

Dronfield Henry Fanshawe School

A STUDENT'S GUIDE TO CHOOSING COURSES IN THE SIXTH FORM

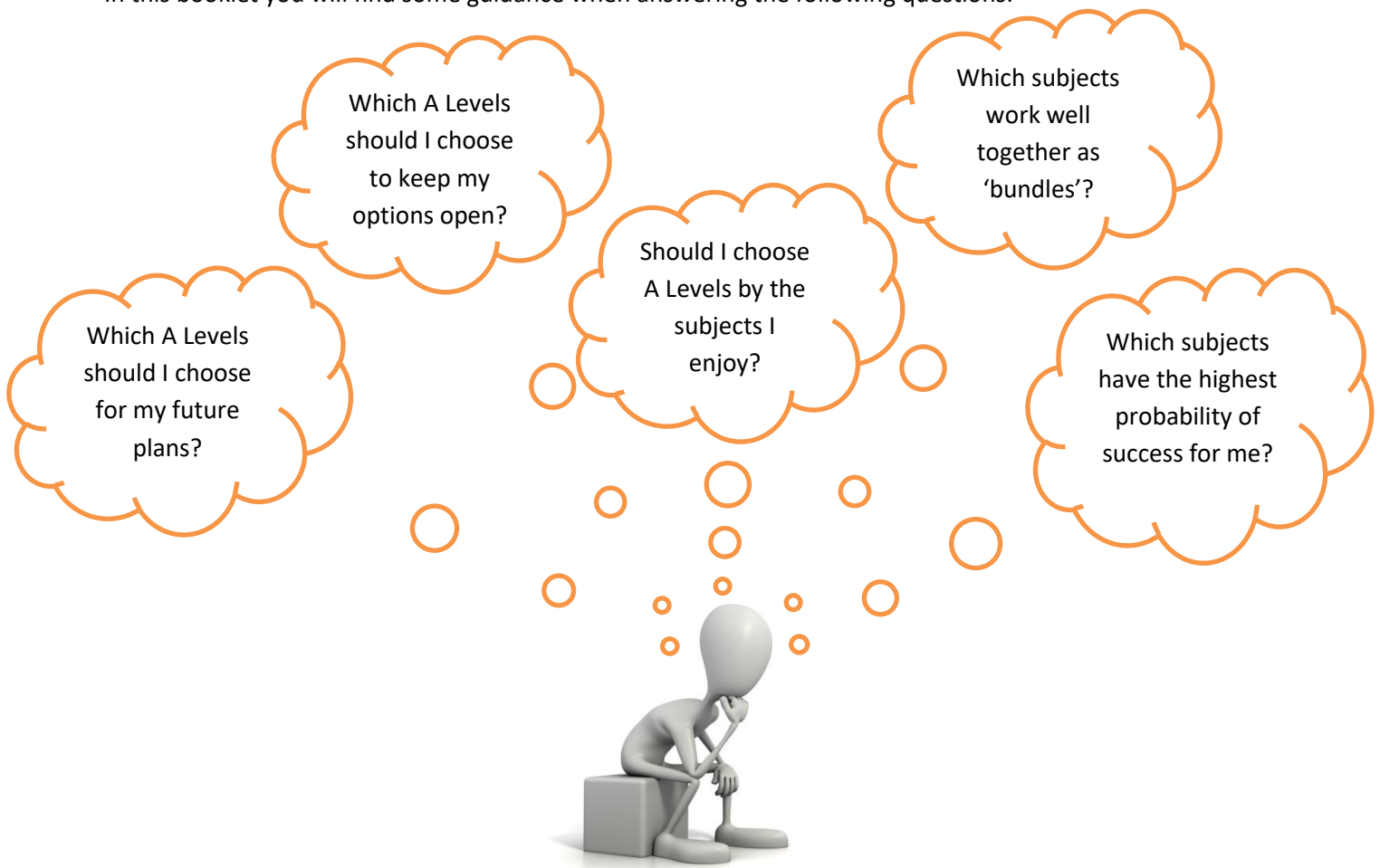


Welcome.

When we ask students what are their hopes and dreams, rarely will they respond with A Levels, their hopes and dreams are usually much bigger. However, these qualifications will play an integral part in making these hopes and dreams become a reality, therefore, the decisions on which subjects to choose must be carefully considered. In this booklet we have tried to clarify some of the main ways that students select subjects. We recommend that you consider all approaches and look for commonality across them.

At DHFS we have a rich history in helping students select the best options for them, as an individual, and this is evident in the success of students whilst in the Sixth Form and at other institutions.

In this booklet you will find some guidance when answering the following questions:



I hope that you find this booklet valuable as part of your decision-making process. If you have any questions, please feel free to contact the Sixth Form team on SixthForm@dronfield.derbyshire.sch.uk.

Mr M Howell
Director of Sixth Form

Please note that some of the data in this booklet uses GCSE grades before they were converted to numbers. For information, here is a guide to how to convert them.

How the new grades compare with the old ones

Old grades	New grades
A*	9
A	8
B	7
C	6 5 STRONG PASS 4 STANDARD PASS
D	3
E	2
F	1
G	1
U	U

Source: Ofqual



<https://www.bbc.co.uk/news/education-44125336>

Choosing A Levels by Future Plans

Subject requirements

If you know what you wish to study at university and want to know what subjects you will need to have studied in preparation, you will find detailed information on each university's entry requirements on the UCAS website www.ucas.com. You can also find out more from the HEAP Online website www.heaponline.co.uk.

Another good source of information is the Informed Choices booklet produced by the Russell Group www.russellgroup.ac.uk.

This section below is from the booklet and will give you some idea of subject specific requirements for higher education entry.

Source: <http://russellgroup.ac.uk/media/5320/informedchoices.pdf>

Course	Essential advanced level qualifications	Useful advanced level qualifications
Accountancy (also Banking/Finance/Insurance)	Usually none, although one or two universities require Mathematics.	Mathematics, Business Studies (AGCE, National and Diploma), and Economics.
Actuarial Science/Studies	Mathematics	Further Mathematics, Economics, Business Studies (AGCE, National and Diploma).
Aeronautical Engineering	Mathematics and Physics.	Further Mathematics, Design Technology, Computing/ Computer Science.
American Studies	Requirements vary but English and/or History are often asked for.	Politics
Anthropology	None	A small number of courses like a science AS-level such as Biology. Sociology is also very relevant.
Archaeology	None	Geography, History or science subjects can all be useful.
Architecture	Some courses say they want an arts/science mix. Some may require Art.	Art, Mathematics, Design Technology and Physics. AGCE or National. Art and Design may also be useful at some universities. Do note that a portfolio of drawings and ideas may be asked for.
Art and Design	Art or Design Technology including AGCE/National (to give you the portfolio to get onto an Art Foundation Course, though sometimes AGCE/National Art and Design applicants go straight onto a degree).	Design Technology, Art & Design. Do note that most entrants onto Art and Design degrees will have done a one-year Art Foundation Course after completing Year 13.

Biochemistry	Always Chemistry and some universities will say you must have Biology as well, while some will say Chemistry plus one from Mathematics/Physics/Biology. Doing Chemistry, Biology and Mathematics or Physics will keep all Biochemistry courses open to you.	Biology, Mathematics, Further Mathematics, Physics, Computing/Computer Science.
Biology	Biology, usually Chemistry. A few universities specify two sciences.	Mathematics or Physics, Computing/Computer Science.
Biomedical Sciences (including Medical Science)	Normally two from Biology, Chemistry, Mathematics and Physics. Chemistry is essential for some courses.	Mathematics, Further Mathematics, Biology, Chemistry, Physics.
Business Studies	None	Mathematics, Business Studies (AGCE, National and Diploma) and Economics.
Chemical Engineering	Chemistry and Mathematics and sometimes Physics as well.	Physics, Biology, Further Mathematics, Computing/Computer Science.
Chemistry	Chemistry and occasionally Mathematics. Most courses require Chemistry and would like Mathematics and one other science subject (for example, Physics or Biology).	Mathematics, Further Mathematics, Physics, Biology, Computing/Computer Science.
Childhood Studies	None	CACHE, Psychology, Sociology, AGCE/National/Diploma Health and Social Care.
Civil Engineering	Mathematics, in many cases Physics. Sometimes one of Physics or Chemistry.	Further Mathematics, Chemistry, Biology, Computing/Computer Science, Design Technology, Geography.
Classical Studies	For Classics courses Latin or Ancient Greek are required. For Classical Studies and Classical Civilisation courses most subjects will be considered.	Modern Foreign Language, English Literature, History, Classical Civilisation. Do note that there are some Classics courses which will allow you to start Latin and/or Classical Greek from scratch.
Computer Science	For some courses, Mathematics. For some courses Computing/Computer Science.	Mathematics, Further Mathematics, Computing/Computer Science, Physics, Philosophy, ICT.
Dentistry	Chemistry and Biology for most courses, but some require Mathematics or Physics as well.	Mathematics, Physics, Further Mathematics.
Dietetics	Chemistry, Biology.	Mathematics
Drama	Some courses require English Literature and for a few courses English and/or Theatre Studies.	English Literature, English Literature and Language, Theatre Studies.
Economics	Usually Mathematics.	Economics, Computing/Computer Science, History, Business Studies.

Electrical/Electronic Engineering	Mathematics, usually Physics.	Further Mathematics, ICT, Design Technology, Computing/Computer Science.
Engineering (General)	Mathematics and Physics.	Further Mathematics, Design Technology, Computing/Computer Science.
English	English Literature or combined English Language & Literature (some courses will accept English Language).	History, Religious Studies, a foreign language.
Environmental Science/Studies	Many courses will ask for two from Biology, Chemistry, Mathematics, Physics and Geography.	Another facilitating subject, particularly a science.
European Studies	A Modern Foreign Language.	Another Modern Foreign Language, English Literature, History, Politics.
French	French	Another Modern Foreign Language, English Literature, History, Politics.
Geography	Most degrees require Geography.	Some Geography BSc (science) degrees prefer one from Biology, Chemistry, Mathematics or Physics.
Geology/Earth Sciences	Usually two from Mathematics, Physics, Chemistry and Biology.	Geography, Geology, Computing/Computer Science.
German	German (a handful of universities offer the opportunity to study German from scratch, without German A-level).	Another Modern Foreign Language, English Literature, History, Politics.
History	Most degrees require History.	Economics, English Literature, Philosophy, Politics, Sociology, Theology/ Religious Studies, a modern or classical language.
History of Art	None	Art, English Literature, History, Theology/Religious Studies, History of Art, French, German, Spanish, Italian.
Italian	Italian or another language such as French, German or Spanish.	Another Modern Foreign Language, English Literature, History, Politics.
Law	Usually none, although a few universities require English.	History; other facilitating subjects. There really are no essential subjects for Law. Maybe one choice should involve essay or report writing. History gives you good relevant skills for Law but is not essential.
Management Studies	Sometimes Mathematics.	Mathematics, Economics, Business Studies (AGCE, National and Diploma).
Materials Science (including Biomedical Materials Science)	Normally two from Chemistry, Mathematics, Physics, Biology (also Design Technology for some universities).	Chemistry, Design and Technology, Further Mathematics, Computing/Computer Science.

