

## Is ranking A-level pupils useful?

### Summary

- For a student's rank to be useful for motivation or selection purposes it must be easy to interpret, unfortunately this is not the case. Thus, care must be taken not to over-interpret what rankings can tell us.
- Different A-level courses attract groups of students with different levels of ability. Hence, the grade achieved by those in a certain rank position varies considerably across subjects. Therefore, comparisons between student rankings across subjects do not make sense.
- Even within a subject, comparing student rankings is problematic. This is because equal intervals between ranks do not necessarily represent equal intervals in the trait being measured. The difference in the knowledge and understanding of the student on the 95th percentile and the student on the 96th is not comparable to the difference between, say, the 75th percentile and the 76th.
- This problem is, of course, compounded in attempting to compare student rankings across subjects.

Chelsea finished 1<sup>st</sup> in the Champions League but only 6<sup>th</sup> in the Premiership, while Arsenal finished 3<sup>rd</sup> in the Premiership but only equal 9<sup>th</sup> in the Champions League. So which is the better team? Such unanswerable questions will happily occupy pub conversations for hours on end. A similar question has been asked of A-levels, as to whether the ranks of candidates in their different subjects may provide useful information.

For a rank to be useful for motivation and/or selection, it must be relatively easy to interpret. The obvious difficulty with such a system at A-level is that different A-level courses and different levels of study (AS and A2) attract different groups of students. Further Mathematics, for example, attracts candidates with a higher mean GCSE score than Philosophy, so the same ranks achieved in these subjects can't be compared.

Figure 1 illustrates how the grade achieved by specific percentile ranks varies by subject. A percentile rank represents the percentage of candidates that have received a lower UMS mark than you have. The 95<sup>th</sup> percentile, for example, represents a performance that is better than 95 per cent of all candidates. Reading across the graph it is clear that achievement in the 60<sup>th</sup> percentile rank could mean anything from a grade A (in French, German or Maths, for example) to a grade C (in ICT, General Studies or Physical Education, for example), depending on the subject. The ranks would therefore only be meaningful for use as part of a selection procedure when comparisons are made between candidates taking the same subject. Using ranks when candidates have taken a basket of different subjects would be complex and problematic. If the ranking is done separately by awarding body there is also no guarantee that the different awarding bodies attract the same ability profile of candidates.

Considering the use of ranking as a motivational tool, the change of ability profile from AS level to A2 level could also present issues. The weakest candidates in each subject tend to drop out after AS level. A candidate in the ninety-fifth percentile at AS level may therefore find themselves in the eighty-fifth percentile at A2 level, not because their performance has dropped, but because the overall level of the competition has increased.

Debates that compare football outcomes will always remain unresolved because rank-order scales cannot tell us what the actual differences between individual scores mean. The gap in football ability between the 1st and 2nd team in the Champions League is not necessarily the same as the gap between the 3rd and 4th team. And, of course, it is not necessarily the same gap as between the 1st and 2nd team in the Premiership. In other words, we cannot assume that equal intervals between the ranks represent equal intervals in the trait being measured. This applies equally to A-level ranks. The difference in the knowledge and understanding of the student on the 95th percentile and the student on the 96th percentile, is not comparable to the difference in the knowledge and understanding of the student on, say, the 75th percentile and the student on the 76th percentile. This is the case when comparing rankings within any A-level subject, and is exacerbated when one tries to compare ranks across subjects.

To summarise, there are difficulties inherent in interpreting ranks and care needs to be taken not to draw inappropriate conclusions. It is therefore a matter of debate as to whether ranking is worthwhile. A more helpful approach for universities and employers would be to consider a more rounded picture of each applicant covering their enrichment activities (such as completion of the Extended Project, for example) rather than seek more detail on his/her academic attainment.

