

AS and A Level Choice

Gender makes a difference

The pattern of AS and A2 level choices of subjects tended to follow gender stereotypes.

Boys preferred to take more practical subjects such as Mathematics, Physics, Computing, ICT, or Business Studies and were more likely than girls to choose two or more science/maths subjects. The subject considered most important by boys at AS was Applied ICT although this did not appear in their Top 10 most important subjects at A2 level. Business Studies and Art & Design became more important at this level.

Girls preferred to take subjects involving languages or the Humanities such as English, Biology, Psychology, Sociology, Art and Design and were more likely than boys to have chosen at least one Modern Foreign Language, although uptake of Modern Foreign Languages was relatively low for both males and females (See Factsheet 10 in this series on Modern Foreign Languages).

There were striking differences in the percentages of males and females taking certain subjects. At AS and A2 level, boys were approximately three times more likely than girls to take Physics and twice as likely to take Maths and ICT. On the other hand, girls were approximately twice as likely as boys to take English Literature, English Language, Psychology, Sociology and Art & Design. These differences could have implications for social capital as there is evidence to suggest that taking A2 subjects such as Maths and Physics, or those that lead to Medicine, tends to lead to higher earning power (Dolton & Vignoles, 2002*).

Percentages of Male and Female students taking the most popular subjects at AS and A2 level				
Subject	AS level		A2 level	
	% of Males	% of Females	% of Males	% of Females
Mathematics	40.3	24.4	36.0	19.5
Biology	23.1	29.0	19.5	24.1
Physics	23.0	8.0	20.6	6.1
Chemistry	21.8	21.3	19.8	18.3
Business Studies	21.3	14.1	22.6	13.1
History	19.6	22.2	19.4	21.2
Psychology	18.3	33.7	14.2	27.7
Geography	16.8	14.1	15.8	12.2
General Studies	14.2	15.3	7.7	10.2
ICT	14.1	6.7	13.3	5.3
Art & Design	10.6	19.9	9.9	17.3
English Literature	8.3	21.2	7.4	17.3
English Language	6.8	12.9	6.9	13.1
Sociology	6.9	14.8	7.5	12.2

Of the top 10 subjects taken by most students, 7 were taken by both boys and girls. These were Mathematics, Biology, Psychology, History, Chemistry, Business Studies and Geography. Also in the top 10 for boys were Physics, ICT, and PE/Sports, while for girls the top 10 subjects included English Literature, English Language and Art & Design. By year A2, General Studies had dropped out of the top 10 chosen subjects for boys and girls.

Top 10 subjects at A2 level chosen by male and female students completing the survey			
Subject	% of Male Students	Subject	% of Female Students
Mathematics	36.0	Psychology	27.7
Business Studies	22.6	Biology	24.1
Physics	20.6	History	21.2
Chemistry	19.8	Mathematics	19.5
Biology	19.5	Chemistry	18.3
History	19.4	Art & Design	17.3
Geography	15.8	English Lit	17.3
Psychology	14.2	English Lang	13.1
ICT	13.3	Business Studies	13.1
Media Studies/PE Sport	11.0/11.0	Geography/Sociology	12.2

Boys and girls attached different levels of importance to the AS and A level subjects they chose. For example, Further Mathematics was the third most important subject to males at AS and A2 level, but did not appear in the top 10 most important subjects for females. In contrast, girls gave more importance to Accounting and History of Art at AS level than boys did and to Economics and PE/Sport at A2 level than boys did. Further details on the impact on A level choice of ability, school type, social class, demographic factors and advice received are provided in the full report and in other Factsheets in this series.

* Dolton, P, & Vignoles, A. 2002. The Return on Post-Compulsory School Mathematics Study. *Economica*, 69, pp. 113-142. Available at: <http://ssrn.com/abstract=308892>

Context of research

Cambridge Assessment undertook this large-scale questionnaire survey of the choices made by 4,125 AS level students and 2,472 A2 level students to determine what subjects they chose to take and what influenced their decision-making. There were approximately the same numbers of boys and girls sampled from 60 schools (Comprehensive, Grammar, Independent) and colleges (Sixth Form, Tertiary and Further Education) throughout England and the students came from a variety of ethnic backgrounds. The proportions of student gender and school type were representative of the A level populations as a whole. Students were asked to list the subjects they chose at AS and A2 level, where advice had been obtained, what advice they had been given and what had influenced the choices they had made. The differences that emerged in this research between different social class groups, gender groups, ethnic groups, ability levels and school type with regard to subject choice may have implications for the widening participation agenda.

Further information

Full details of AS and A2 level subject choice are given in the full report available at: www.cambridgeassessment.org.uk

In addition to this report, comprehensive details of some aspects of examination uptake can be found in the statistical reports section of the Cambridge Assessment website.

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