Mathematics	Mathematics and sometimes Further Mathematics.	Further Mathematics, Physics, Computing/Computer Science.
Mechanical Engineering	Mathematics, usually Physics.	Further Mathematics, Design Technology, Computing/Computer Science. Mechanical Engineering departments may have a preference for Mathematics A-levels with a strong mechanics component.
Media Studies (including Communication Studies)	A few courses ask for English or Media Studies.	English, Media Studies, Sociology, Psychology.
Medicine	If you do Chemistry, Biology and one from Mathematics or Physics you will keep all the medical schools open to you. If you do Chemistry and Biology you will keep open the vast majority. If you do Chemistry and one from Mathematics and Physics you will limit your range of choices much more.	Further Mathematics or a contrasting (non-science) subject, Computing/Computer Science.
Music	For most traditional courses, Music and Grade VII/VIII, although some universities will consider candidates without A-level Music.	Some universities have a preference for at least one essay-based subject .
Nursing and Midwifery	Usually Biology or another science.	Biology, Sociology, Psychology, Chemistry, Mathematics, Physics.
Occupational Therapy	Some courses ask for Biology.	Psychology, Physical Education, Sociology or another science.
Optometry (Ophthalmic Optics)	Two from Biology, Chemistry, Mathematics or Physics (some courses prefer Biology as one of the choices).	Further Mathematics, Computing/Computer Science.
Orthoptics	Biology	Chemistry, Mathematics, Physics, Computing/Computer Science.
Pharmacy	Chemistry and one from Biology, Mathematics and Physics keeps the vast majority of courses open to you. Some courses like to see Chemistry, Biology and Mathematics. Doing Chemistry and Biology keeps most courses open.	Mathematics, Physics, Computing/Computer Science.
Philosophy	None	Mathematics, Classical Civilisations, Philosophy and Religious Studies/Theology.
Physics	Mathematics, Physics.	Further Mathematics, Chemistry, Computing/Computer Science.
Physiotherapy	Most courses will consider you with just Biology. However, some also require a second science from Chemistry, Mathematics or Physics.	Chemistry, Mathematics, Physics, Psychology.[DHFS suggest PE as well]

Planning	Sometimes Geography.	Geography, Mathematics, Economics.
Politics	Usually none	Government & Politics, Politics, History, Philosophy, Law, Sociology, Economics, English Literature, Religious Studies, Business Studies.
Psychology	A few courses ask for one from Biology, Chemistry, Mathematics, Physics.	Biology, Mathematics, Psychology, Sociology, Computing/ Computer Science.
Religious Studies/Theology	None	Religious Studies/Theology, Philosophy, English Literature, History.
Sociology	None	Sociology, Psychology, Geography, Computing/Computer Science.
Spanish	Spanish (some degrees will also consider French, German or Italian).	Another Modern Foreign Language, English Literature, History, Politics.
Speech Therapy	Some universities want a science such as Biology, Chemistry or Physics. Some specify Biology, but some degrees will consider candidates with none of these.	A modern foreign language (for example, French, German, Spanish, Italian), English Language (and Literature), Psychology.
Sports Science/Physical Education	Many courses want to see one from Biology/Chemistry/Mathematics/ Physics (some courses will treat Physical Education as a science equivalent).	Physical Education, Psychology.
Surveying	None	For some types of Surveying e.g. Building Surveying, Mathematics and Physics could be helpful. For Estate Management (General Practice Surveying) most A-level combinations will be considered.
Teacher Training (Primary and/or Secondary)	(those best for Primary Teaching shown in italics) At least one from Art, Biology, CACHE, Chemistry, Computing, Design and Technology, Drama (Theatre Studies), <i>English</i> , French, <i>Geography</i> , German, <i>History</i> , ICT, Italian, <i>Mathematics</i> , <i>Music</i> , <i>Physics</i> , <i>Physical Education</i> , <i>Religious Studies</i> (Theology), Spanish.	Another of the subjects listed above.
Veterinary Science	You should do Chemistry and Biology and one from Mathematics/Physics so that you have all universities open to you.	Further Mathematics

Choosing subjects by 'bundles'

"In considering your advanced level subject choices, it is a good idea to consider the broad ways in which certain subject combinations at advanced level tend to relate to broad groups of university degree courses.

For those studying for AS and A-levels, the most common patterns are described in detail below.

The scientist

A student who is good at science often chooses **Chemistry, Biology, Mathematics/Further Mathematics and Physics**. This will keep open all the science/Mathematics options at university.

For the sake of maintaining a wider outlook on life, however, many students in this category will replace one of the sciences with an arts/humanities subject or a social science (indeed, some universities encourage this). Students who are very good at maths may well do Further Mathematics.

Biological/Life Sciences are degrees based on **Chemistry and Biology**. As long as you choose these two subjects at advanced level, a huge range of degrees will be open to you. These include degrees leading to a definite career path (for example, Medicine, Dentistry, Veterinary Science, Pharmacy, Dietetics) and degrees based on research (for example, Biochemistry, Biomedical Materials Science, Pharmacology).

Physical Sciences involve the practical application of **Mathematics and Physics**. As long as you take these two subjects at advanced level a huge range of degrees will be open to you, such as: Engineering (mechanical, electronic/electrical and civil), Physics and Materials Science.

Essays, essays, essays

The majority of students fall into the 'essay' category, where all their subject choices will be in the arts/humanities and social sciences (with perhaps one creative/talent-based subject). A large range of university degrees in the arts/humanities, social sciences and business fields will be open to these students, but not normally degrees in the Mathematics/sciences field. Subjects include **History, English Literature, Philosophy, Psychology, Criminology, Business, Economics, Politics, Geography and Sociology** at advanced level. Your degree at university might well follow on from one of these subjects – you could do a degree in History, Politics, English Literature, Law, Psychology or Sociology.

The linguist

There are many language degrees open to students who have studied one language at advanced level. Some universities offer courses where you can begin a language from scratch. Some students will emphasise their linguistic abilities by doing not one but two foreign languages including **French, German, Spanish or Italian**. Students that study languages are highly sought after by universities for language degrees or courses with a language component. **English Language** is also a complementary subject for foreign language students.

The artist

If you have talent in music you may well want to study it at university. If so, it is important that you take **Music** to advanced level (along with performance grades). **Music Technology** A-level may not be considered suitable for Music degrees, so it's important to check whether this will meet the requirements of the courses and institutions you are interested in.

If you have a talent in **art** you may well be thinking about an art foundation course as a precursor to a degree programme. You might want to consider an advanced level qualification in either Art or Art and Design. Either of these will provide you with the basis for your portfolio, which you will need to gain entry to an art foundation course.

For **Drama**, many universities don't require you to have specific subjects at advanced level. However, some do have subject specific entry requirements so do check carefully. In addition, some universities may ask you to attend an audition/workshop/interview. Preparation for such auditions can be gained from many different out-of-school activities, from drama and dance groups within school and, of course, from your school leaving qualifications themselves."

<http://russellgroup.ac.uk/media/5320/informedchoices.pdf>

Popular 'Bundles'

<u>A Level Subject</u>	<u>Bundle subjects</u>
Art - Fine	History, Photography
Art - Photography	ICT, Art
Biology	Chemistry, Mathematics, Physical Education, Psychology
Business	Mathematics, History, Psychology, Sociology
Chemistry	Biology, Mathematics, Physics, Further Maths
Computer Science	Mathematics, Further Maths
Drama & Theatre	English, Psychology
Engineering	Maths, Physics
English Language	Psychology, Modern Foreign Language
English Literature	History, Philosophy, Sociology, Drama & Theatre, Film Studies
Film Studies	English Literature, History, Drama & Theatre
French	Other Modern Foreign Languages, English Language, English Lit, History, Geography
German	Other Modern Foreign Languages, English Language, English Lit, History, Geography
Geography	History, Biology, Maths
History	English Literature, Politics, Sociology, Philosophy
Mathematics / Further	Physics, Chemistry, Biology, Computer Science, Philosophy
Music Technology	Mathematics, Computer Science
Philosophy	English Literature, History, Maths
Physical Education	Biology, Psychology, Applied Science
Physics	Mathematics, Further Maths, Chemistry, Engineering
Politics	History, English Literature
Prod Des - Design & Technology	Mathematics, Physics, Art, Business
Prod Des - Textiles	Drama and Theatre, Business
Psychology	English Language, Sociology, Criminology, Business, Psychology, Applied Science
Sociology	English Literature, Criminology, Psychology, Business, Politics
Spanish	Other Modern Foreign Languages, English Language, English Lit, History, Geography
Level 3 Food Science and Nutrition	PE, Chemistry, Biology, Sociology, Business, Applied Science
BTEC L3 ICT	BTEC Business, A Level Business, Economics
Level 3 Criminology	Psychology, Sociology, Politics

Choosing A Levels to Keeping Options Open

“Many courses at university level build on knowledge and skills which you will gain while still at school. Where this is the case, universities need to make sure that all the students they admit have prepared themselves in the best way to cope with their chosen course. For this reason, some university courses may require you to have studied a specific subject prior to entry, others may not. However, there are some subjects that are required more often than others. These subjects are sometimes referred to as **facilitating subjects**.

Subjects that can be viewed as facilitating subjects are:

- Mathematics and Further Mathematics
- English Literature
- Physics
- Biology
- Chemistry
- Geography
- History
- Languages (Classical and Modern)

By choosing facilitating subjects at advanced level, you will have a much wider range of options open to you at university. An advanced level qualification in any facilitating subject will keep open to you a number of degree courses. At some universities, a qualification in the subject is a requirement for entry to the course. At other universities, it may not be a requirement for the course, but will still be useful to gain entry.

Of course, by choosing facilitating subjects you are not restricted to applying for degree courses which require those subjects. For example, even if you study three facilitating subjects at advanced level, you would still be able to apply to study Law at university (for which most universities do not require any specific advanced level subjects). So, by choosing facilitating subjects you are keeping open as many options as possible.”

Source: <http://russellgroup.ac.uk/media/5320/informedchoices.pdf>

Please note that it is now widely regarded that a wider range of A Levels and Level 3 qualifications can provide a plethora of transferable skills.

Choosing A Levels by What You Enjoy

The Russell Group suggest that you could pick A Levels because *“you have enjoyed and been good at the subject in the past, and think you will achieve a high grade in it.”*

<http://russellgroup.ac.uk/media/5320/informedchoices.pdf>. There is a significant difference between enjoying a subject and loving it. Loving a subject involves continued independent study outside of the specification, for example the scientist who keeps up to date with the latest developments or the musician who thinks about music all the time taking every opportunity to play and hear music. If you are picking a subject because you enjoy it, make sure you also love it.

Why pick a subject because you love it?

There is a general assumption that if you study a subject that you love, you will:

- enjoy the subject more
- spend time outside of lessons learning more about the subject content
- be more passionate about studying it

and as a result, achieve more highly.

However www.whatuni.com states *“[we] ...recommend thinking about what subjects you do well in. Although it’s important to enjoy your courses, when it comes to exam time you’ll be happy that you picked something you’re good at instead of something you enjoyed but struggled with.”*

Source: <https://www.whatuni.com/advice/ultimate-guides/the-ultimate-guide-to-choosing-your-a-levels/57528/>

WARNING: Make sure you do your research. The subject you love at GCSE might not be the same at A Level. Look at the specification, the content, speak to teachers and other students before making a decision.

