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A-Level Results Analysis, 2019

15ʰ August 2019

EducationInvestor
Awards 2015
WINNER
Consultants
– to the private sector

EducationInvestor
Awards 2016
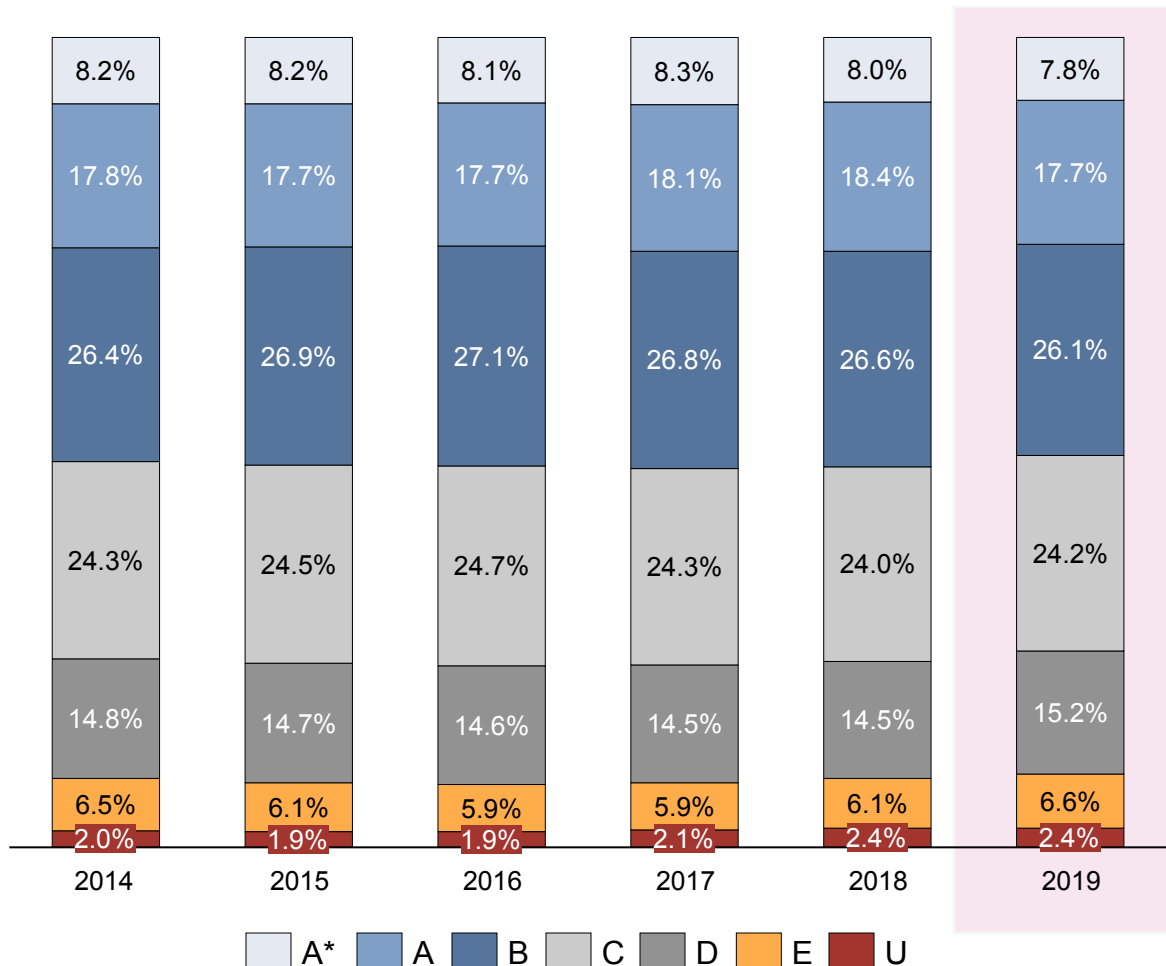**WINNER**
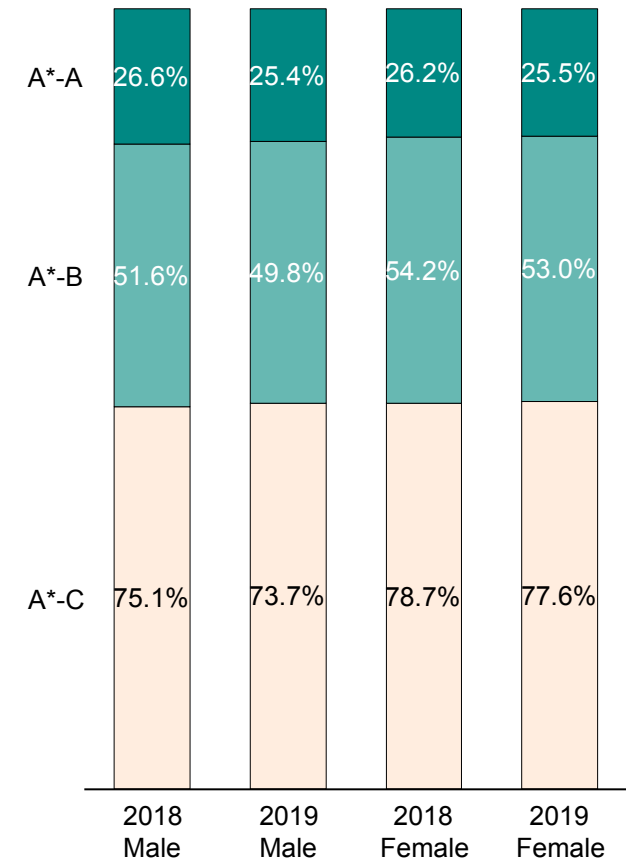Consultants
– to the private sector

Overall grade distribution has remained relatively stable over the past 6 years. Grade performance has slightly decreased from both the male and female population
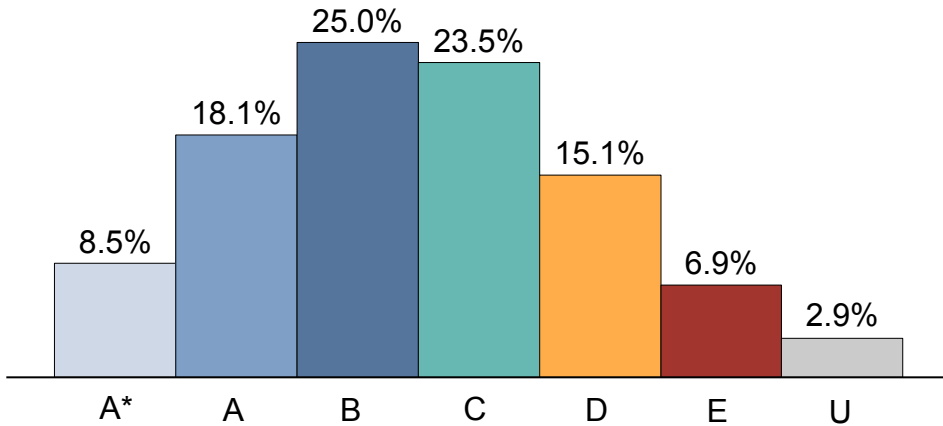
Grade distribution, All Subjects, 2014-2019
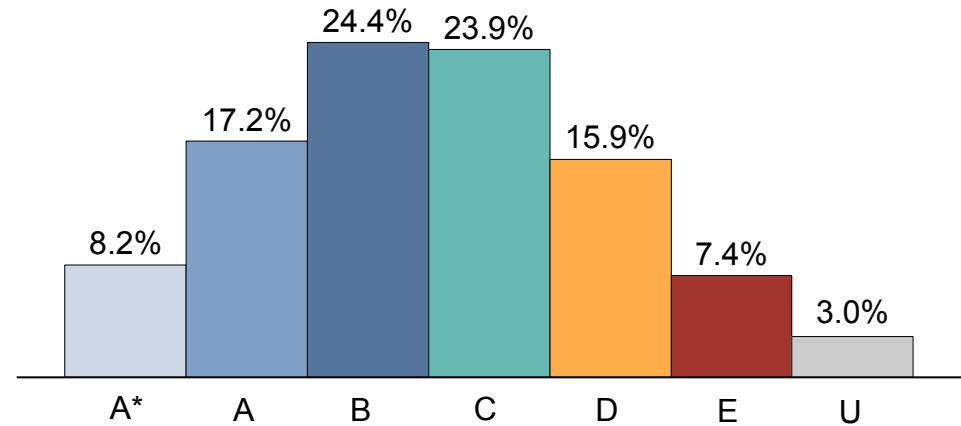
Grade performance Male vs Female, 2018-2019

The average grade distribution for both male and female in 2019 has been slightly weaker compared to 2018

Average male grade distribution, all subjects, 2018

Bar chart:
- A*: 8.5%
- A: 18.1%
- B: 25.0%
- C: 23.5%
- D: 15.1%
- E: 6.9%
- U: 2.9%

Average male grade distribution, all subjects, 2019

Bar chart:
- A*: 8.2%
- A: 17.2%
- B: 24.4%
- C: 23.9%
- D: 15.9%
- E: 7.4%
- U: 3.0%

Average female grade distribution, all subjects, 2018

Bar chart:
- A*: 7.6%
- A: 18.6%
- B: 28.0%
- C: 24.5%
- D: 13.9%
- E: 5.5%
- U: 1.9%

Average female grade distribution, all subjects, 2019

Bar chart:
- A*: 7.5%
- A: 18.0%
- B: 27.5%
- C: 24.6%
- D: 14.5%
- E: 5.9%
- U: 2.0%
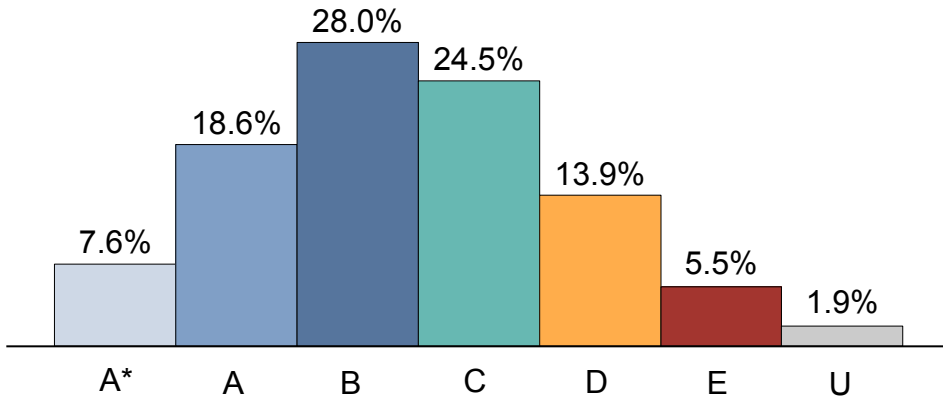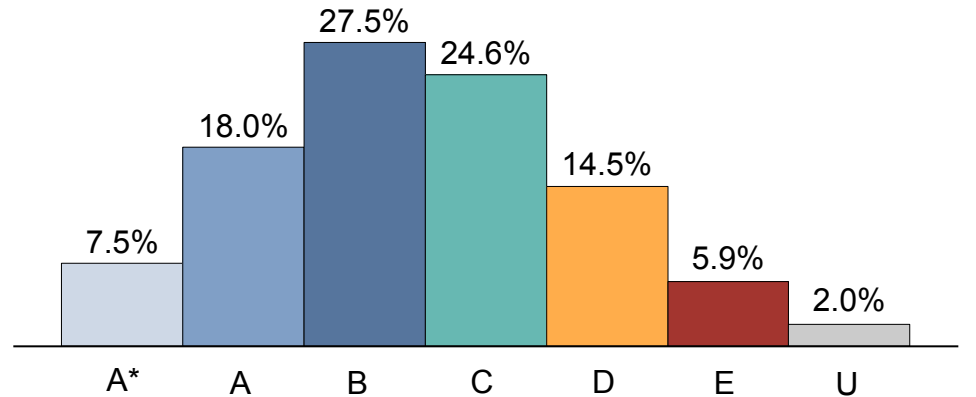
The proportion of students taking facilitating subjects has been stable over time

