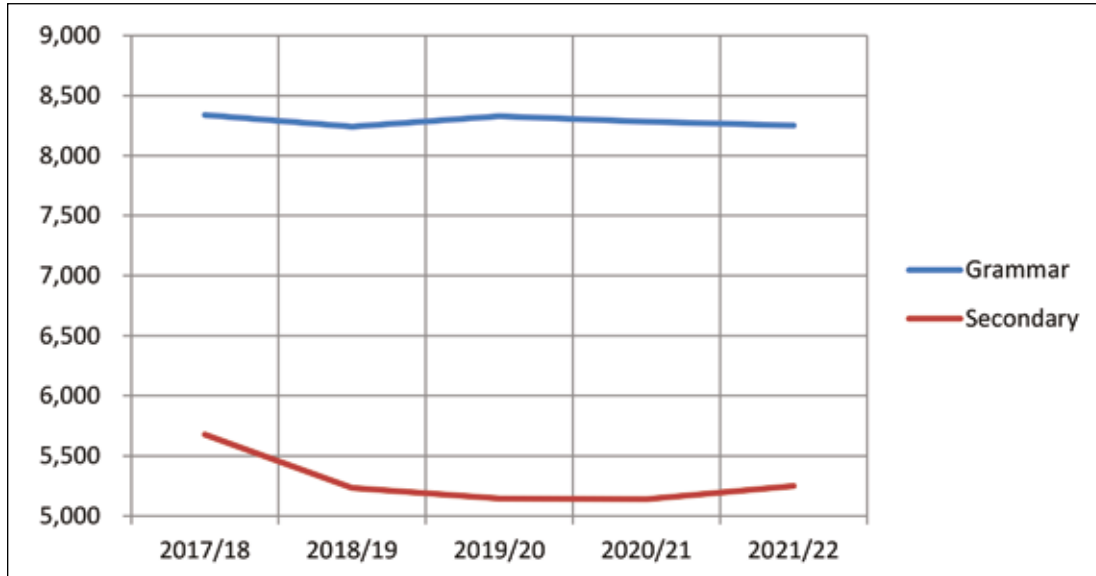
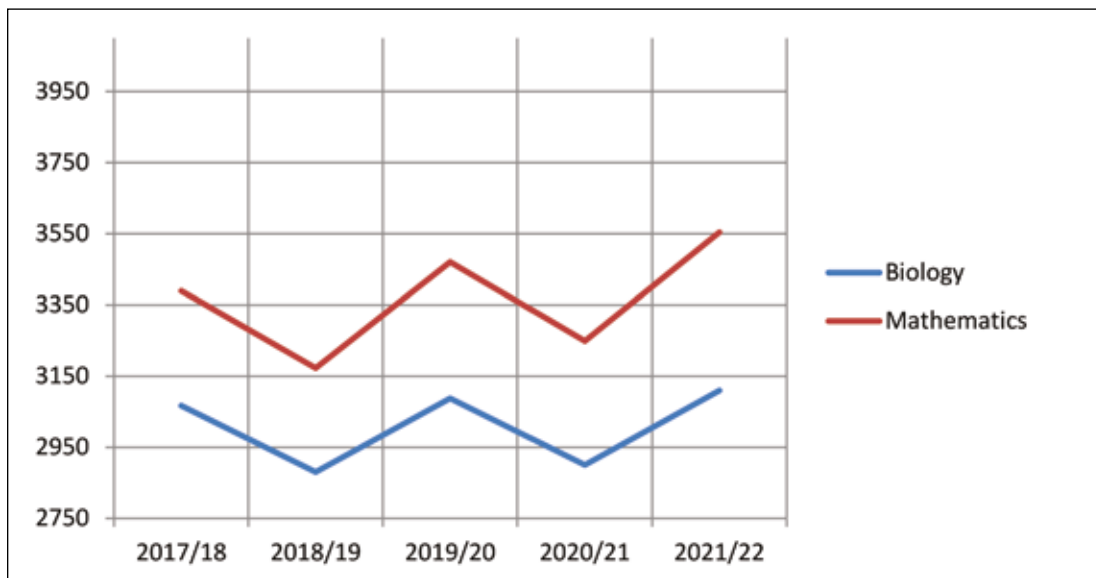
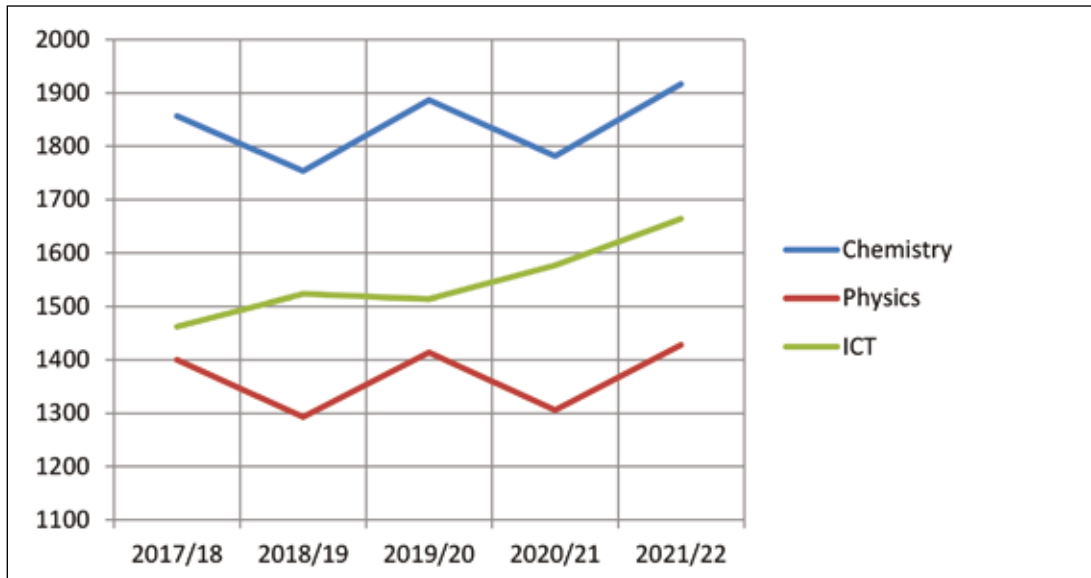