Choosing Subjects by Probability of Success

Statistically some subjects are harder to attain higher grades than others. If a student GCSE grades B in maths, English, history, geography and biology, which A Levels should they do?

Probability of gaining an A*-C at A Level from a GCSE grade B(6)

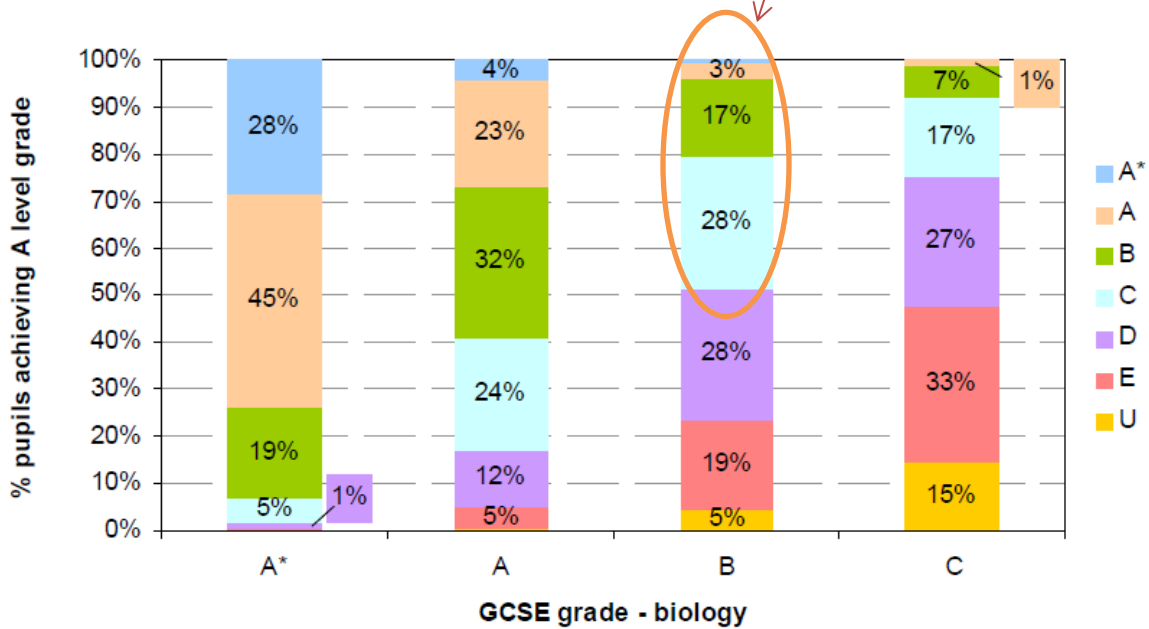
Maths	English	History	Geography	Biology
45%	68%	69%	70%	48%

Source: **Research Report DFE-RR195**

From the same starting point (B at GCSE), the probability of achieving an A*-C grade is highest in geography, history and English.

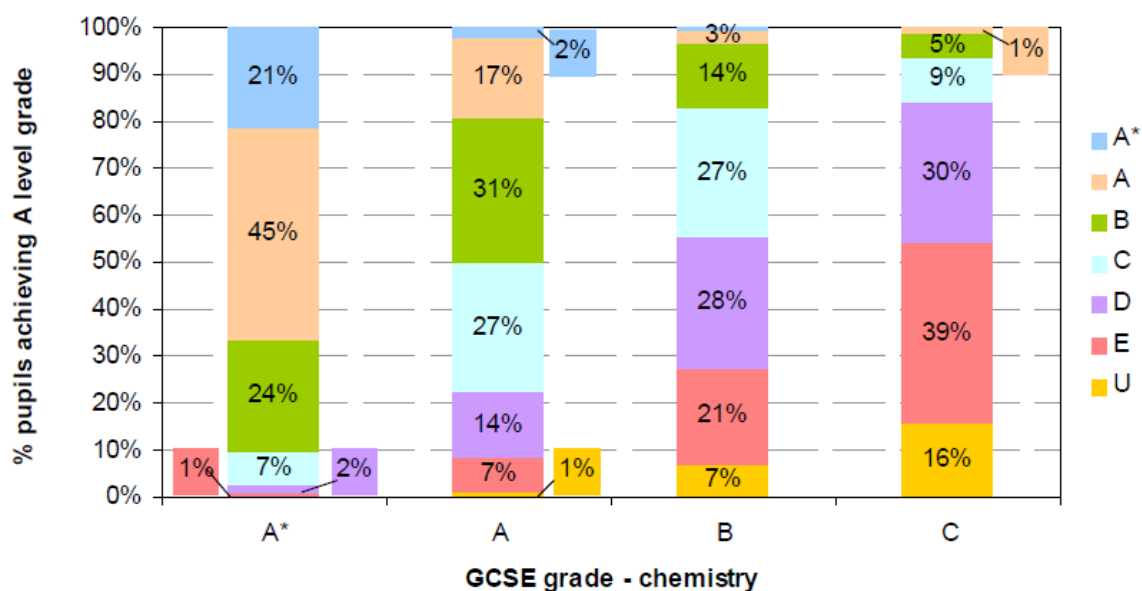
A list of subjects can be found below.

Chart 3.1: Impact of GCSE grade on A level attainment – biology



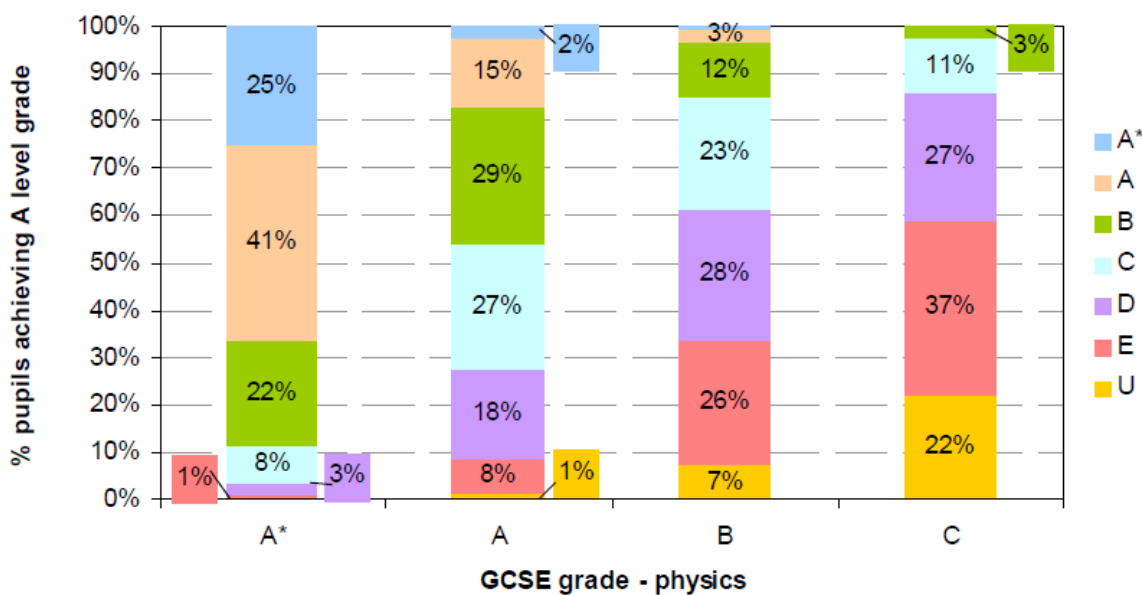
Source: *National Pupil Database*

Chart 3.2: Impact of GCSE grade on A level attainment – chemistry



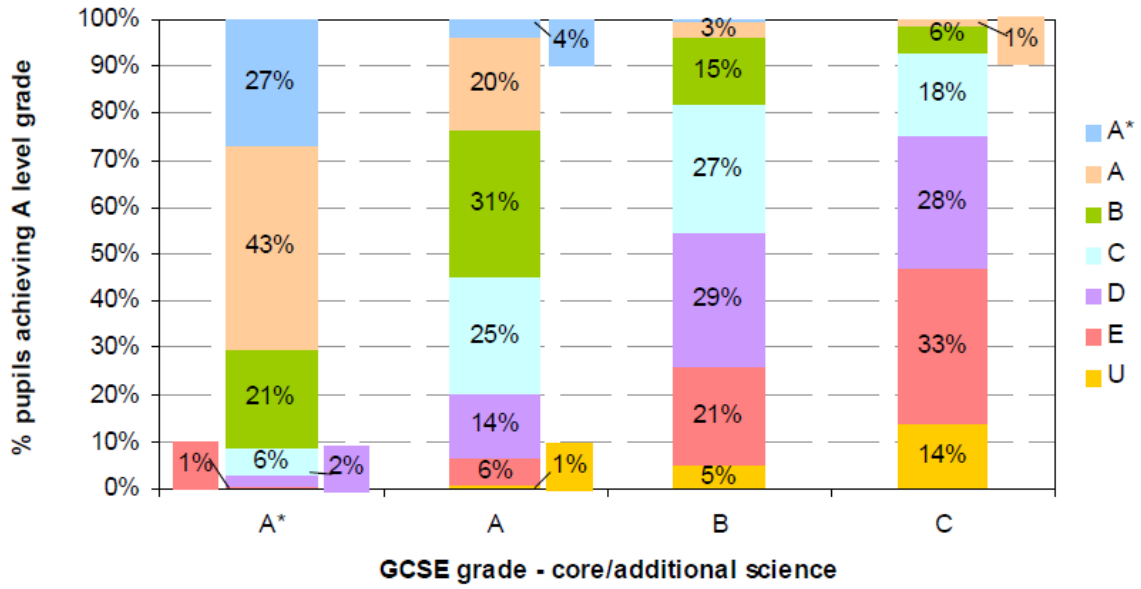
Source: National Pupil Database

Chart 3.3: Impact of GCSE grade on A level attainment – physics



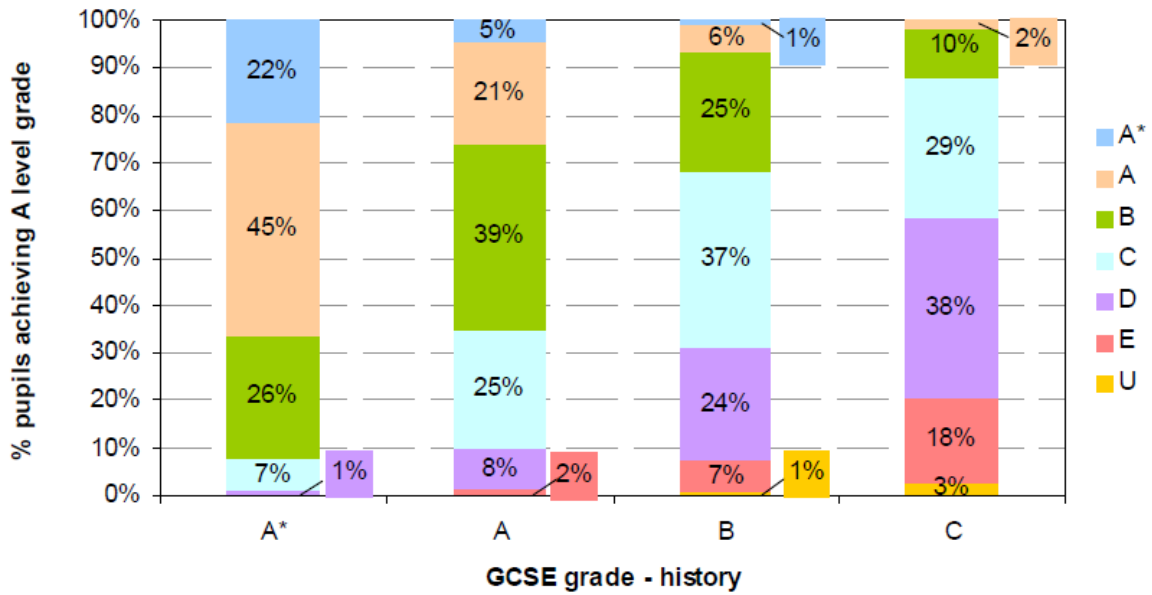
Source: National Pupil Database

Chart 3.4: Impact of GCSE grade on A level attainment – core/additional science^{3,4}