Facilitating subjects[1] entries as a % of total entries, 2014-2019
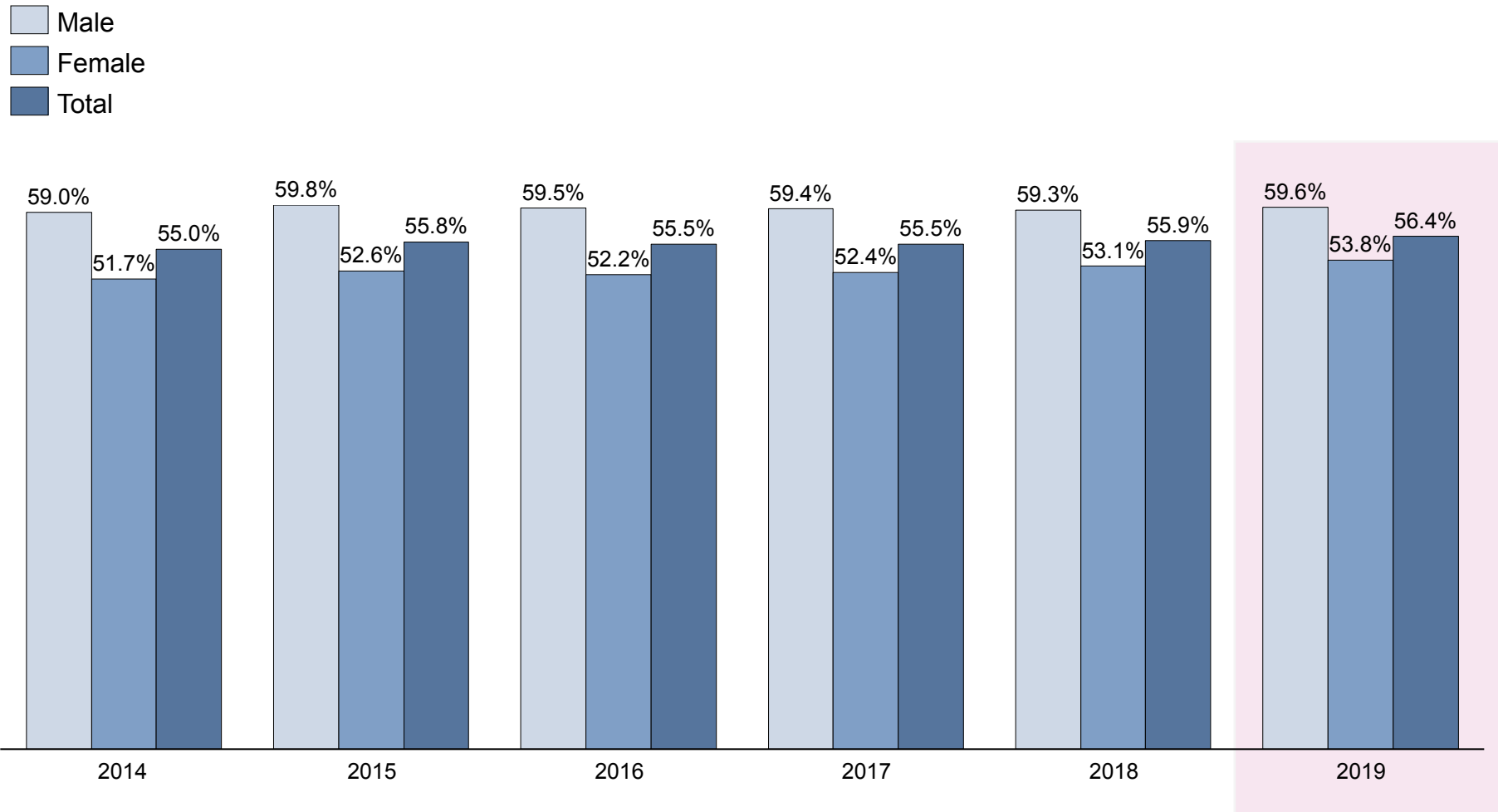
- Male
- Female
- Total

	2014	2015	2016	2017	2018	2019
Male	59.0%	59.8%	59.5%	59.4%	59.3%	59.6%
Female	51.7%	52.6%	52.2%	52.4%	53.1%	53.8%
Total	55.0%	55.8%	55.5%	55.5%	55.9%	56.4%

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Girls have a much larger share of all A level entries

Total number of A-level entries by gender and proportion of total entries

■ Male
□ Female

	2014	2015	2016	2017	2018	2019
Male	380k	383k	375k	374k	365k	361k
Female	454k	467k	461k	455k	446k	440k
%	54.4%	54.9%	55.2%	54.9%	55.0%	55.0%
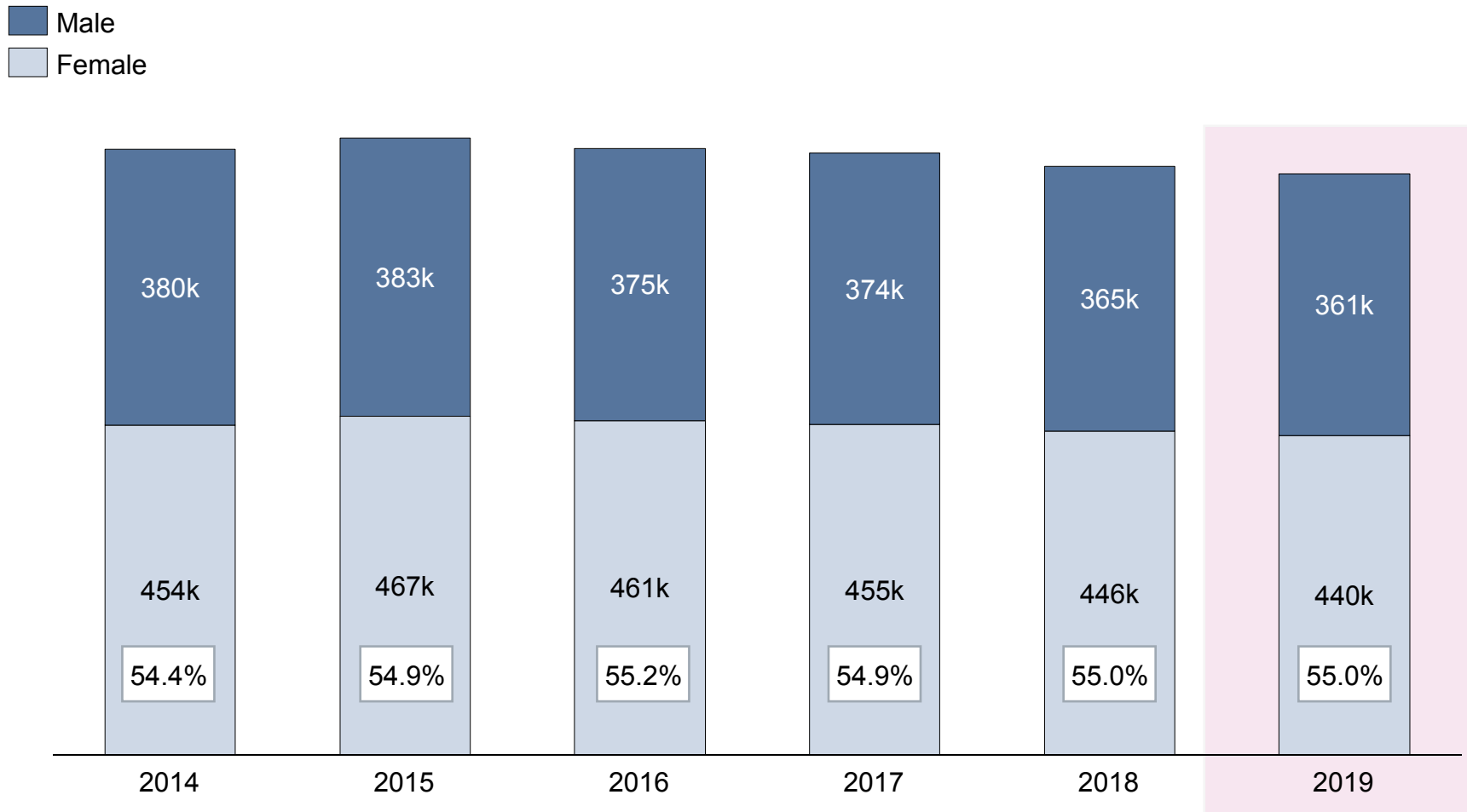
The top 10 subjects by proportion of entries has barely changed in the last 6 years. However, English has strongly declined, mathematics has dipped for the first time since 2014, and Biology and Psychology have become more popular

Number of entries as % of total entries, top 10 subjects, 2014-2019

Legend: Mathematics, Biology, Psychology, English, Chemistry, History, Art & Design, Physics, Sociology, Geography

Data labels: 10.7%, 10.9%, 11.0%, 11.5%, 12.0%, 11.5%, 10.2%, 10.5%, 10.1%, 9.5%, 8.9%, 8.6%, 7.9%, 4.0%, 4.4%, 4.3%, 4.6%, 4.1%, 4.4%

Years: 2014, 2015, 2016, 2017, 2018, 2019
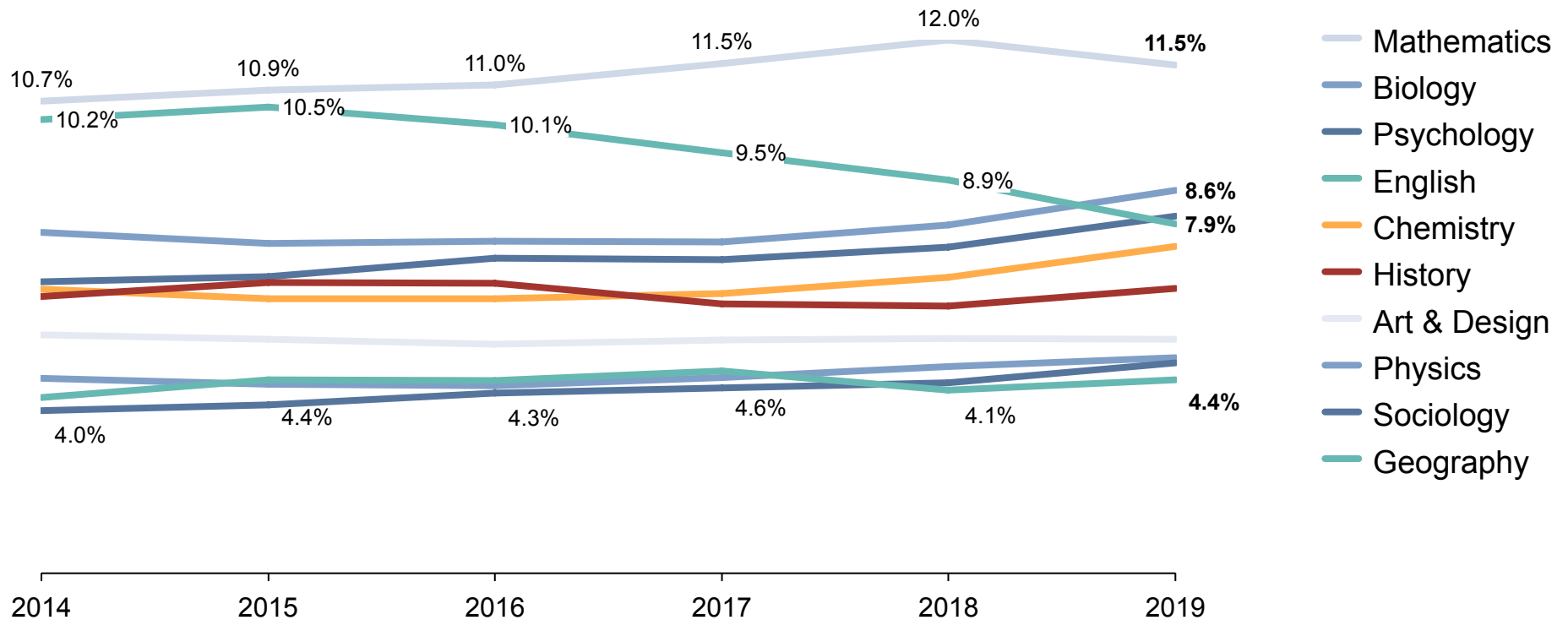
The top 10 subjects by proportion of entries for males has changed only slightly in the last 6 years. This year, Geography and Psychology have surpassed English