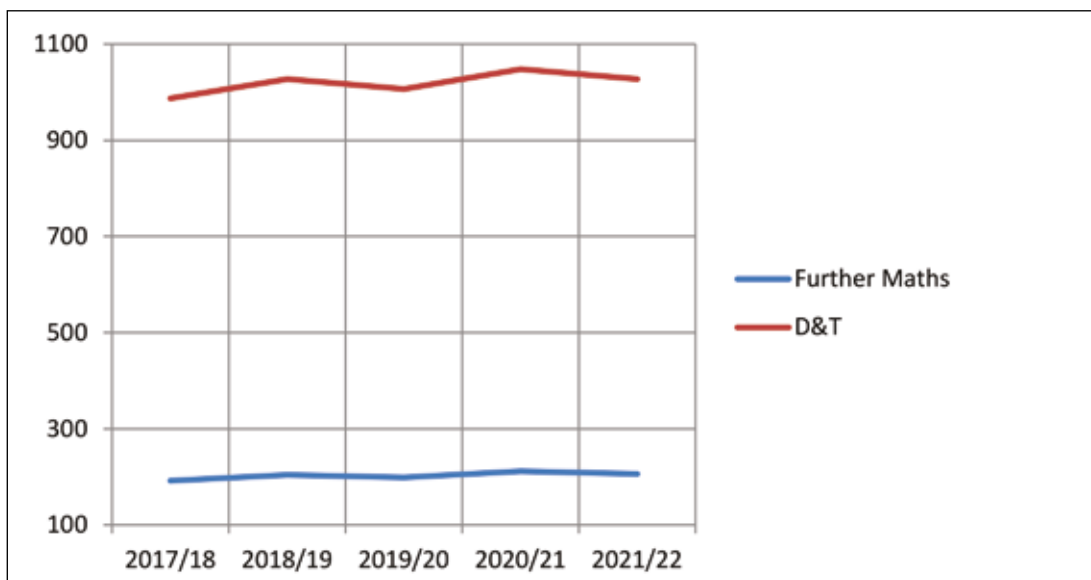
Figure 77: GCE A Level Projected STEM Entries (Biology and Mathematics)