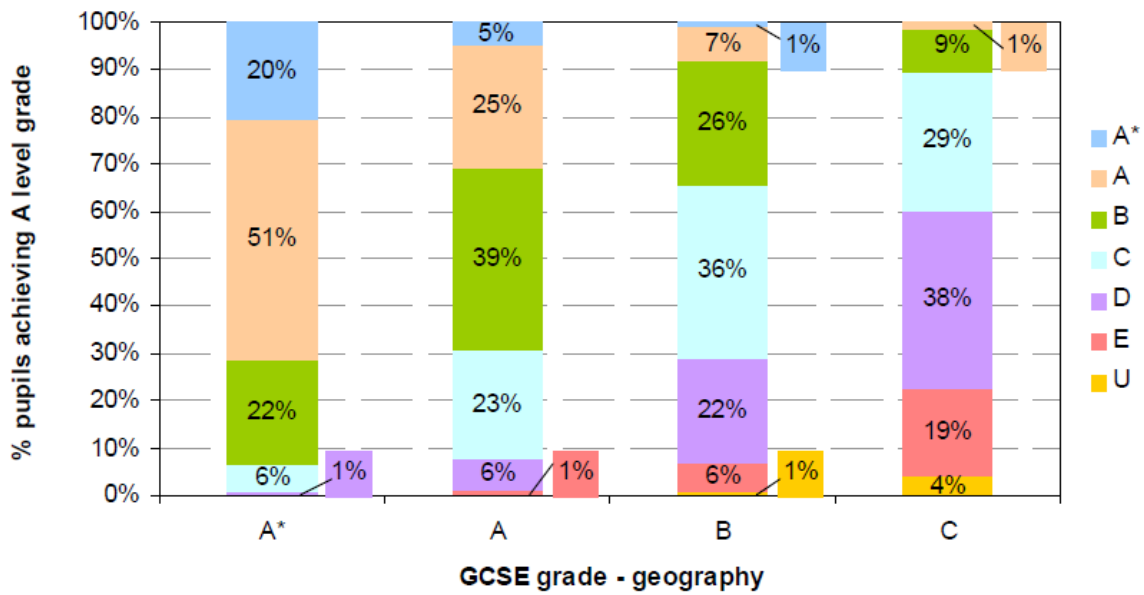
Source: National Pupil Database

Chart 3.5: Impact of GCSE grade on A level attainment - history



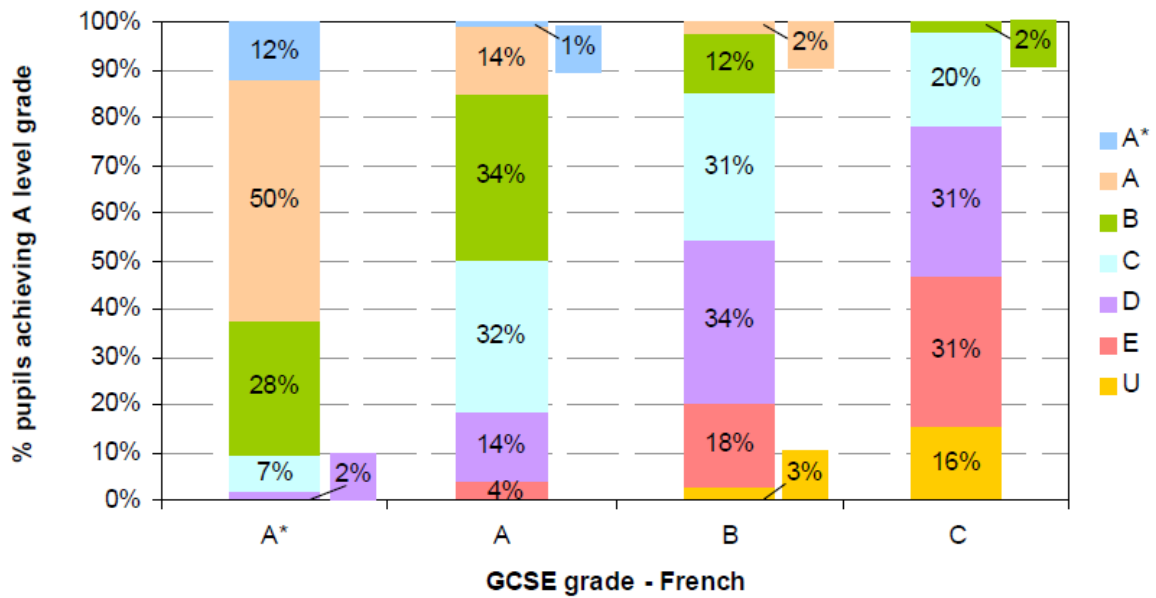
Source: National Pupil Database

Chart 3.6: Impact of GCSE grade on A level attainment - geography



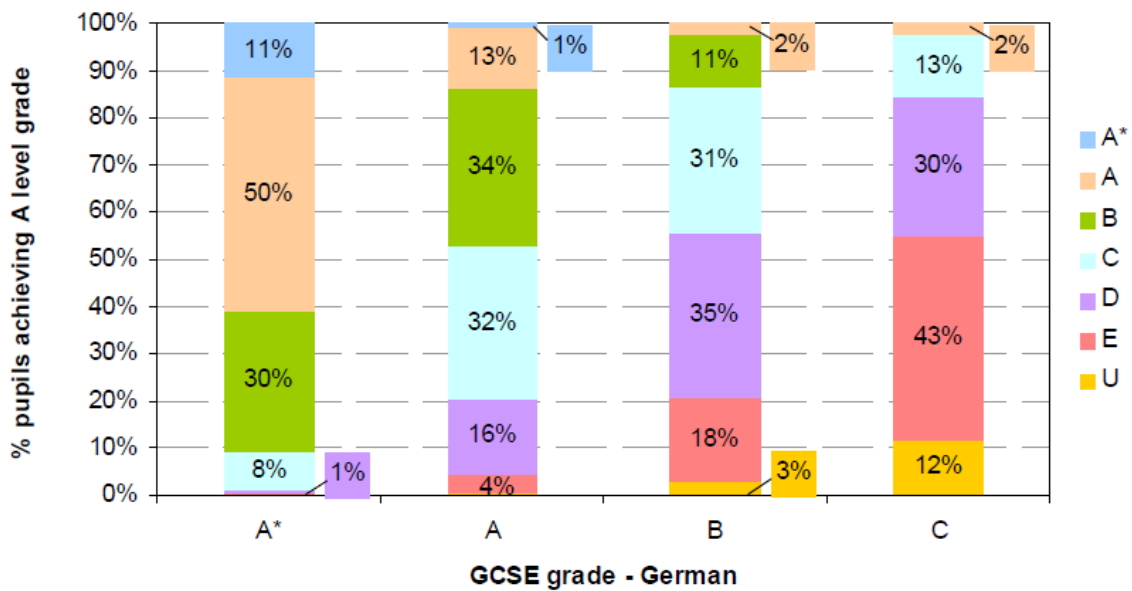
Source: National Pupil Database

Chart 3.7: Impact of GCSE grade on A level attainment - French



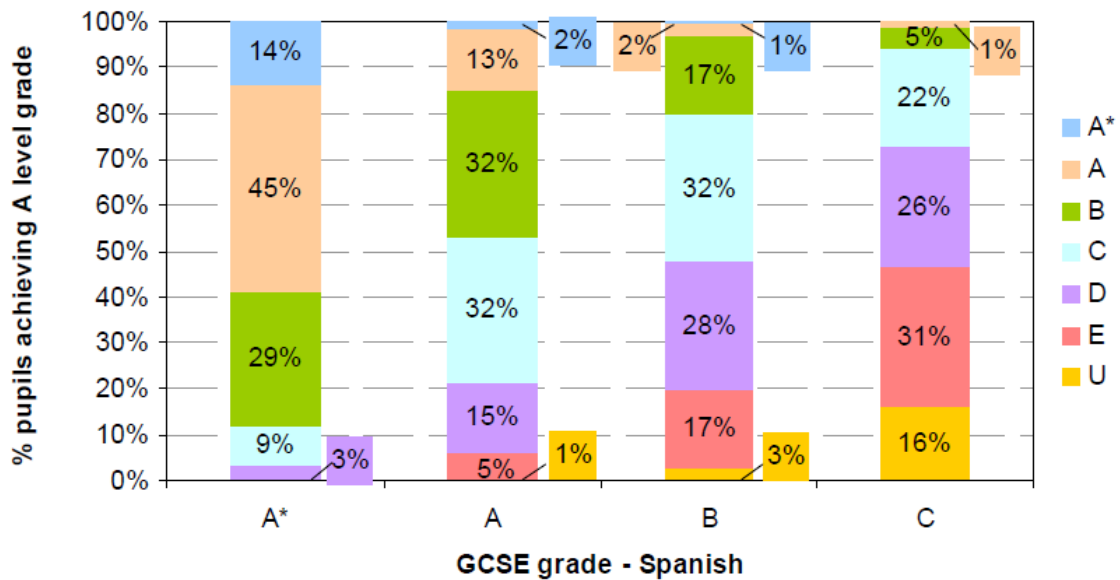
Source: National Pupil Database

Chart 3.8: Impact of GCSE grade on A level attainment - German