Number of male entries as % of total male entries, top 10 subjects, 2014-2019

14.3% 14.8% 15.1% 15.5% 16.2% **15.6%**

8.4%

4.6%

3.6% 3.6% 3.8% 3.9% 4.1%

2014 2015 2016 2017 2018 2019

Legend:
- Mathematics
- Physics
- Chemistry
- Biology
- History
- Economics
- Business Studies
- Geography
- Psychology
- English
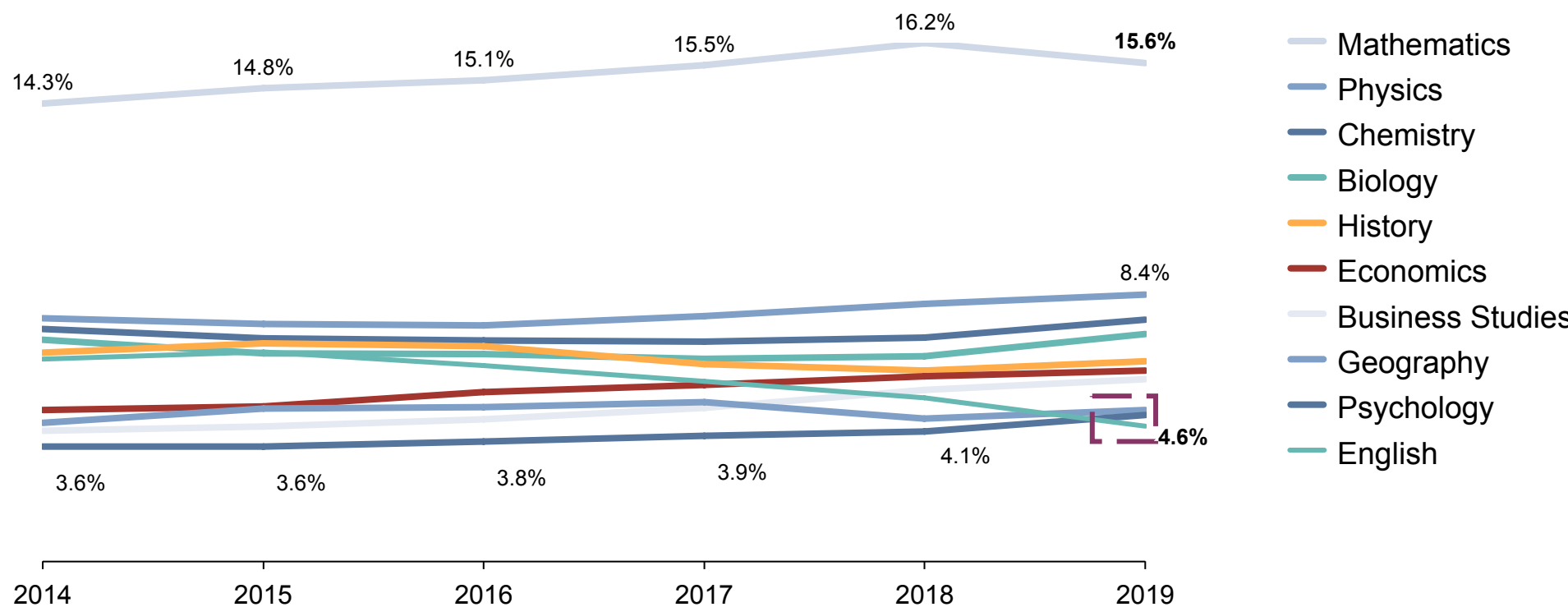
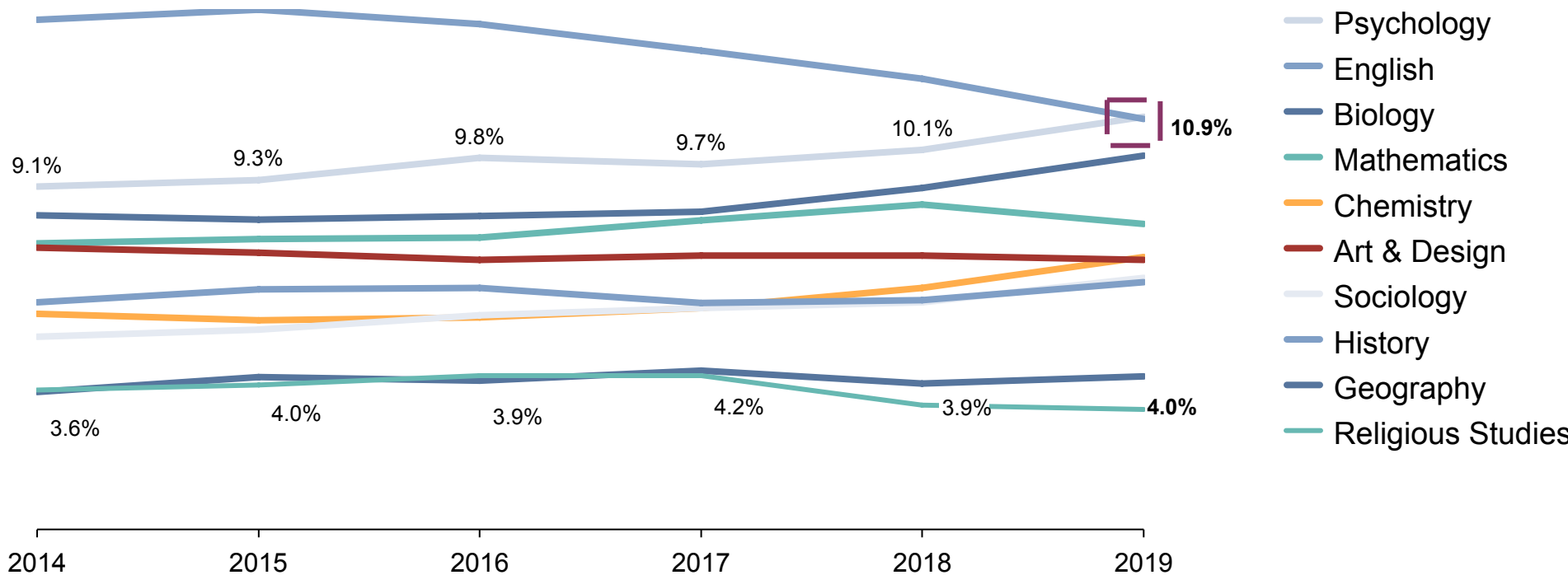# The top 10 subjects by proportion of entries for females has changed in the last 6 years. This year, Psychology has surpassed English as the top subject. Biology and chemistry have also increased

Number of female entries as % of total female entries, top 10 subjects, 2014-2019

9.1%   9.3%   9.8%   9.7%   10.1%   10.9%

3.6%   4.0%   3.9%   4.2%   3.9%   4.0%

Legend:
- Psychology
- English
- Biology
- Mathematics
- Chemistry
- Art & Design
- Sociology
- History
- Geography
- Religious Studies

2014   2015   2016   2017   2018   2019

Maths is the most popular subject among boys, while Psychology is top for girls (new for 2019)

Top 10 most popular subjects by entries, male (2018)

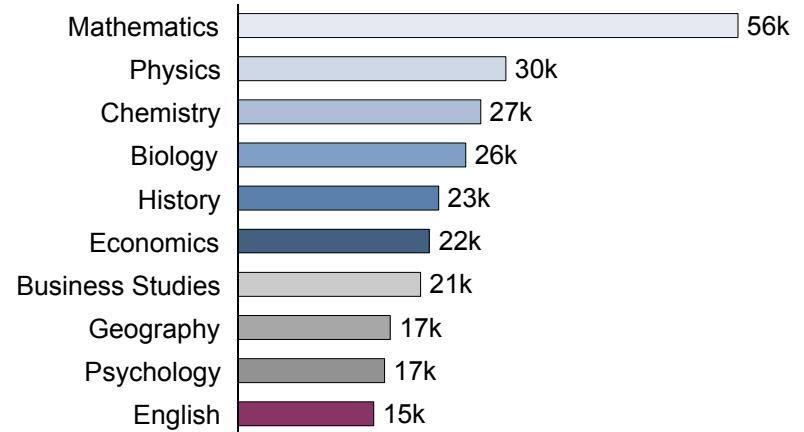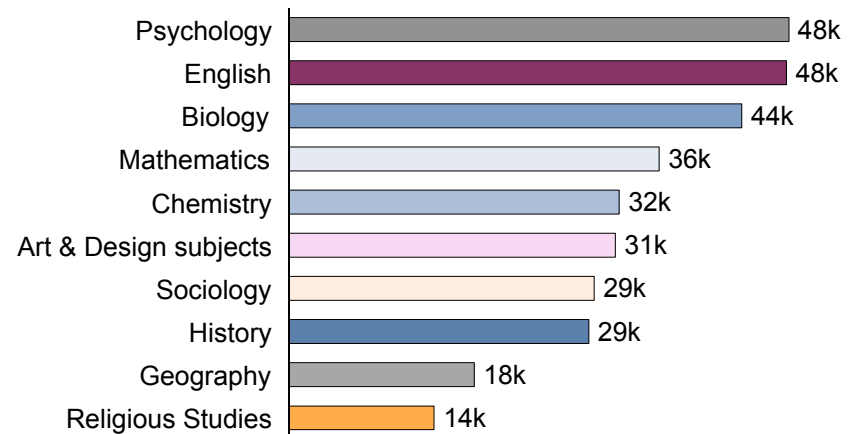| Subject	Entries
Mathematics	59k
Physics	29k
Chemistry	26k
Biology	23k
History	22k
Economics	21k
Business Studies	20k
English	19k
Geography	16k
Psychology	15k

Top 10 most popular subjects by entries, male (2019)

Subject	Entries
Mathematics	56k
Physics	30k
Chemistry	27k
Biology	26k
History	23k
Economics	22k
Business Studies	21k
Geography	17k
Psychology	17k
English	15k

Top 10 most popular subjects by entries, female (2018)

Subject	Entries
English	53k
Psychology	45k
Biology	40k
Mathematics	38k
Art & Design subjects	32k
Chemistry	29k
Sociology	27k
History	27k
Geography	17k
Religious Studies	15k

Top 10 most popular subjects by entries, female (2019)

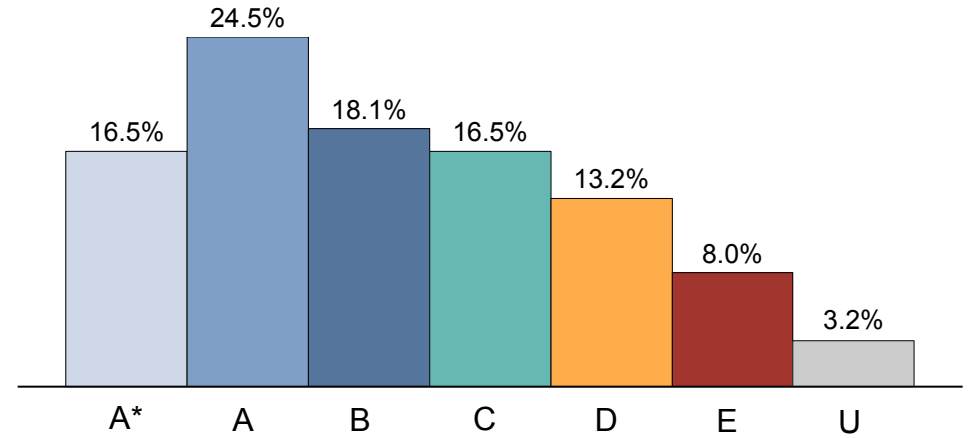| Subject	Entries
Psychology	48k
English	48k
Biology	44k
Mathematics	36k
Chemistry	32k
Art & Design subjects	31k
Sociology	29k
History	29k
Geography	18k
Religious Studies	14k

Maths has a grade distribution which is highly skewed towards A* and A. The English grade distribution has moved up the grades slightly since 2018
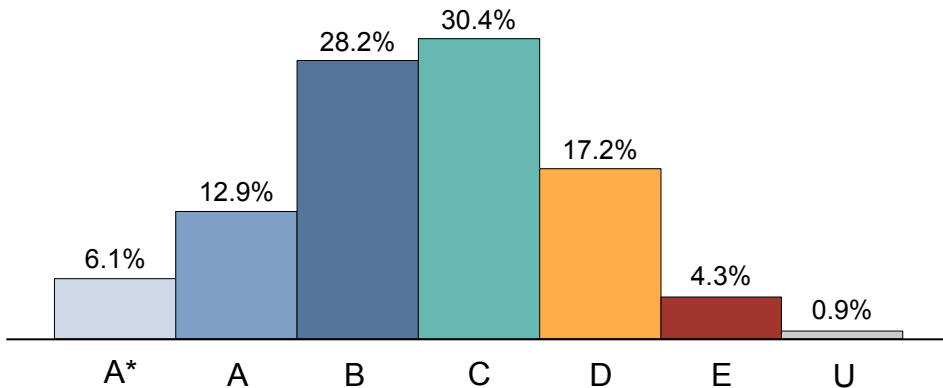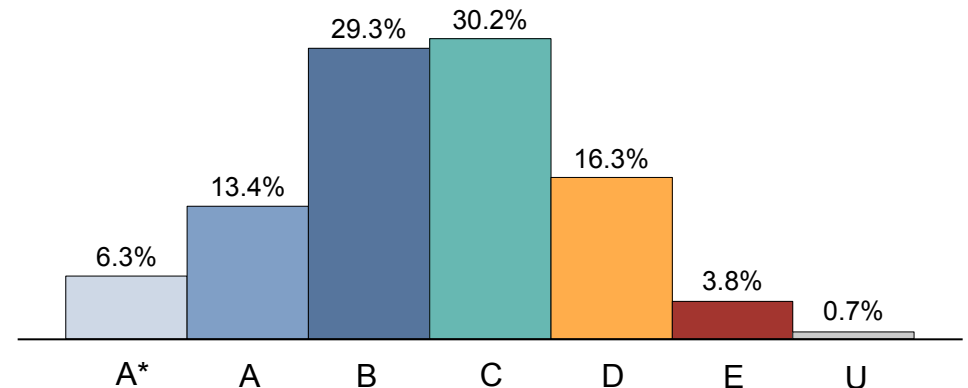
Average grade distribution, Maths, 2018