**Figure 78: GCE A Level Projected STEM Entries (Chemistry, Physics and ICT)**

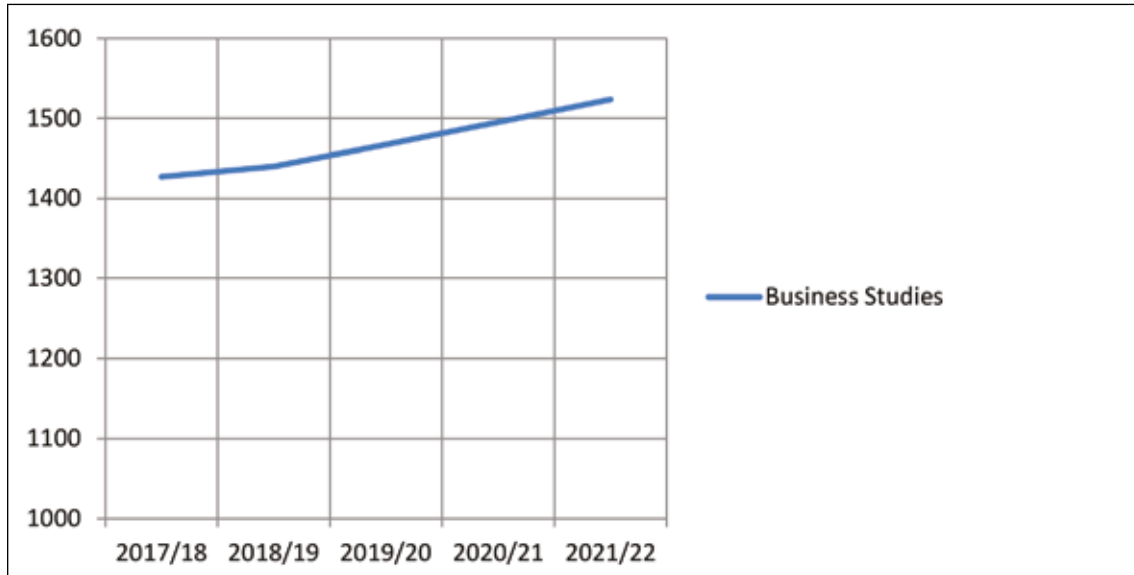


**Figure 79: GCE A Level Projected STEM Entries (Further Mathematics and Design and Technology)**

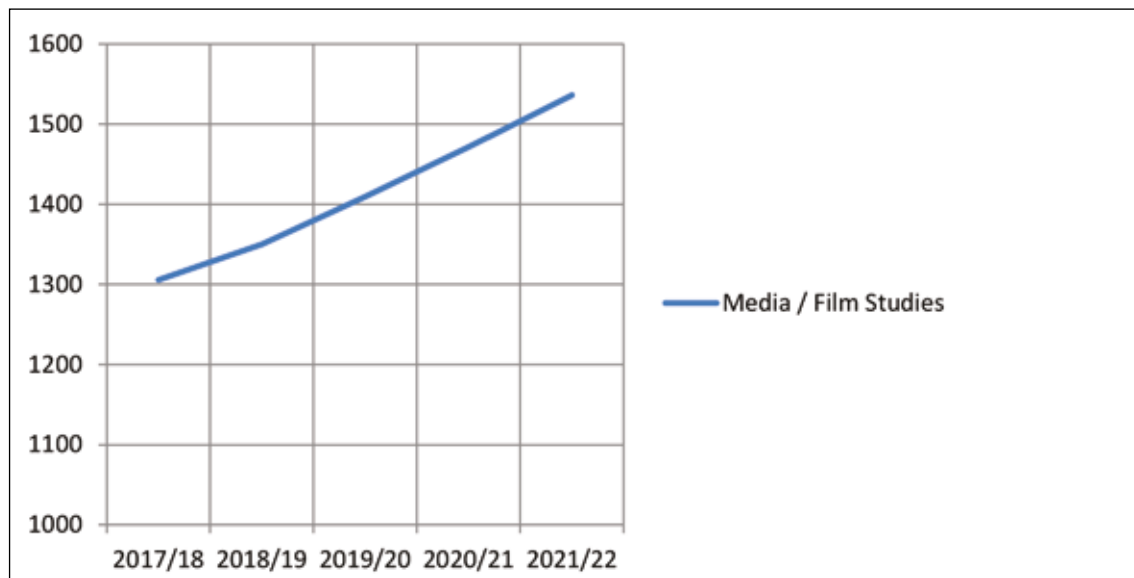


## GCE A Level

**Figure 80: GCE A Level Projected Business Studies Entries**



**Figure 81: GCE A Level Projected Media and Film Studies Entries**





## 9

# Conclusions

CCEA produces a significant amount of information and data analysis on GCSE and GCE qualifications, using our own qualification results, Northern Ireland figures and Three Country (UK) information.

This report presents a detailed summary analysis for GCSE, AS and A level subjects and grade outcomes for the period 2013–17. It outlines similarities and differences between the entry figures for each year for male and female candidates in Northern Ireland and highlights notable entry patterns. The report allows the reader to take a more in-depth look at gender differences in subject choice, examination outcomes and performance probability, focusing on GCSEs taken in Northern Ireland and changes over the last ten years. Our projection of subject entries for the next five years should be of interest to a wide stakeholder base.

## GCSE

- GCSE results have improved; there has been an increase in A\*–C grades. The proportion of entries awarded at least a Grade C has risen by 0.7 percentage points this year to 79.8%.
- At grades A(7)–C(4) (66.4%) Mathematics is at its highest level of attainment since 2015 (66.6%), recovering from a slight decline in 2016. Female candidates now outperform their male counterparts in this subject.
- At these grades, the improvements in English performance over this timeframe have been greater and more consistent than in Mathematics.
- The percentage of candidates achieving A(7)–C(4) grades in English has increased to 79.6%.
- Female candidates are still well ahead in overall GCSE performance. The performance gap sits at 8.1% at A\*–C. This is an increase of 0.5 percentage points on the previous year.
- Participation has increased across the STEM subjects. The proportion of entries in STEM subjects has grown by 2.6% in the last few years.

## GCE

- Mathematics is now the most popular A level in Northern Ireland, with approximately one in ten A level candidates studying this subject.
- The proportion of female candidates studying STEM subjects at A level has increased since 2013. Nearly one third of female students (32.4%) now study STEM subjects at A level. This has helped drive the increase in overall share, particularly over the last two years.
- In Northern Ireland, female candidates outperform their male counterparts across all grades.
- Northern Ireland continues to be the top performing region in the Three Country comparison at Grades A\*–A (+4.1%) and A\*–E (+0.4%).

A more in-depth analysis of GCSE and GCE trends is included in the main body of the report.

The research report provides a large quantity of evidence that will help enable discussions between industry, business, policy makers and educationalists.



For further information or copies of this report, please contact:

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