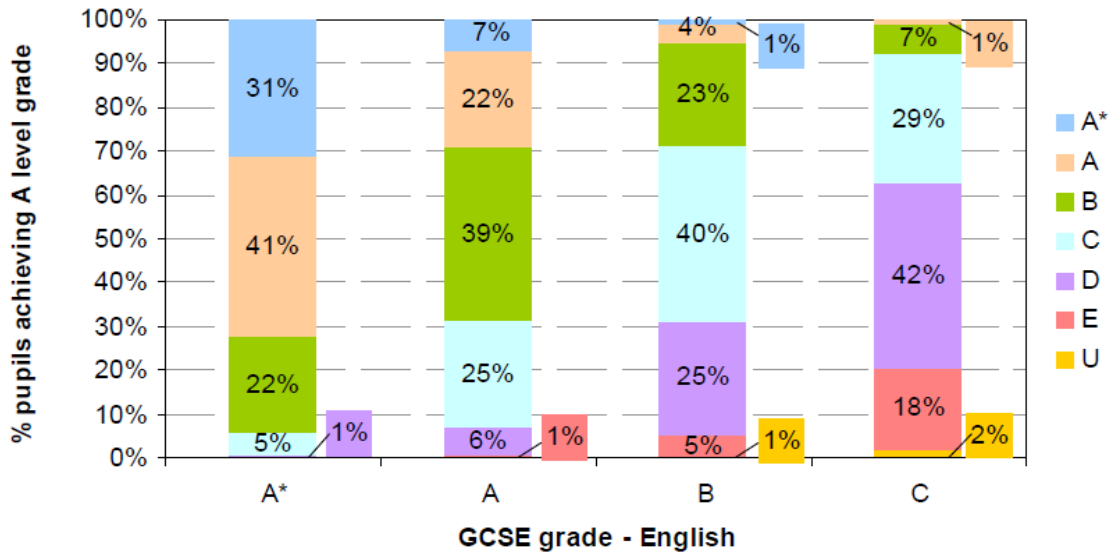
Source: National Pupil Database

Chart 3.9: Impact of GCSE grade on A level attainment – Spanish



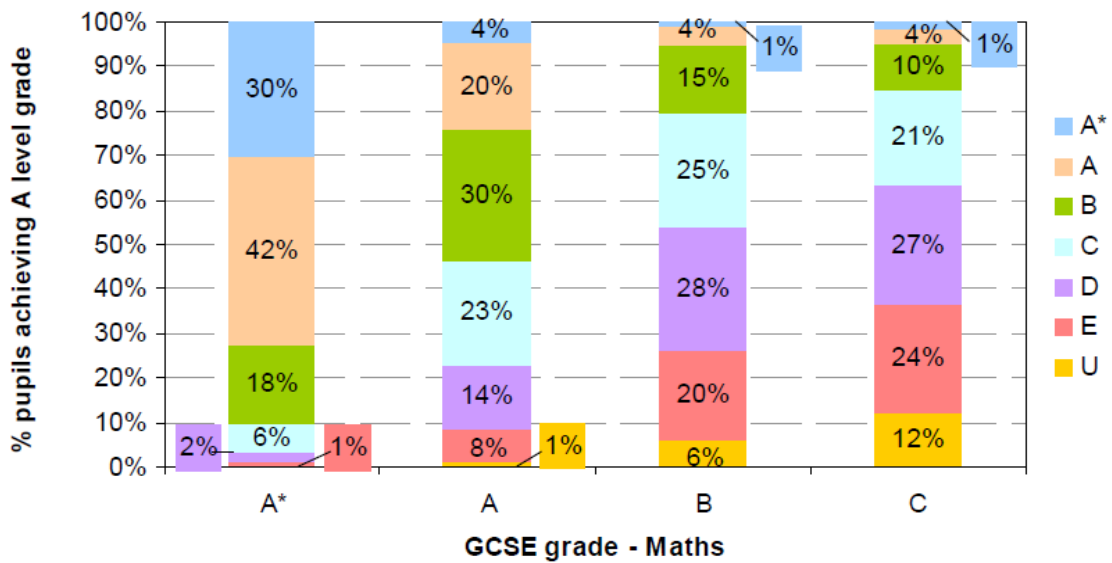
Source: National Pupil Database

Chart 3.10: Impact of GCSE grade on A level attainment – English⁵



Source: National Pupil Database

Chart 3.11: Impact of GCSE grade on A level attainment - maths⁶



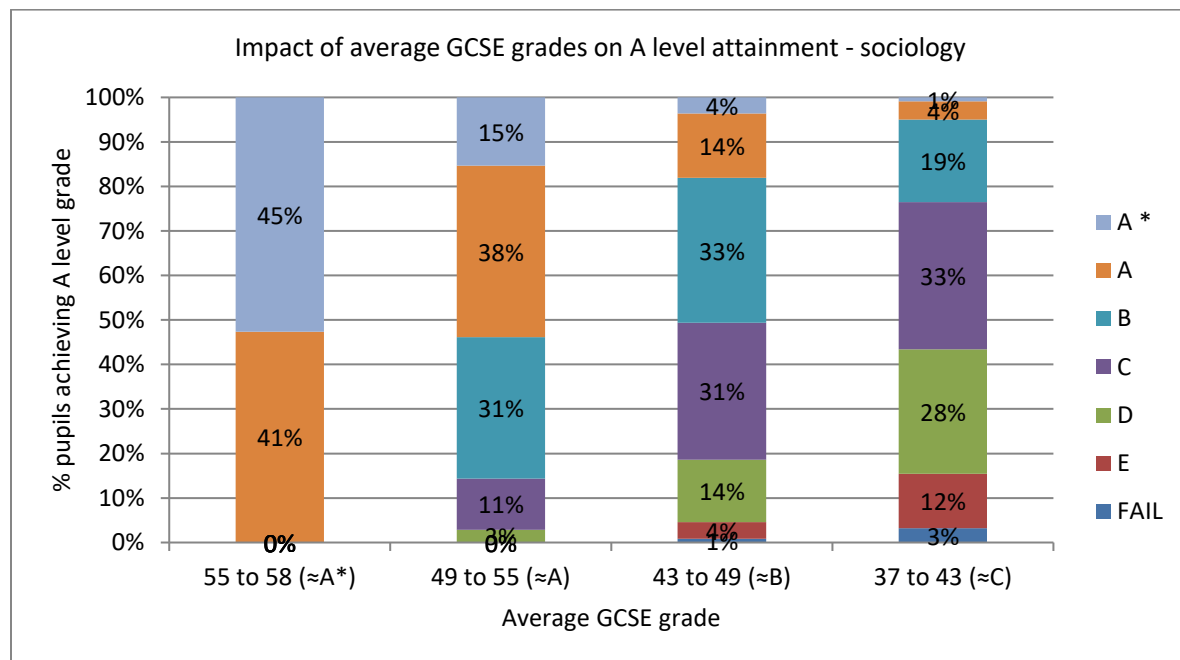
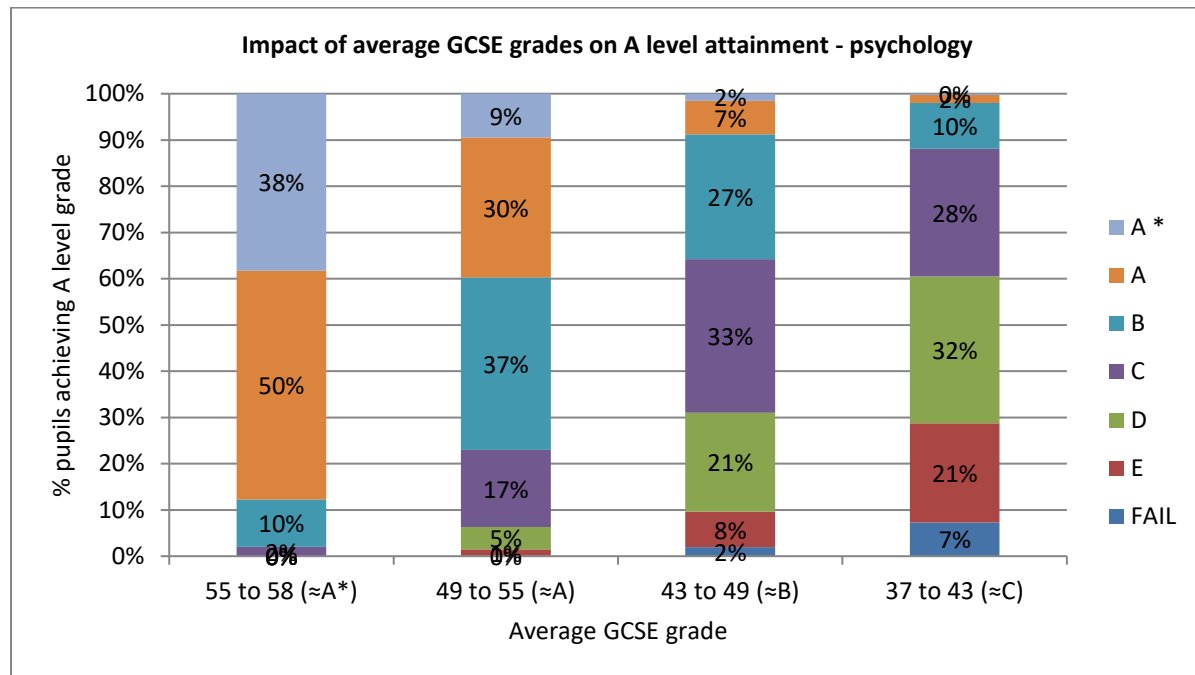
Source: National Pupil Database