A*	A	B	C	D	E	U
15.9%	26.3%	22.6%	16.0%	10.0%	5.5%	3.7%

Average grade distribution, Maths, 2019

A*	A	B	C	D	E	U
16.5%	24.5%	18.1%	16.5%	13.2%	8.0%	3.2%

Average grade distribution, English, 2018

A*	A	B	C	D	E	U
6.1%	12.9%	28.2%	30.4%	17.2%	4.3%	0.9%

Average grade distribution, English, 2019

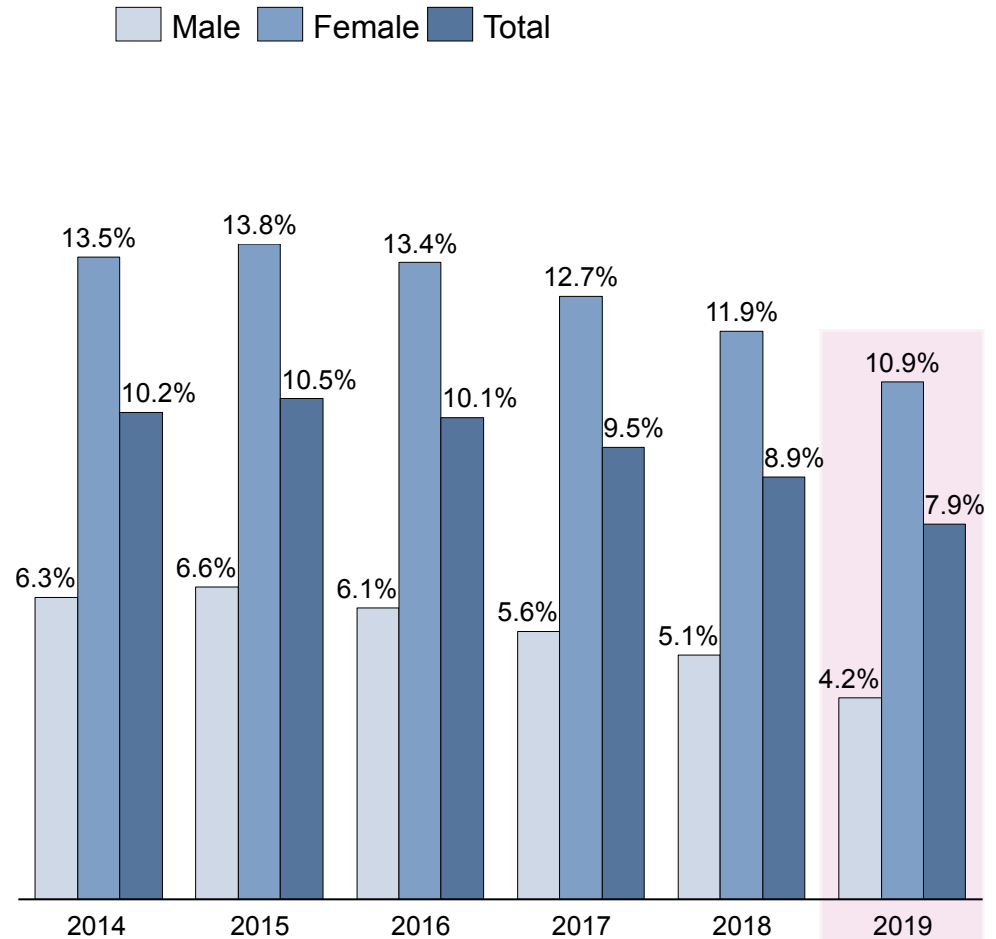| A*	A	B	C	D	E	U
6.3%	13.4%	29.3%	30.2%	16.3%	3.8%	0.7%

English – there a been a significant decrease in English entries both from for males and females

English[1] entries 2014-2019 for male vs female

Legend: ☐ Male ☐ Female
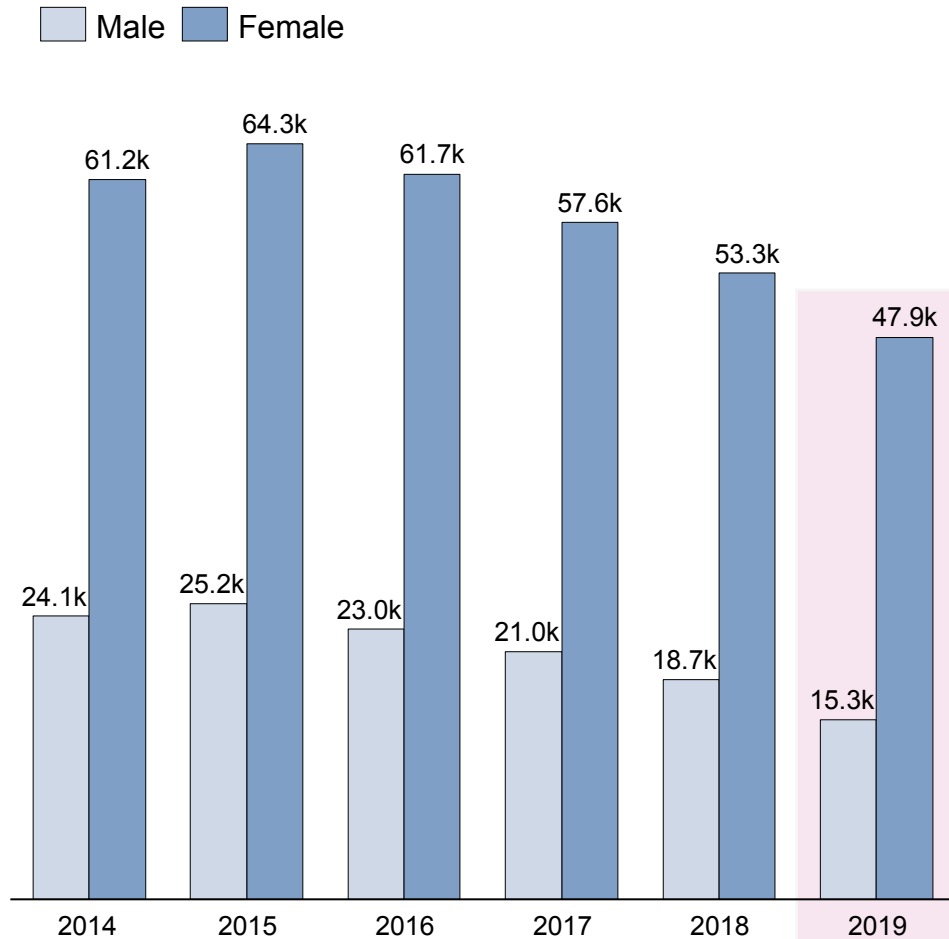
English entries 2014-2019 as proportion of total entries by male vs female
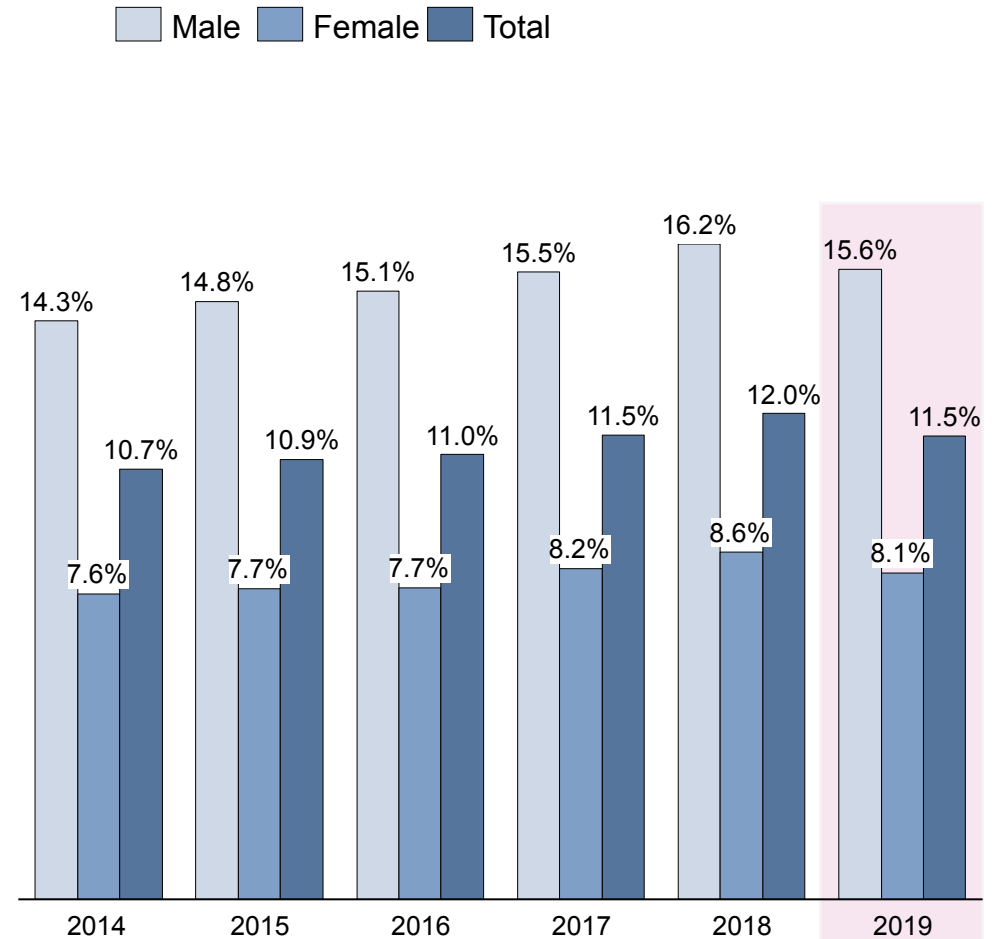
Legend: ☐ Male ☐ Female ☐ Total

1. In 2017, English was split into 3 subjects (English Language, English Literature, English Language & Literature), these have been combined for this analysis for consistency

Source: JCQ Results 2014-2019

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Mathematics – entries for both male and female as proportion of total entries have decreased in 2019 following several years of annual growth

Mathematics entries 2014-2019 for male vs female
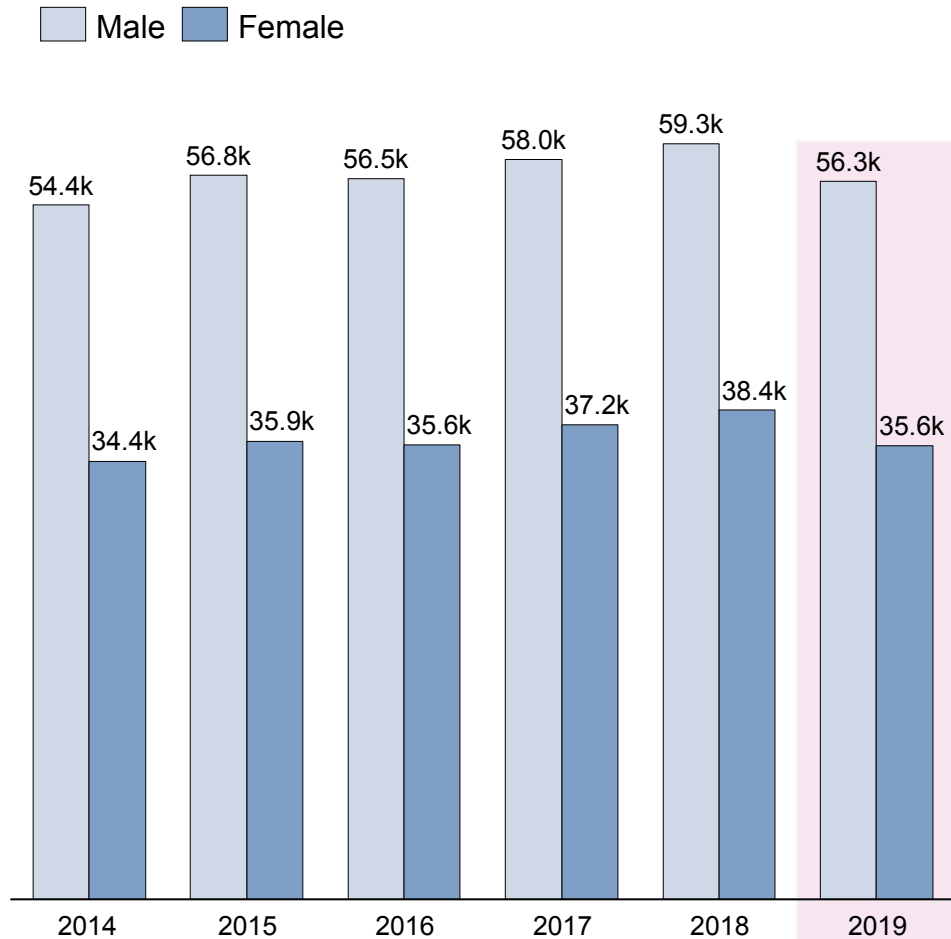
Legend: Male, Female

Year	Male	Female
2014	54.4k	34.4k
2015	56.8k	35.9k
2016	56.5k	35.6k
2017	58.0k	37.2k
2018	59.3k	38.4k
2019	56.3k	35.6k

Mathematics entries 2014-2019 as proportion of total entries by male vs female

Legend: Male, Female, Total

Year	Male	Female	Total
2014	14.3%	7.6%	10.7%
2015	14.8%	7.7%	10.9%
2016	15.1%	7.7%	11.0%
2017	15.5%	8.2%	11.5%
2018	16.2%	8.6%	12.0%
2019	15.6%	8.1%	11.5%