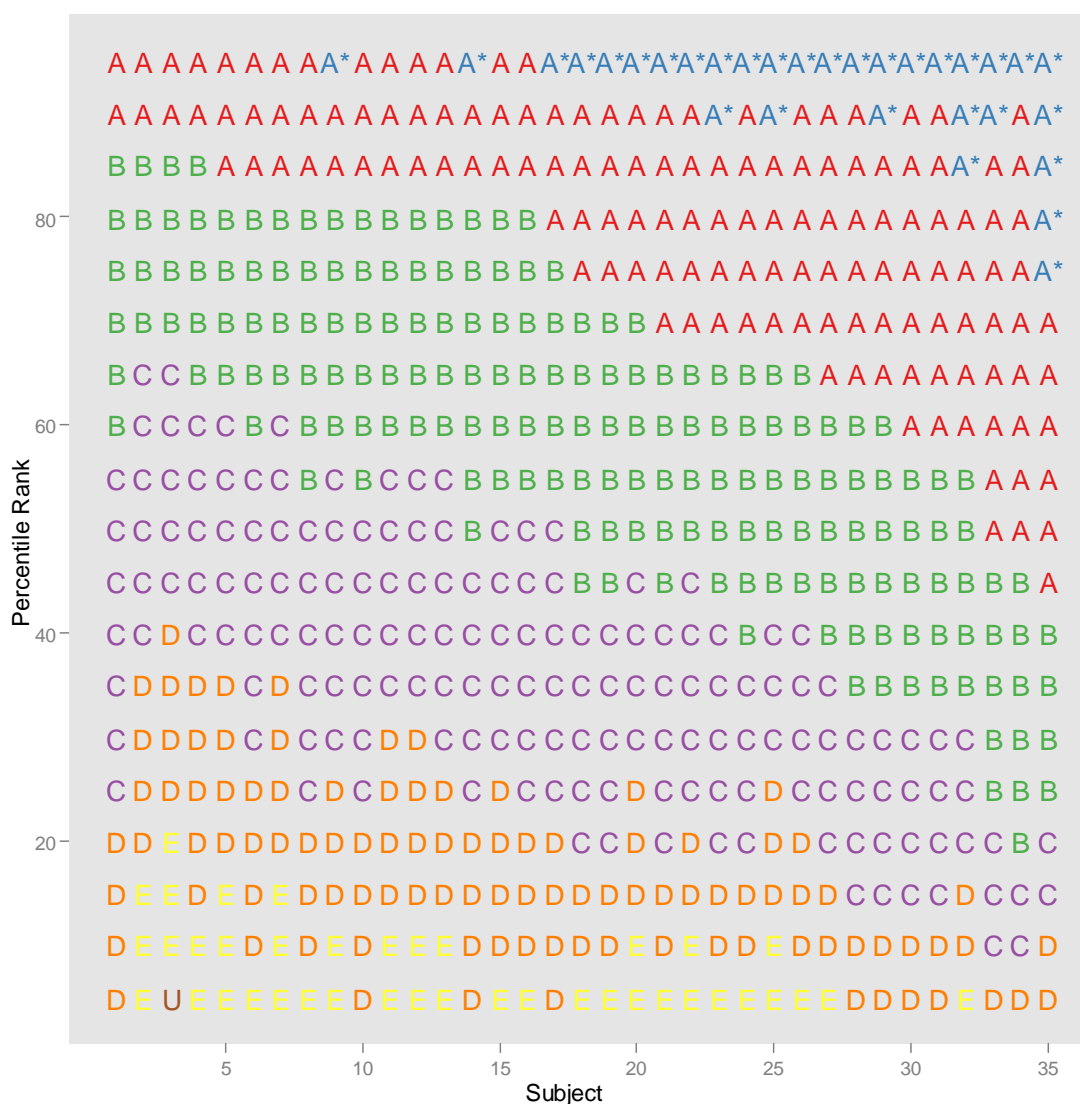


Figure 1: Grades achieved by percentile ranks for A-level subjects (based on JCQ A-level Results 2011)

**Table 1: A-level subject key to figure 1**

Index	Subject
1	Media / Film / TV Studies
2	ICT
3	General Studies
4	Critical Thinking
5	Physical Education
6	Business Studies
7	Computing
8	Performing / Expressive Arts
9	Design and Technology
10	Drama
11	Psychology
12	Law
13	Music
14	Communication Studies
15	Sociology
16	Welsh
17	English
18	Religious Studies
19	History
20	Biology
21	Geography
22	Other sciences
23	Art and Design subjects
24	Political Studies
25	Physics
26	Chemistry
27	Economics
28	Spanish
29	Classical subjects
30	French
31	German
32	Mathematics
33	Other modern languages
34	Irish
35	Mathematics (Further)