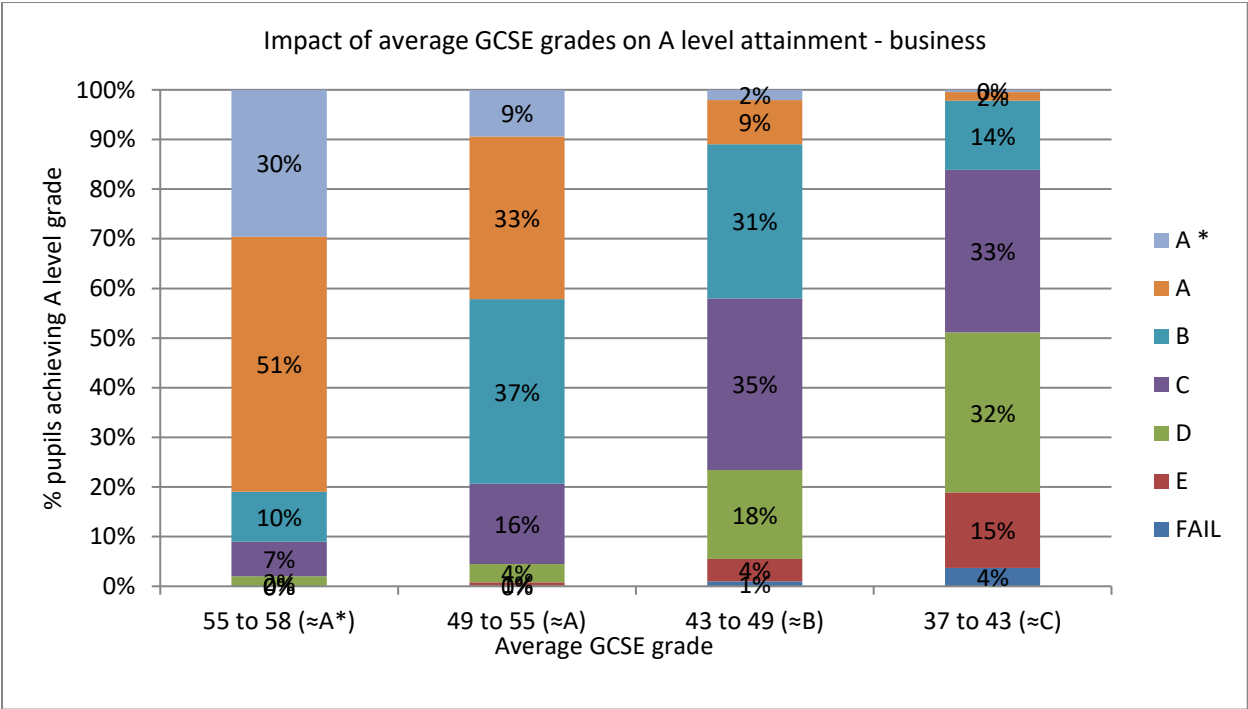
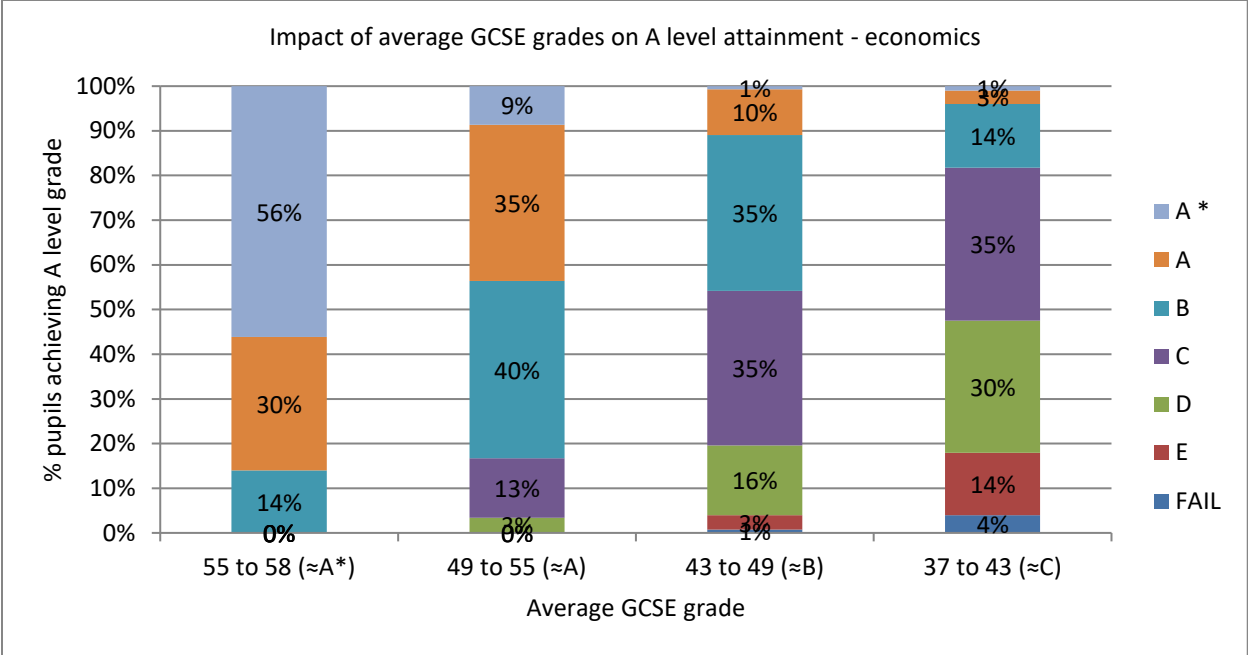
Please find below, subjects which have not necessarily been studied before at GCSE. For this we have used the APS (Average Point Score) which is the average GCSE grade across all taken.

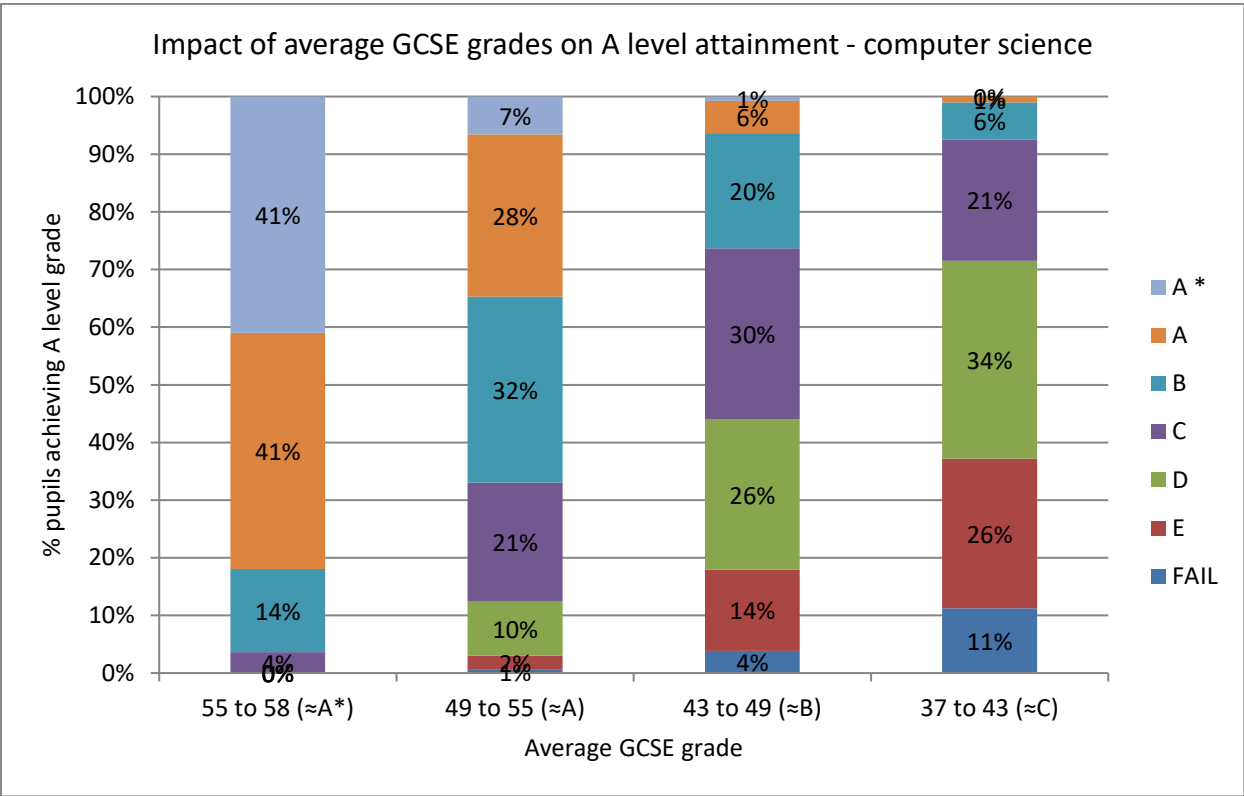
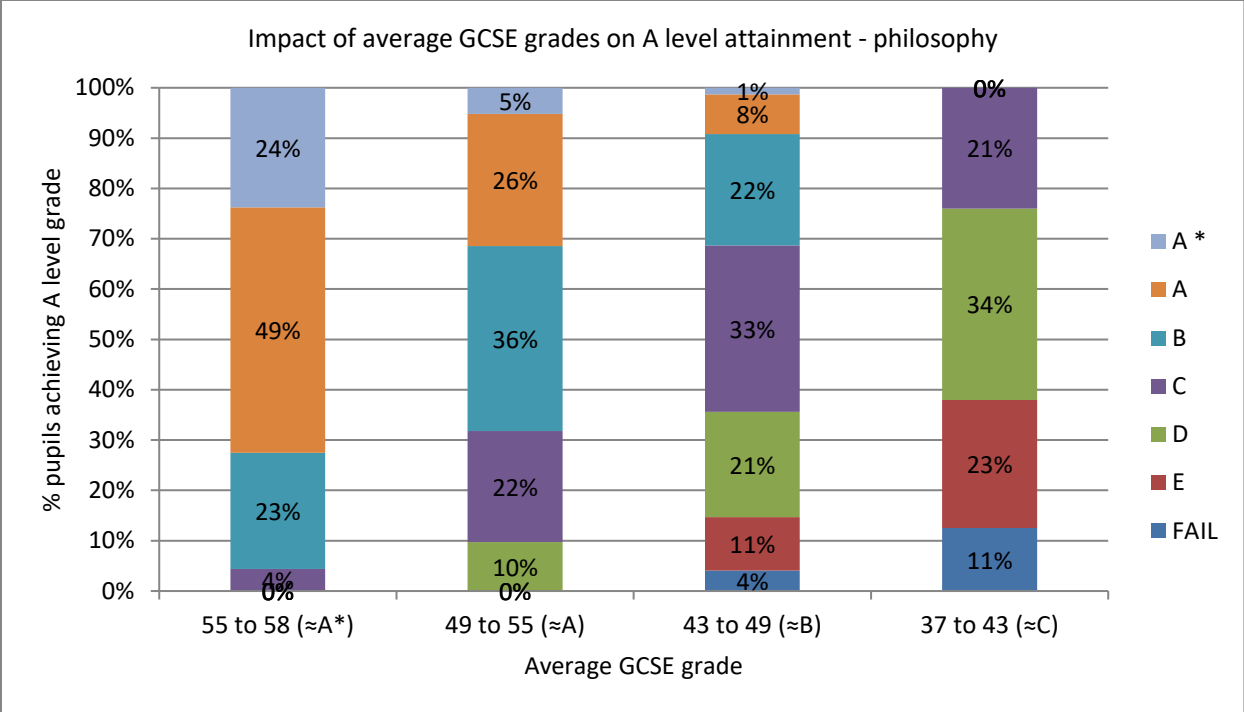
Points per subject: A*= 58, A = 52, B=46, C=40, D=34, E=28, F=22, G=16 and U=0