Biology- The total entries and proportion of individuals taking Biology continued the trend, increasing again in 2019
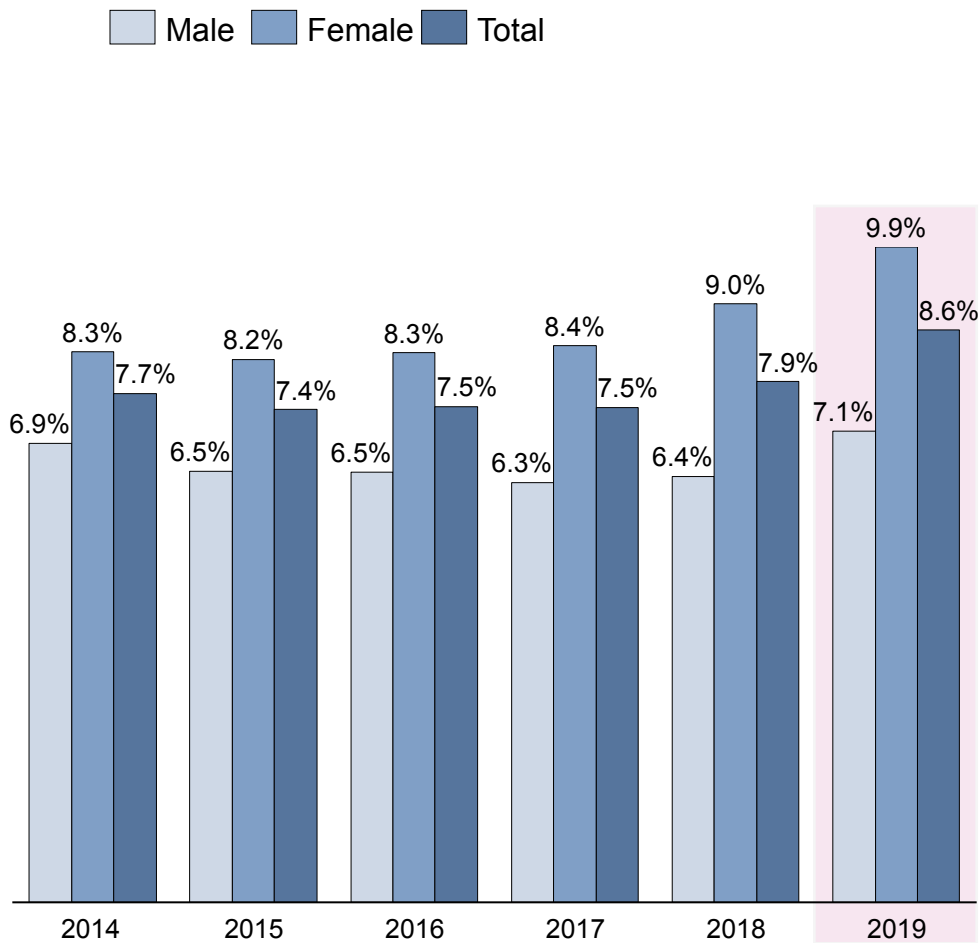
Biology entries 2014-2019 for male vs female
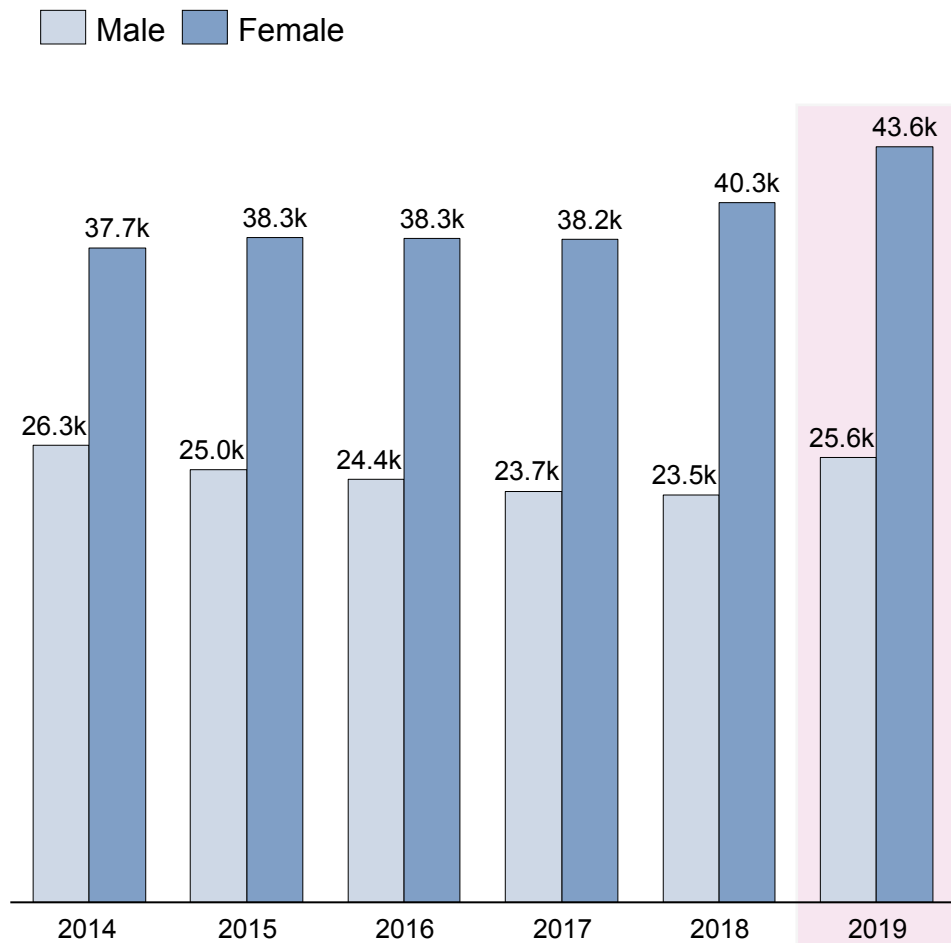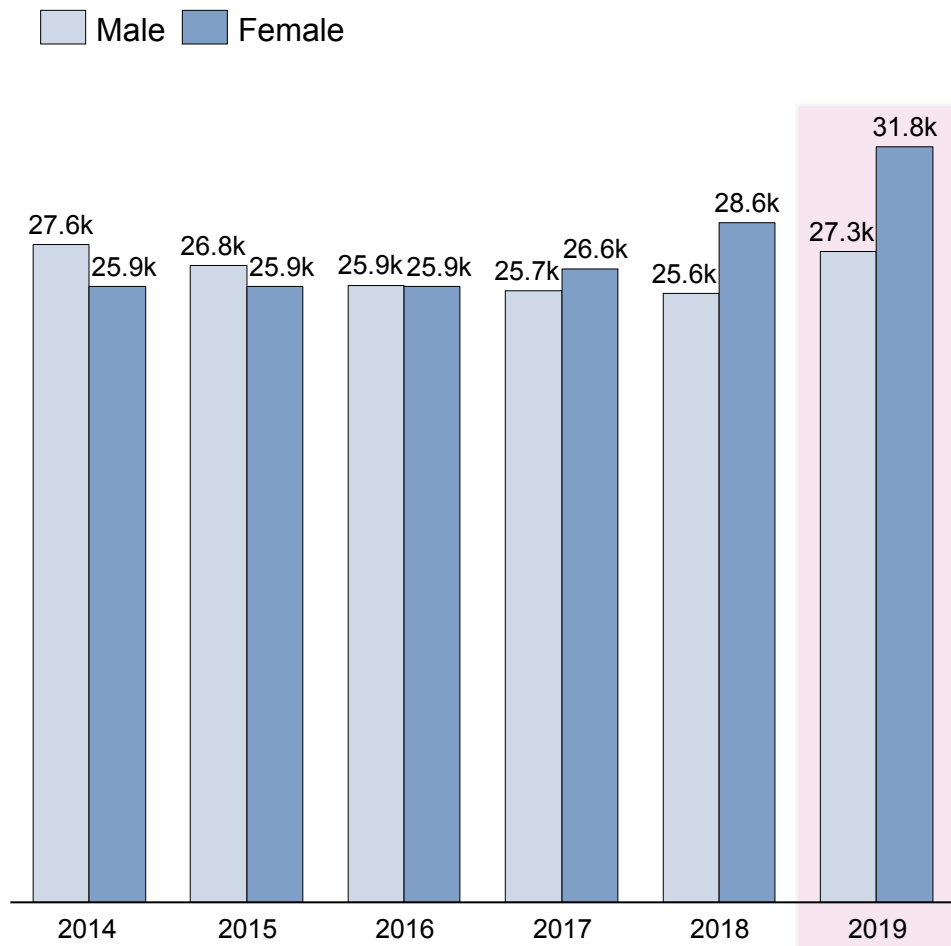

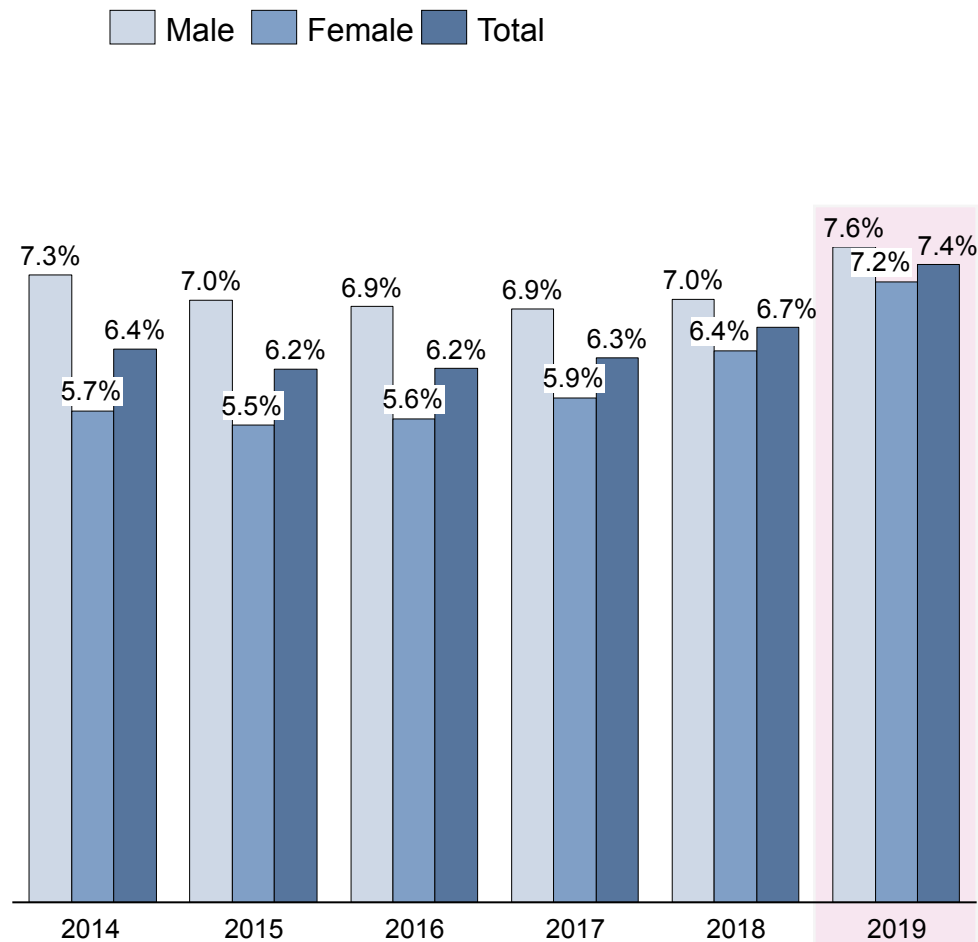## Biology entries 2014-2019 as proportion of total entries by male vs female

Chemistry- Female entries increased by nearly 10% but still have a lower proportion of entries than males
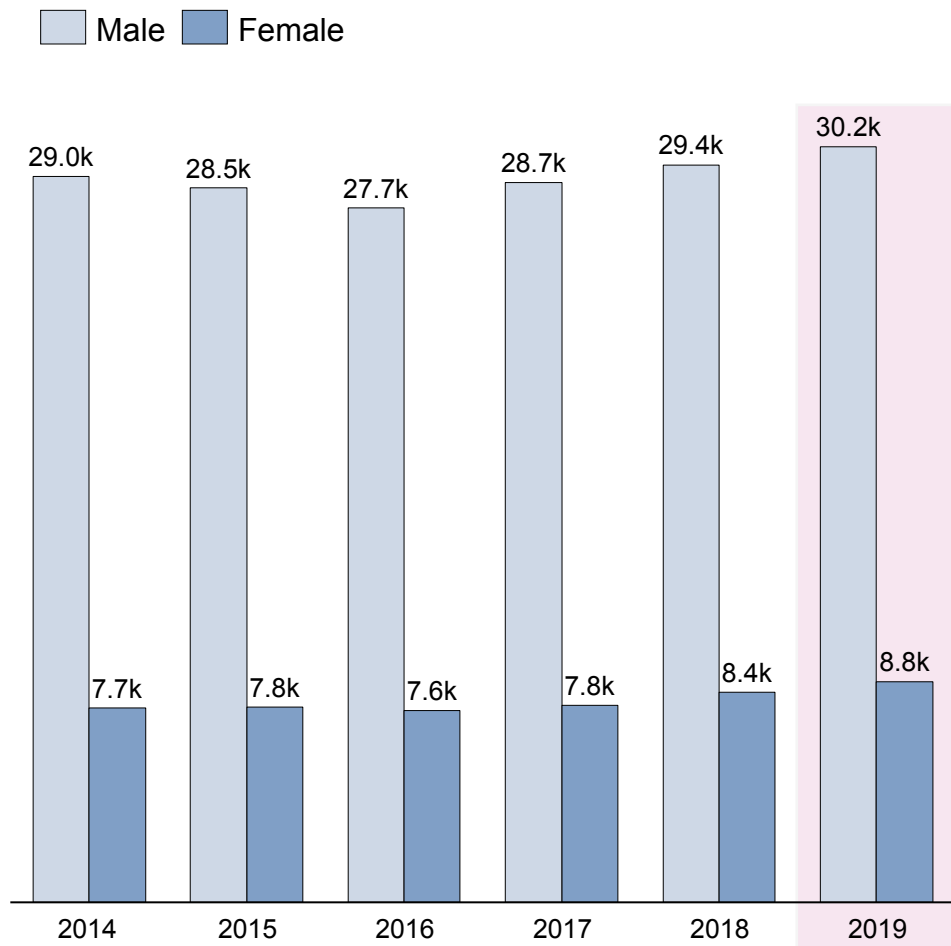
Chemistry entries 2014-2019 for male vs female