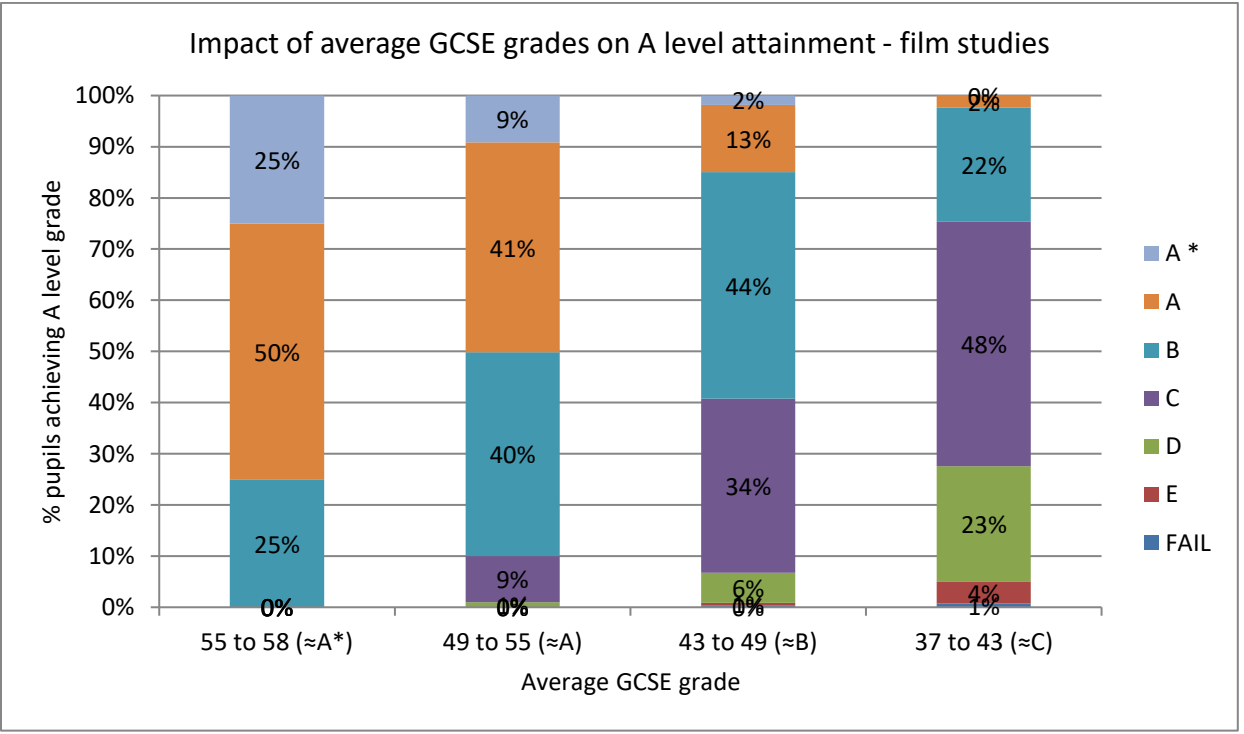
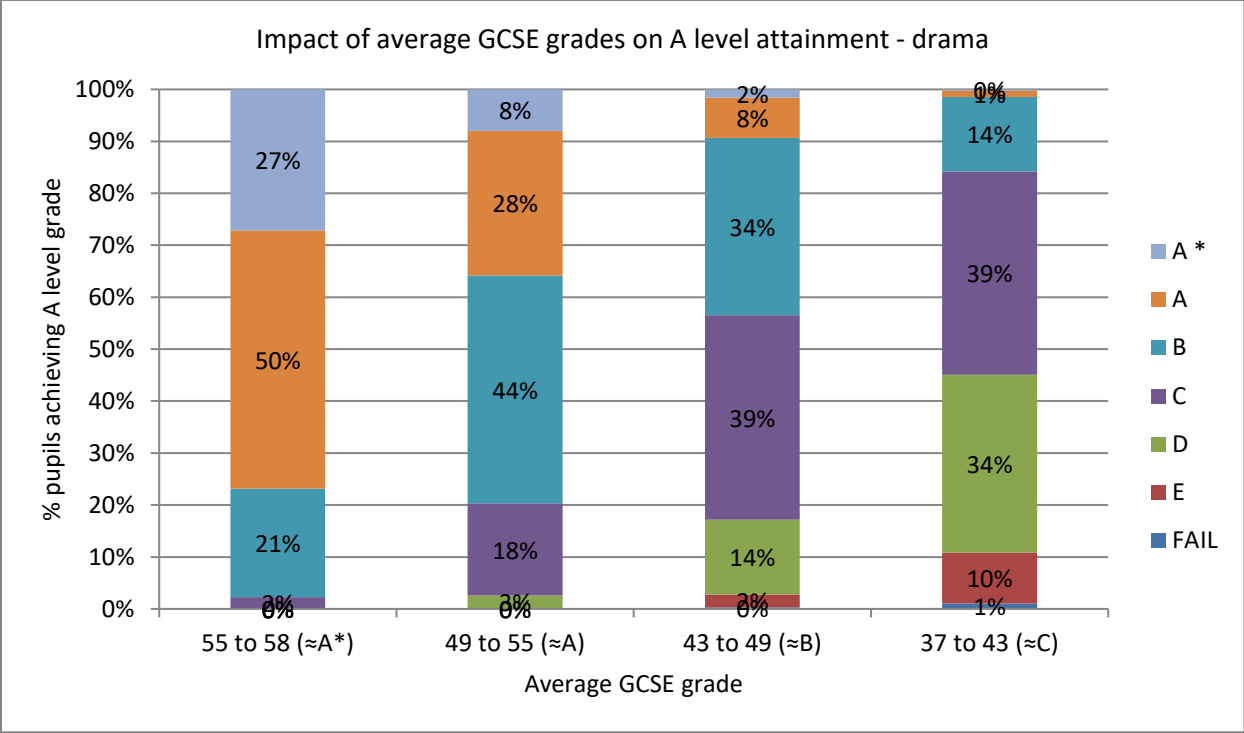
For example, if a student gained 10 x Bs at GCSE, this would result in an APS of 46 (46+46+46.../10)

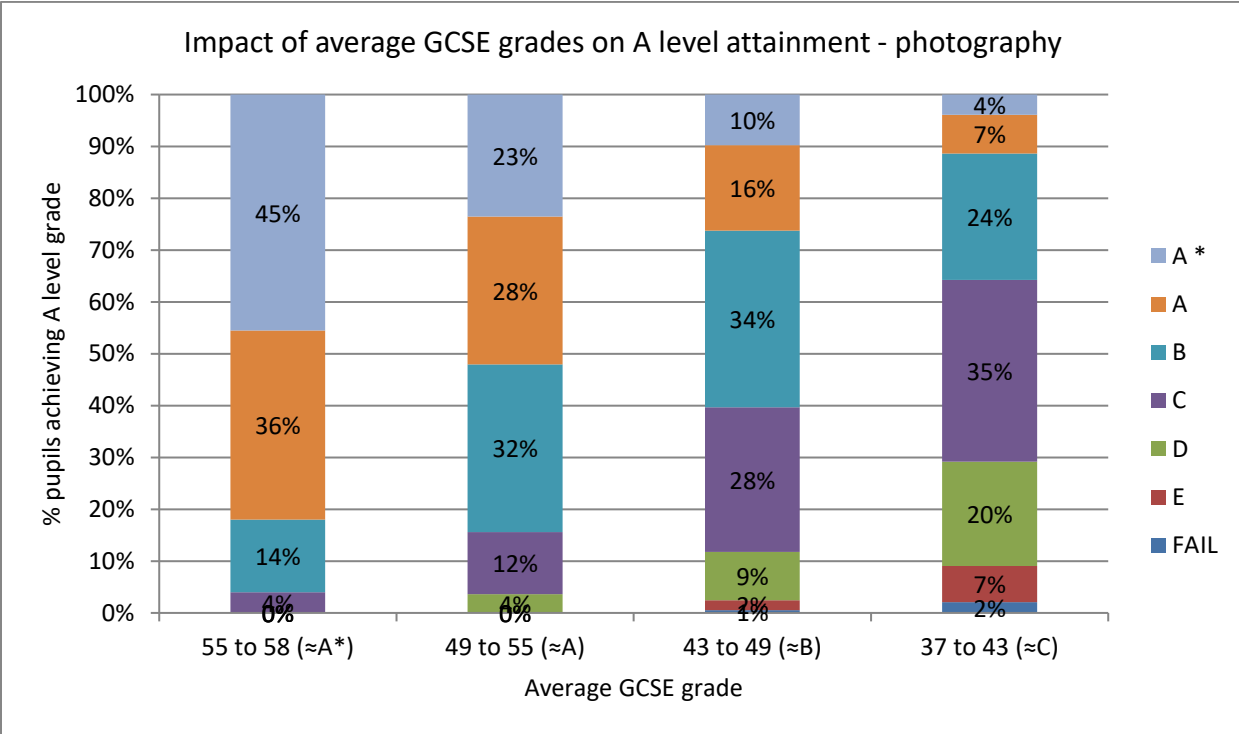
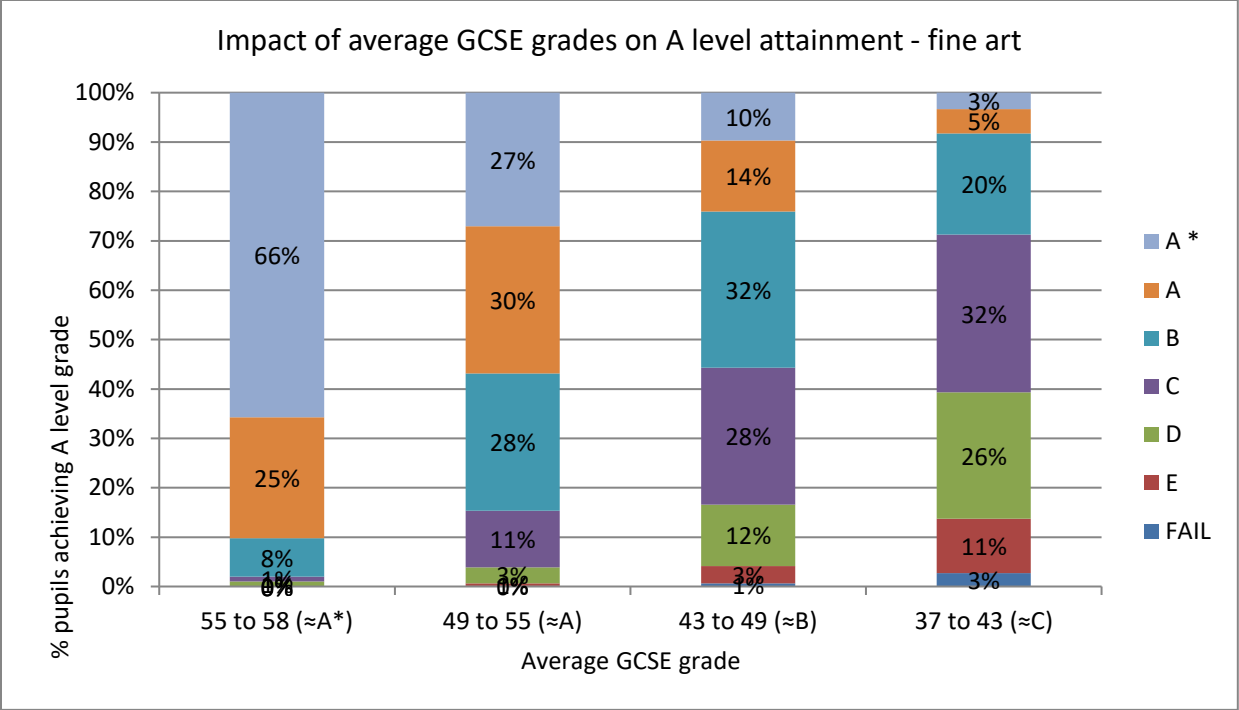
Source: www.education.gov.uk/schools/.../2013/.../TMs_VQAmend2_%20Live_2013_2.xlsx