Male Female

Chemistry entries 2014-2019 as proportion of total entries by male vs female

Male Female Total

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Physics- There has been a growing trend in the proportion of males and females taking physics since 2017

Physics entries 2014-2019 for male vs female

Legend: Male, Female

Year	Male	Female
2014	29.0k	7.7k
2015	28.5k	7.8k
2016	27.7k	7.6k
2017	28.7k	7.8k
2018	29.4k	8.4k
2019	30.2k	8.8k

Physics entries 2014-2019 as proportion of total entries by male vs female

Legend: Male, Female, Total

Year	Male	Female	Total
2014	7.6%	1.7%	4.4%
2015	7.4%	1.7%	4.3%
2016	7.4%	1.7%	4.2%
2017	7.7%	1.7%	4.4%
2018	8.1%	1.9%	4.7%
2019	8.4%	2.0%	4.9%
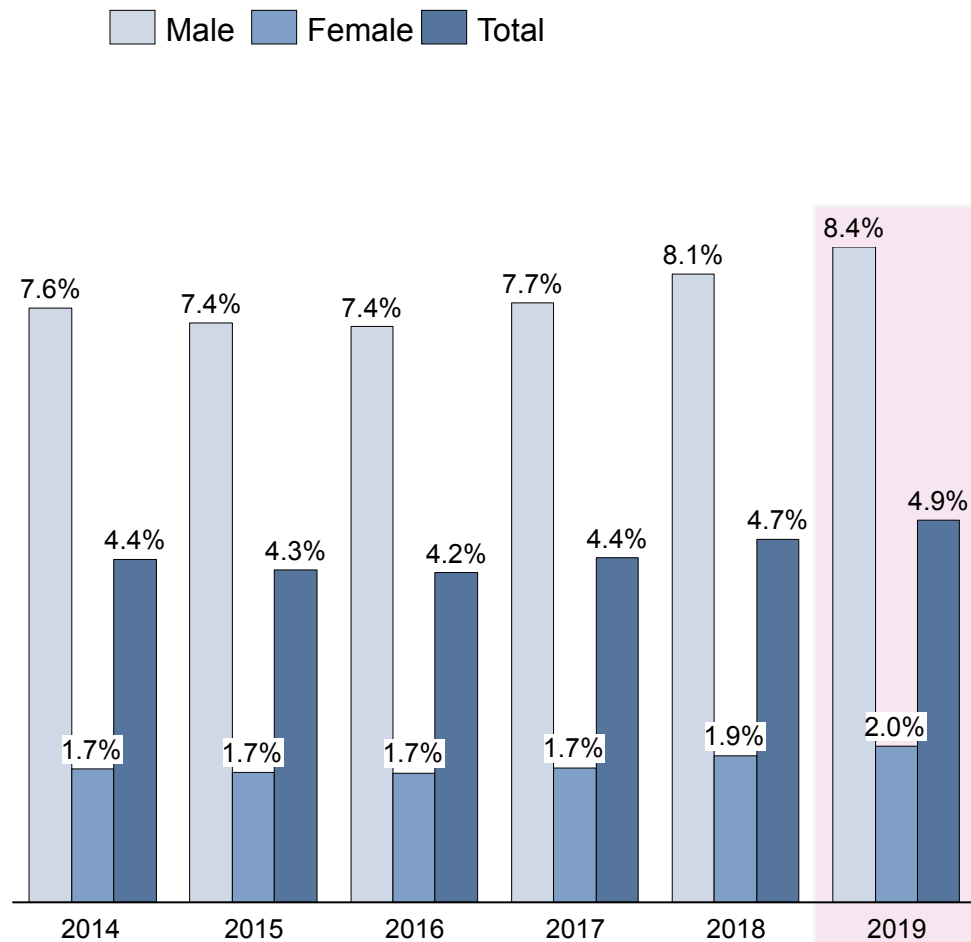
Sciences- There have been more female than male entries in Science subjects in 2019 with strong increases among both genders. However, proportion of entries remains higher among boys compared to girls

Sciences[1] entries 2014-2019 for male vs female
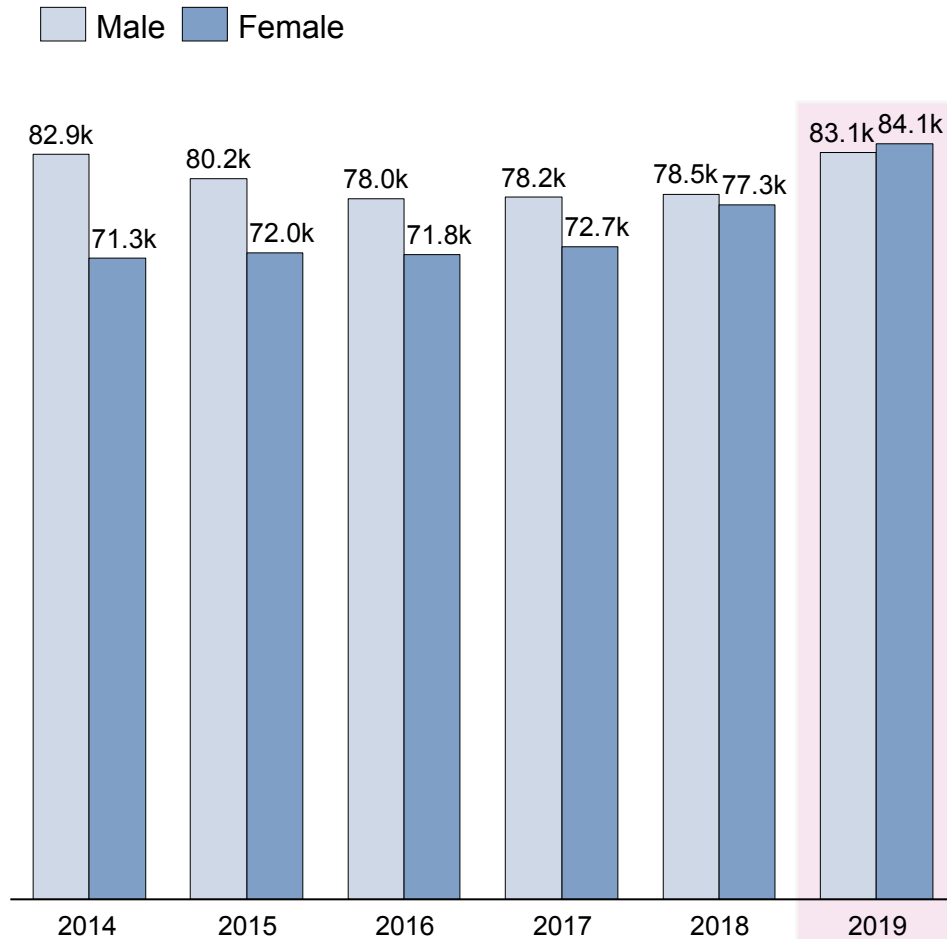
Legend: ☐ Male ☐ Female

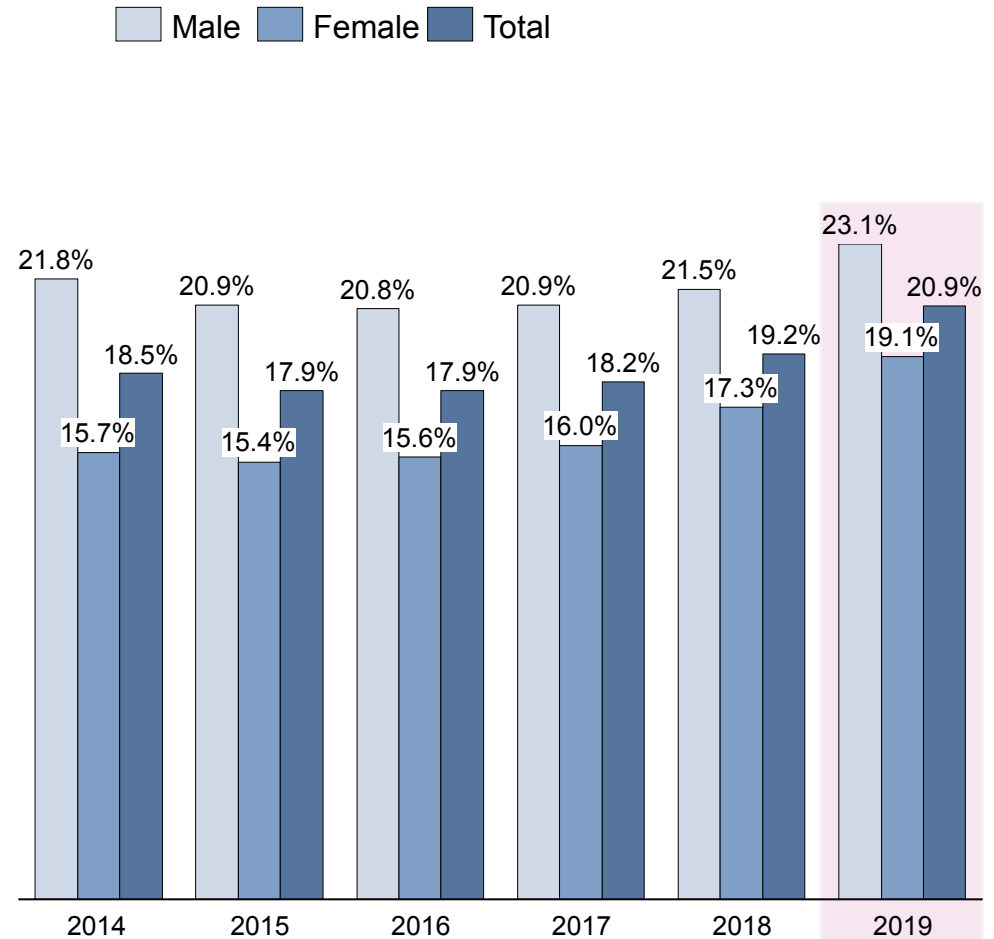| Year	Male	Female
2014	82.9k	71.3k
2015	80.2k	72.0k
2016	78.0k	71.8k
2017	78.2k	72.7k
2018	78.5k	77.3k
2019	83.1k	84.1k

Sciences[1] entries 2014-2019 as proportion of total entries by male vs female

Legend: ☐ Male ☐ Female ☐ Total

Year	Male	Female	Total
2014	21.8%	15.7%	18.5%
2015	20.9%	15.4%	17.9%
2016	20.8%	15.6%	17.9%
2017	20.9%	16.0%	18.2%
2018	21.5%	17.3%	19.2%
2019	23.1%	19.1%	20.9%

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STEM share of subjects has dropped marginally for both boys and girls – and the gap persists