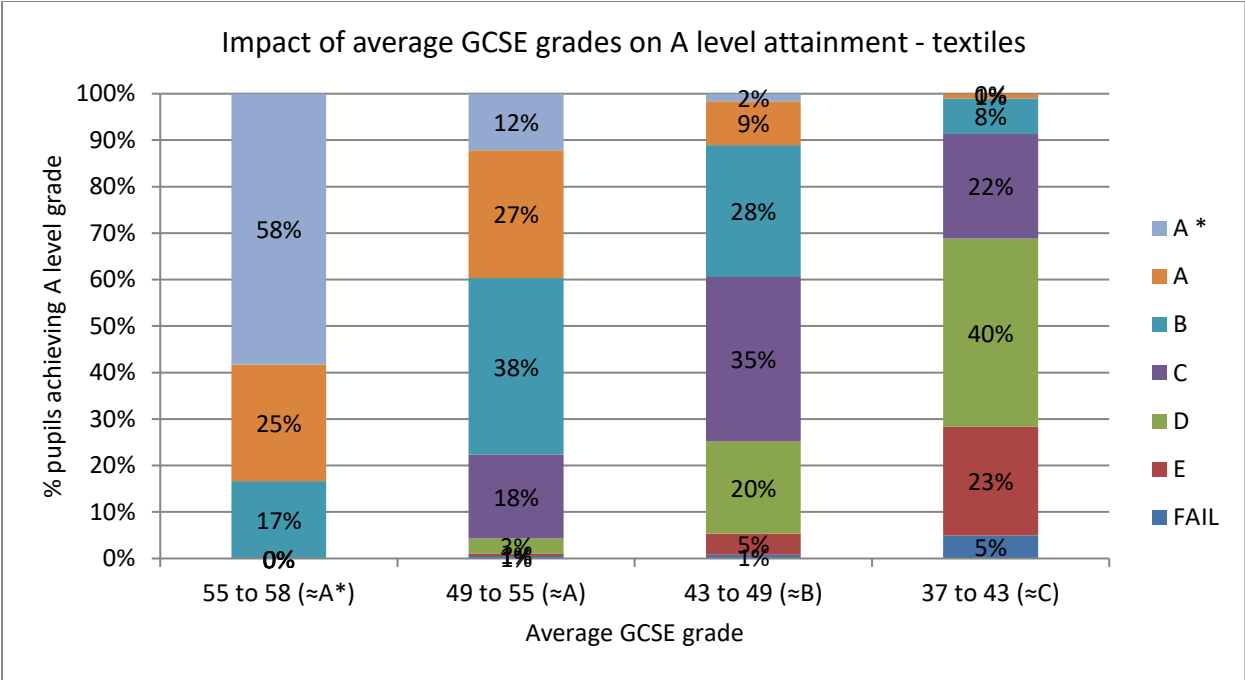
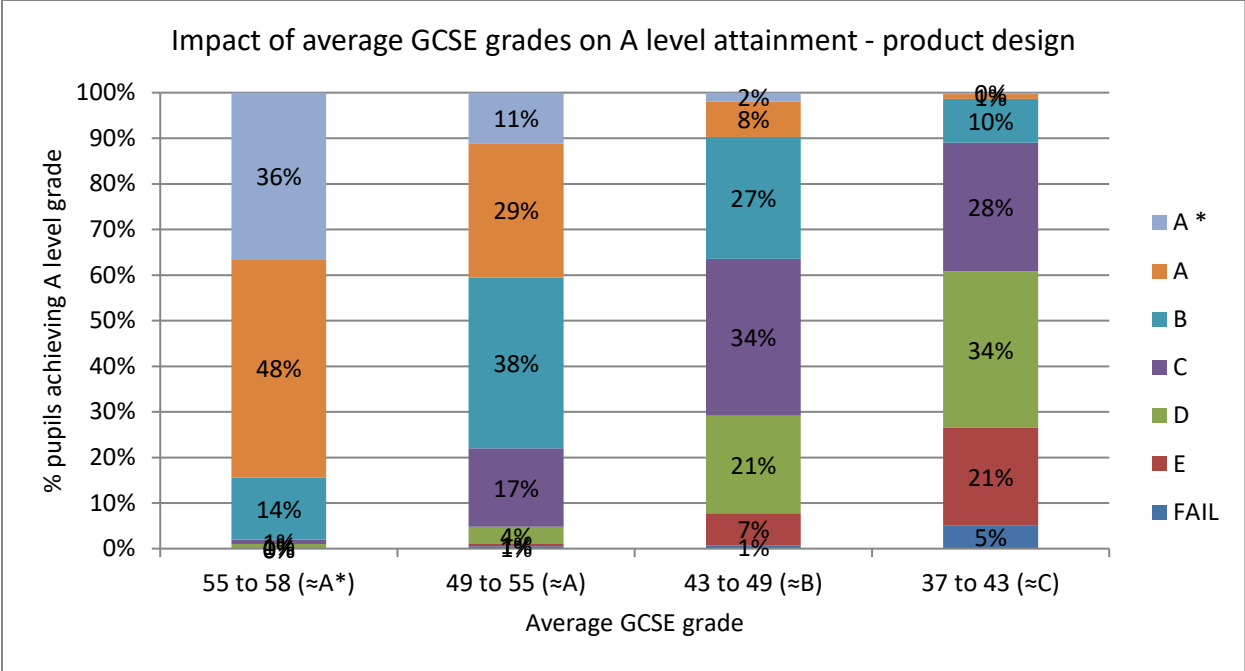


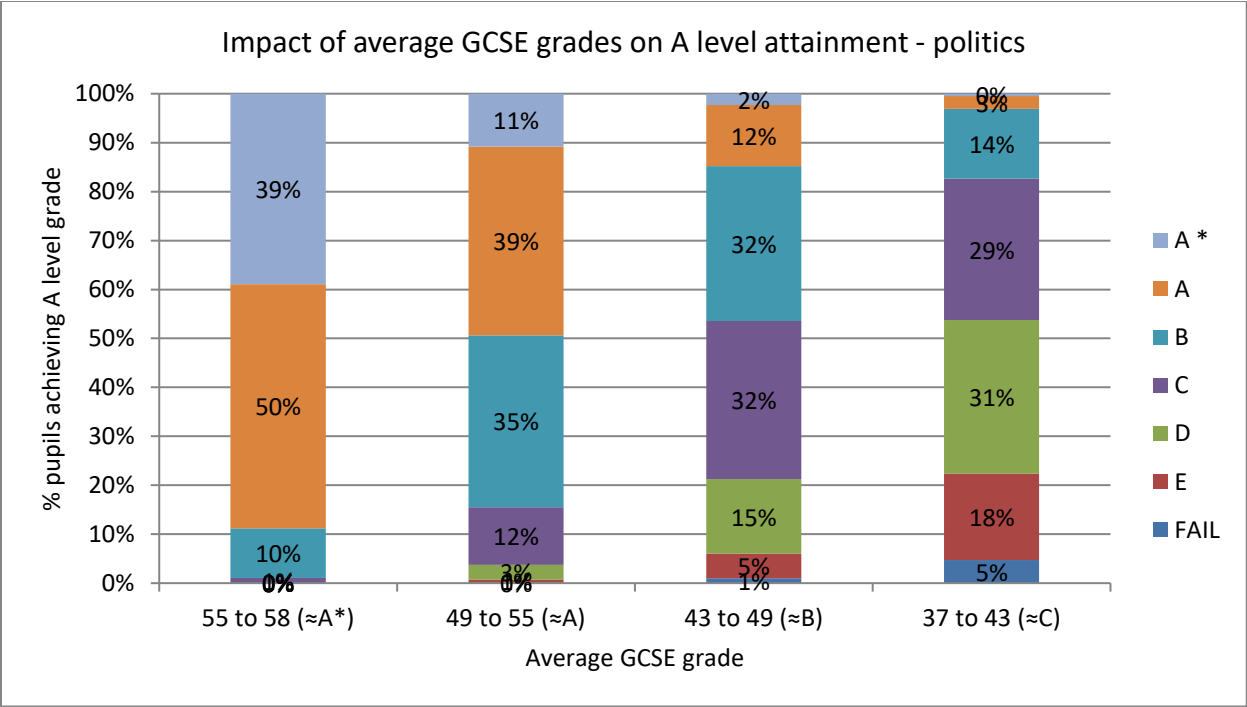
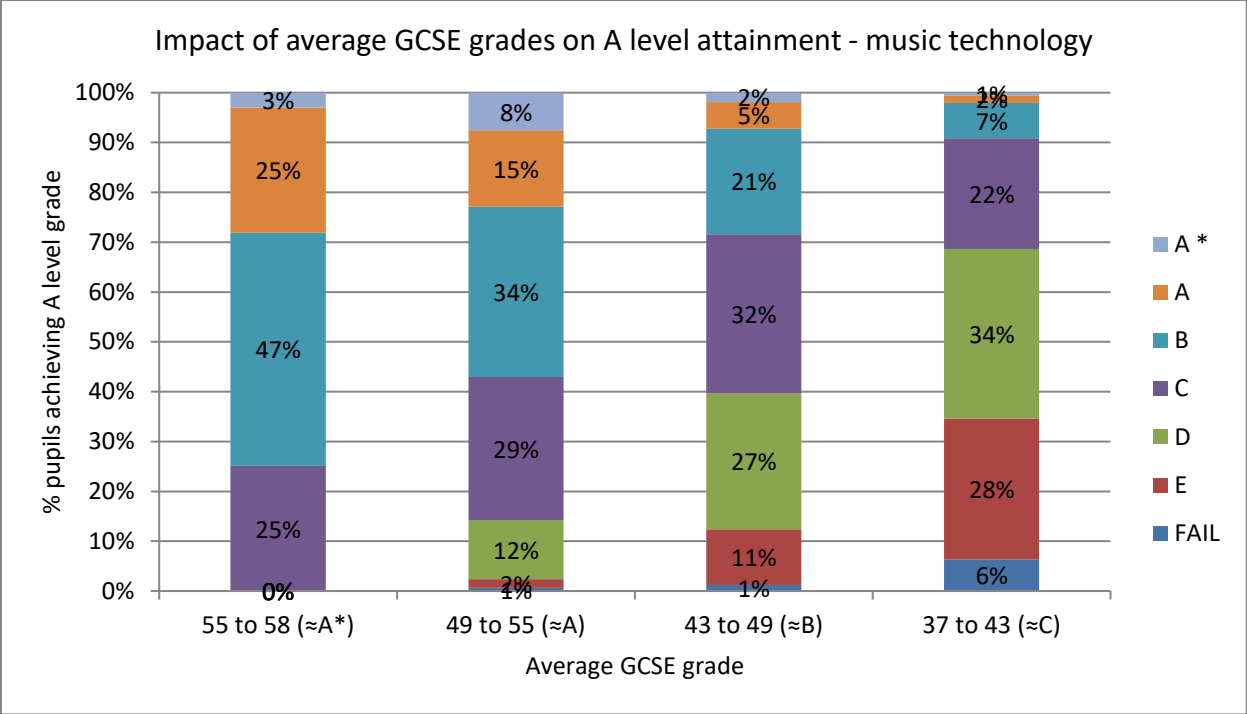












Analysis

Use this page to help narrow down which subjects to choose.

Questions	Subjects
Which A Levels should I choose for my future plans?	1 2 3 4 5
Which A Levels should I choose to keep my options open?	1 2 3 4 5
Which subjects do I enjoy?	1 2 3 4 5
Which bundle should I do?	1 2 3 4 5
Which subjects have the highest probability of success for me? (based on my GCSE projections)	1 2 3 4 5
Which subjects have occurred most in the above questions?	1 2 3 4 5

The A Levels I am going to find out more about at the Sixth Form Open Evening are:

- | | |
|----|----|
| 1) | 4) |
| 2) | 5) |
| 3) | 6) |