STEM entries as a share of total entries, 2014-2019
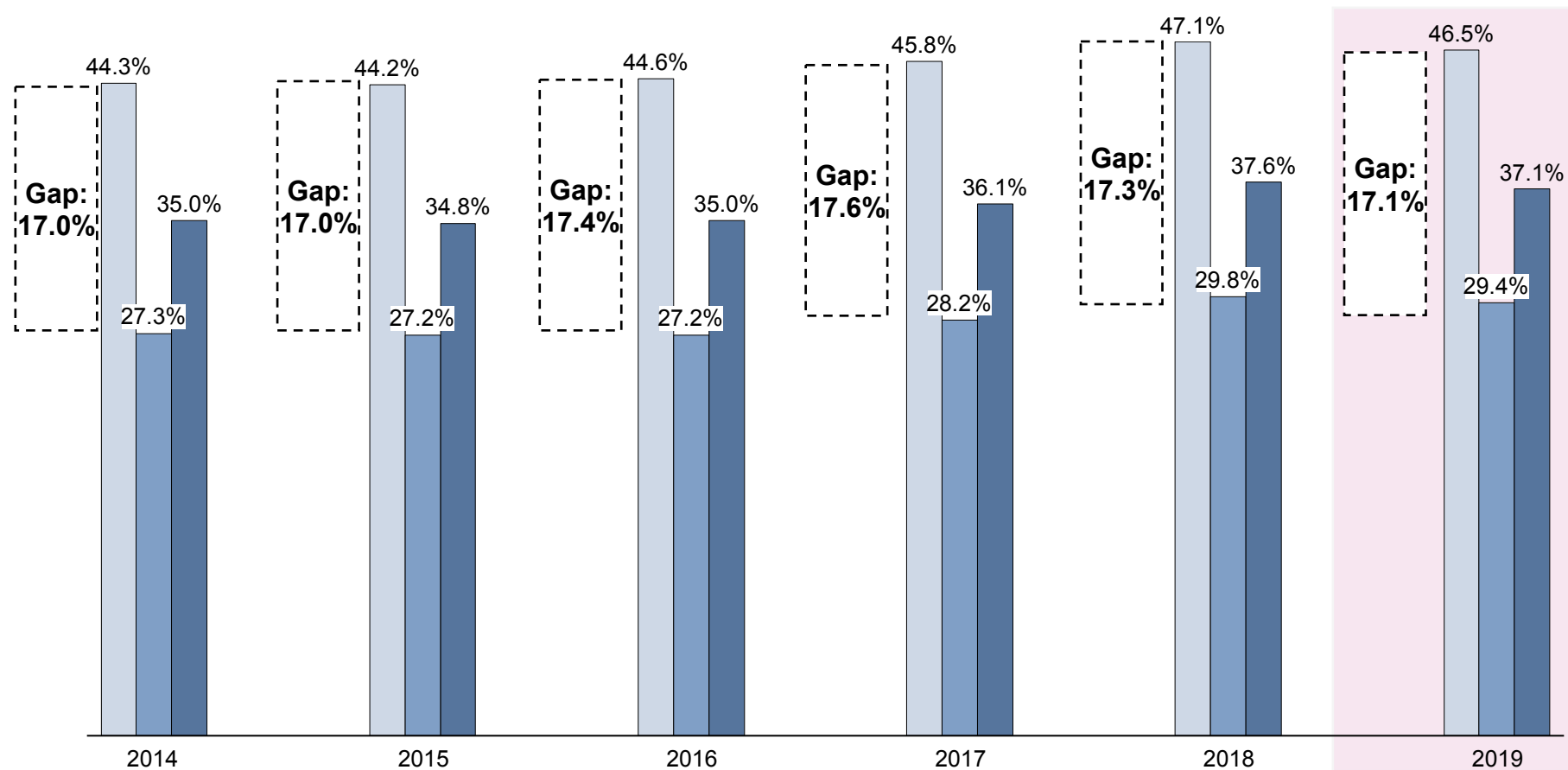
Legend: Male, Female, Total

2014: Male 44.3%, Female 27.3%, Total 35.0%, Gap: 17.0%
2015: Male 44.2%, Female 27.2%, Total 34.8%, Gap: 17.0%
2016: Male 44.6%, Female 27.2%, Total 35.0%, Gap: 17.4%
2017: Male 45.8%, Female 28.2%, Total 36.1%, Gap: 17.6%
2018: Male 47.1%, Female 29.8%, Total 37.6%, Gap: 17.3%
2019: Male 46.5%, Female 29.4%, Total 37.1%, Gap: 17.1%

MFL as share of total entries has remained fairly constant over six years

MFL entries as a % of total entries, 2014-2019
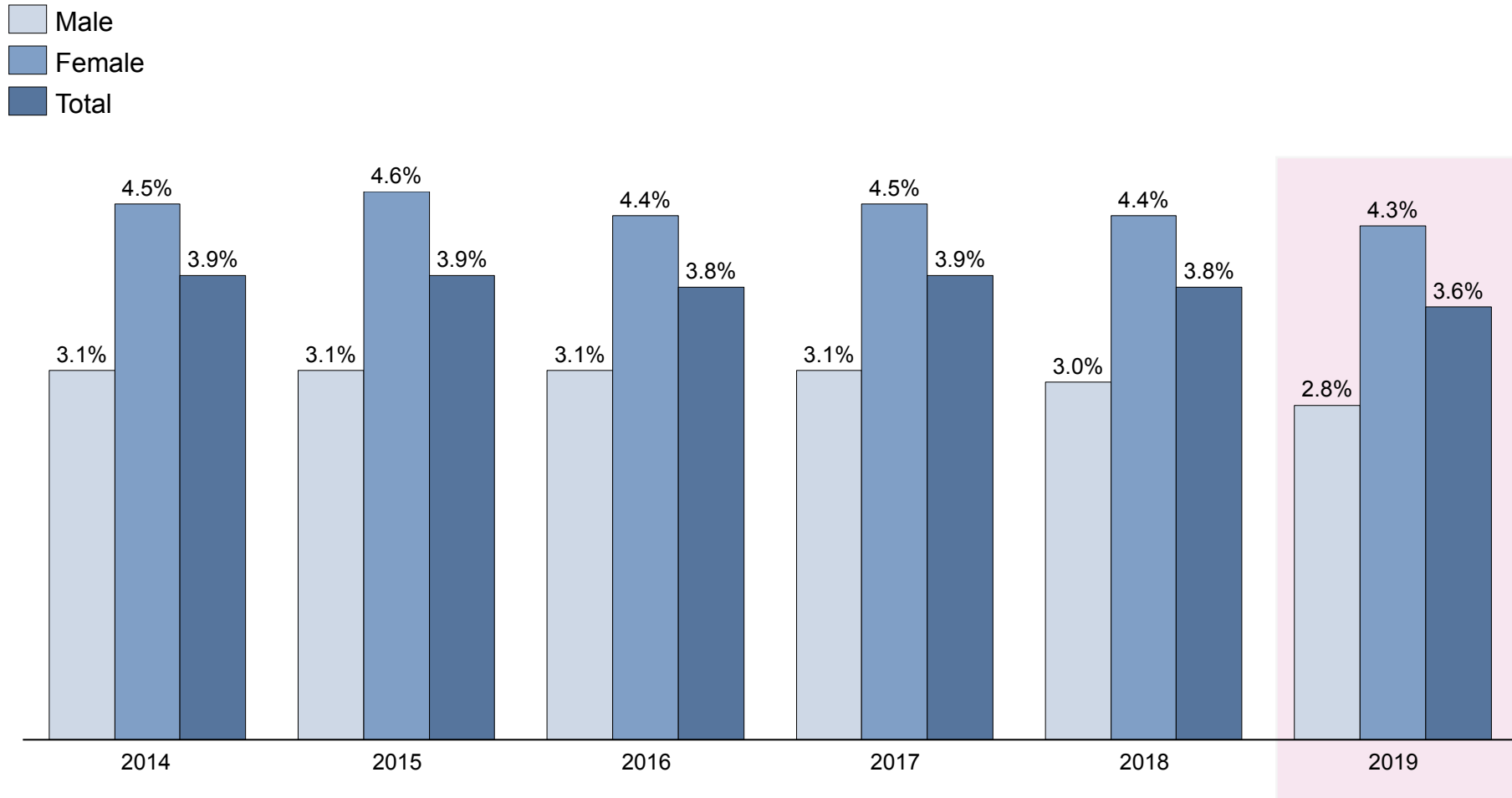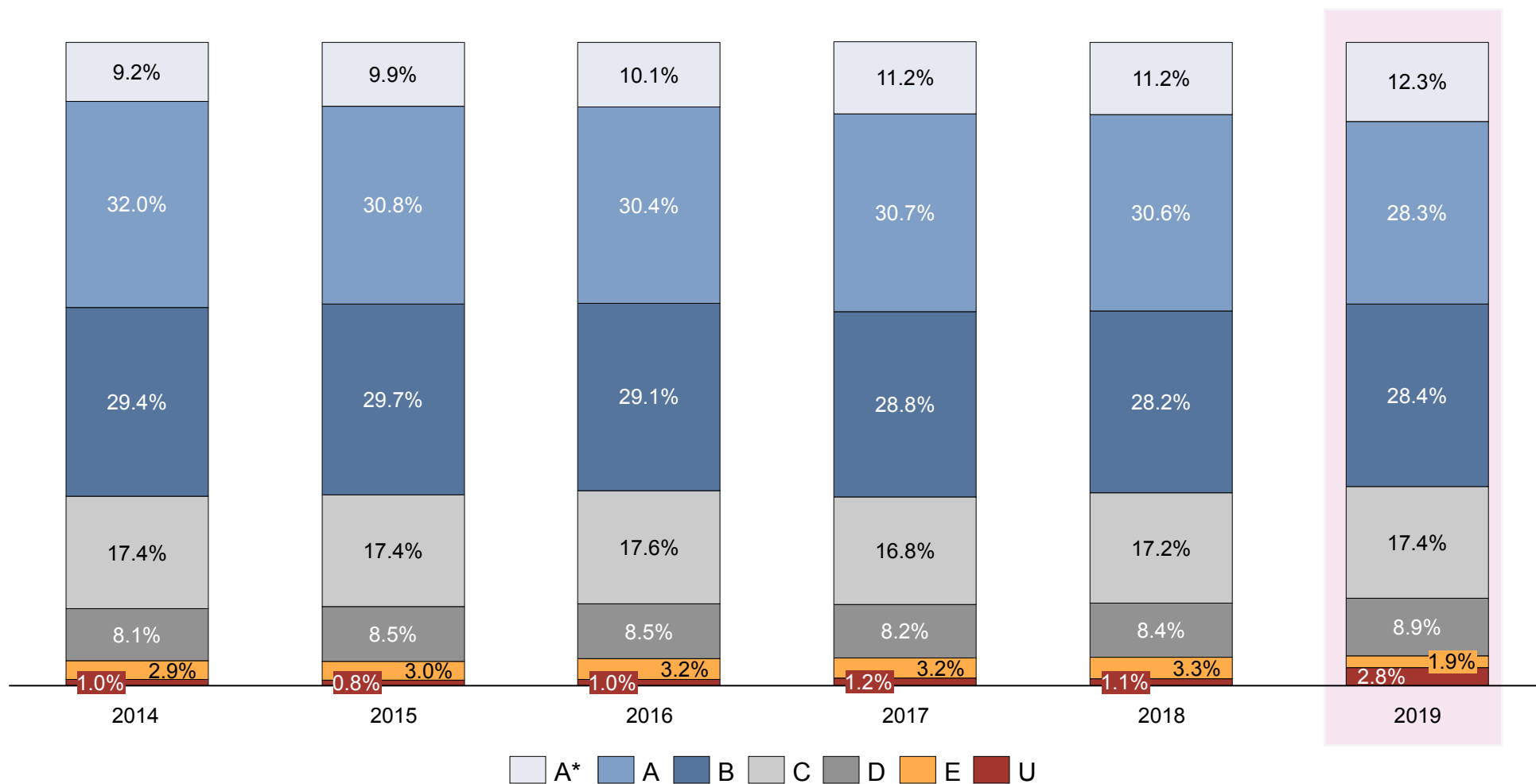

Legend:
- Male
- Female
- Total

2014: 3.1%, 4.5%, 3.9%
2015: 3.1%, 4.6%, 3.9%
2016: 3.1%, 4.4%, 3.8%
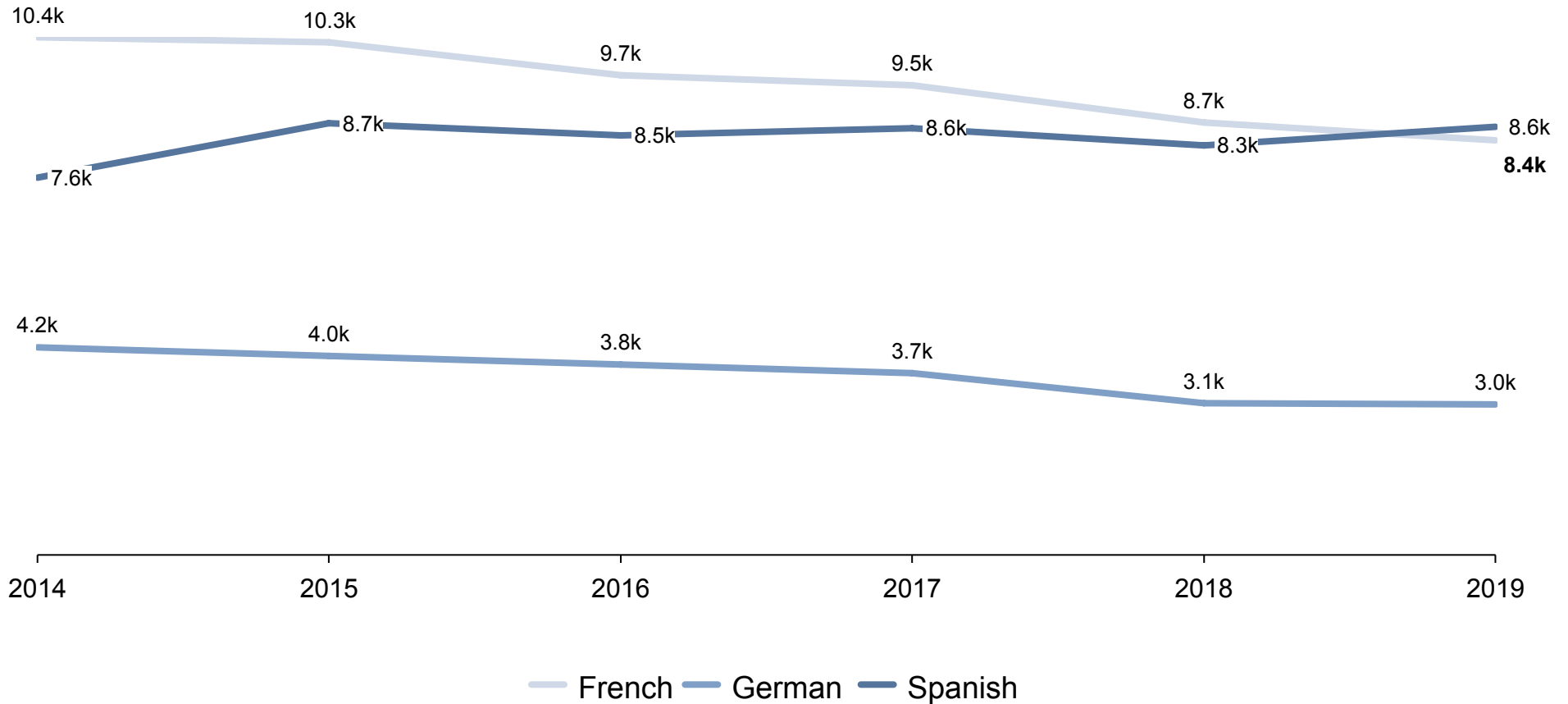2017: 3.1%, 4.5%, 3.9%
2018: 3.0%, 4.4%, 3.8%
2019: 2.8%, 4.3%, 3.6%

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However, there is some evidence of grade inflation for MFL, particularly at the A* level

MFL entries grade distribution, 2014-2019

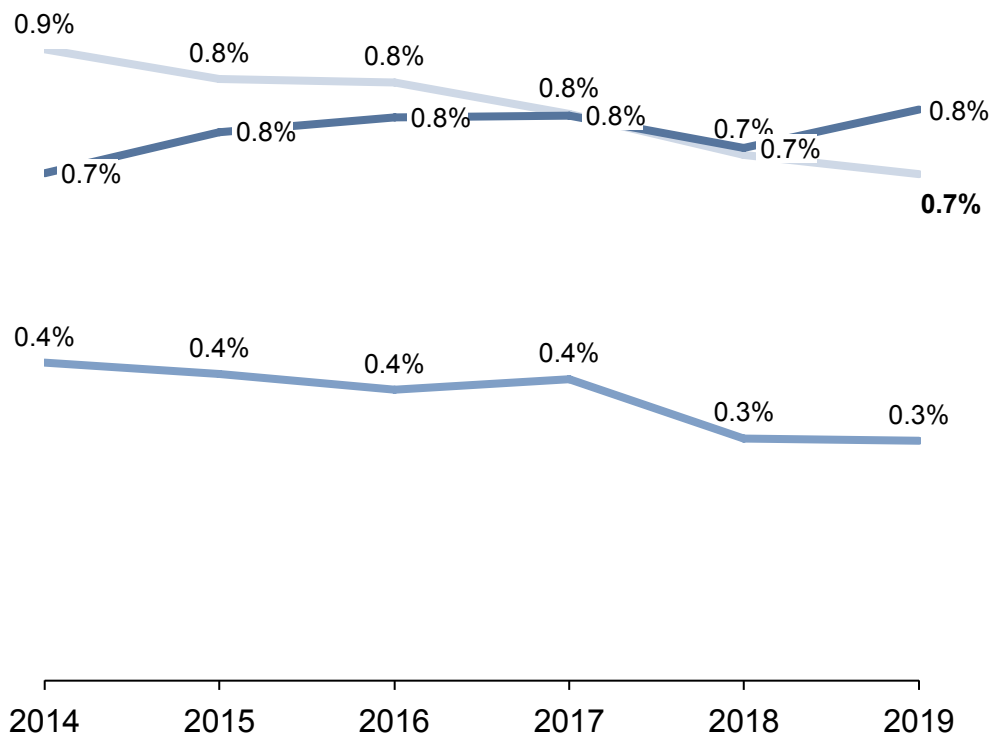|	2014	2015	2016	2017	2018	2019
A*	9.2%	9.9%	10.1%	11.2%	11.2%	12.3%
A	32.0%	30.8%	30.4%	30.7%	30.6%	28.3%
B	29.4%	29.7%	29.1%	28.8%	28.2%	28.4%
C	17.4%	17.4%	17.6%	16.8%	17.2%	17.4%
D	8.1%	8.5%	8.5%	8.2%	8.4%	8.9%
E	1.0%	0.8%	1.0%	1.2%	1.1%	1.9%
U	2.9%	3.0%	3.2%	3.2%	3.3%	2.8%

A*   A   B   C   D   E   U

For the first time, there were more entries to Spanish than French in 2019. German entries remain significantly behind French and Spanish entries

Number of entries, French/Spanish/German, 2014-2019

French: 10.4k, 10.3k, 9.7k, 9.5k, 8.7k, 8.6k

Spanish: 7.6k, 8.7k, 8.5k, 8.6k, 8.3k, **8.4k**

German: 4.2k, 4.0k, 3.8k, 3.7k, 3.1k, 3.0k

2014 — 2015 — 2016 — 2017 — 2018 — 2019
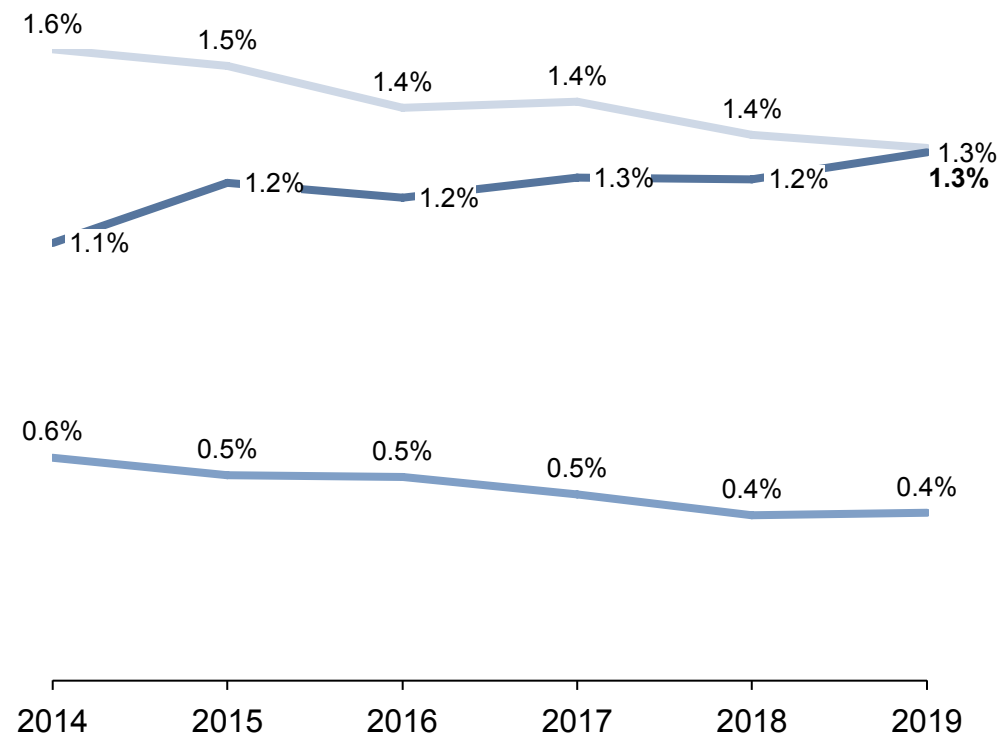
French — German — Spanish

Overall, the proportion of entries into French, Spanish and German remain higher among females compared to males. There has been a strong increase in Spanish entries in 2019 among boys

Number of Male entries as % of total entries, French/Spanish/German, 2014-2019
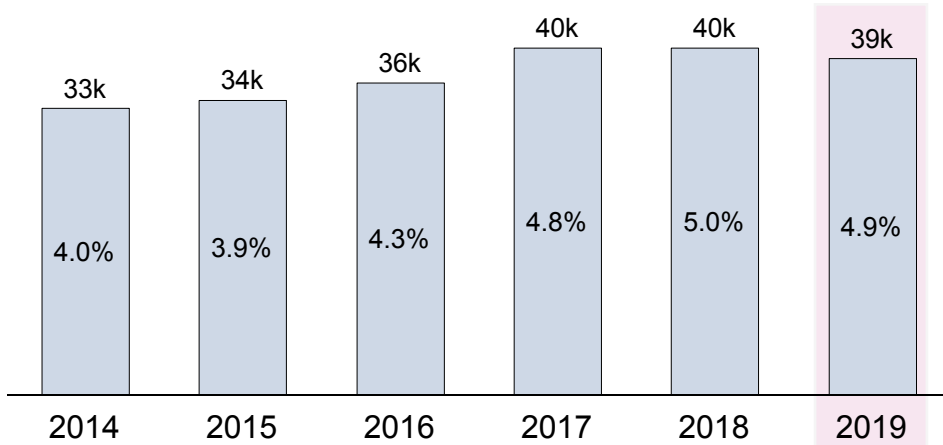
Number of Female entries as % of total entries, French/Spanish/German, 2014-2019

Male chart data points:
0.9%, 0.8%, 0.8%, 0.8%, 0.7%, 0.7%
0.7%, 0.8%, 0.8%, 0.8%, 0.7%, **0.7%**
0.4%, 0.4%, 0.4%, 0.4%, 0.3%, 0.3%

Female chart data points:
1.6%, 1.5%, 1.4%, 1.4%, 1.4%, 1.3%
1.1%, 1.2%, 1.2%, 1.3%, 1.2%, **1.3%**
0.6%, 0.5%, 0.5%, 0.5%, 0.4%, 0.4%
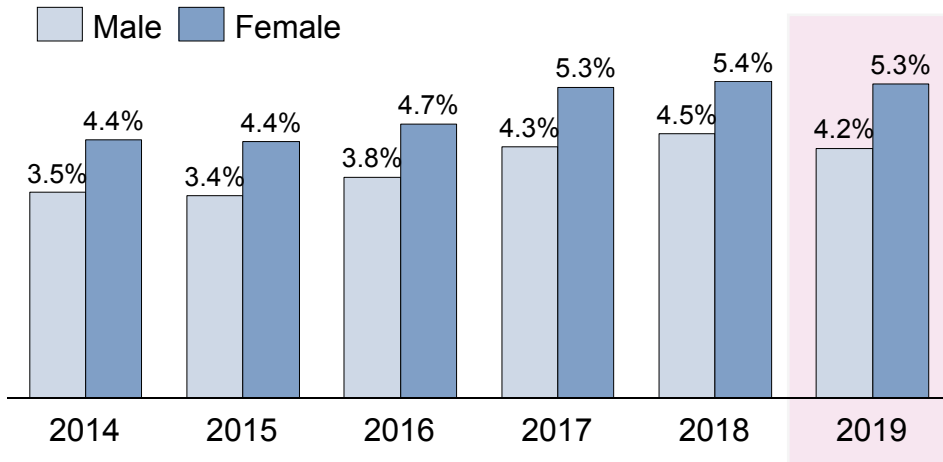
Years: 2014 2015 2016 2017 2018 2019

Legend: French — German — Spanish

Numbers for EPQ did not continue to rise in 2019. The grade distribution barely changed from 2018 to 2019 and is still skewed towards A grades
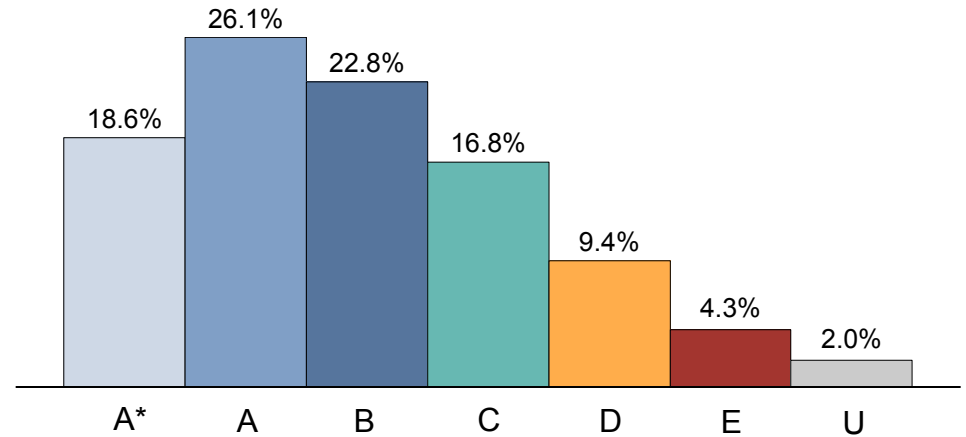
EPQ entries, as % of total A-Level entries and absolute, and with gender split over time

EPQ average grade distribution, 2018

A*: 18.6% | A: 26.1% | B: 22.8% | C: 16.8% | D: 9.4% | E: 4.3% | U: 2.0%

EPQ entries as a share of total entries, male vs female

☐ Male ☐ Female

Year	Male	Female
2014	3.5%	4.4%
2015	3.4%	4.4%
2016	3.8%	4.7%
2017	4.3%	5.3%
2018	4.5%	5.4%
2019	4.2%	5.3%

EPQ average grade distribution, 2019

A*: 18.8% | A: 26.7% | B: 22.4% | C: 16.5% | D: 8.7% | E: 4.3% | U: 2.6%