**Ranking Academia**

I will follow a similar system that George suggested in his scoring.docx. But I will split academic into 3 sub categories. GCSE, A-Level and university.

**University/ Course**

Uni/course ranking:

Where **a** will be the ranking of the university, where **a = uni’s ranking/ total uni’s.**  There is tab separated text file for this

e.g. if student went to LSE a=124/127. Note LSE is ranked 3rd

**b** denotes the weighting for the course the student completed. **b = course ranking/ total number of uni’s doing the course**. There is a tab separated text file for this.

e.g. if student went to kings and student politics b=68/83. Note kings is ranked 15th for politics

**g** denotes the grade the student achieved 1st = 0, 2.1 = -1, 2.2 = -2, 3rd = -3. Used a log function to take into account the difficulty of achieving a higher grade.

Things to consider:

* Scholarships
* Need to get ranking of universities and courses, for the year’s the student graduated/started.
* Master/ PhD
* BSc/ BA
* Abbreviations of course names/ university names

**A-Level/college/6th form/private college**

**a,b,c** represents the three A-Levels, there is a csv of the ranking

The **g’s** represent the grade. A\*=0, A = -1, B = -2, C=-3, D= -4, E= -5, U=-6.

**SR** is the school ranking of the 6th form/college. I tried to normalise the data ‘average point score’ but the last 60 or so rows did not work, the result was NaN. So I will be sticking with the ‘average point score’. This will not have a huge impact on the above formula.

<https://www.compare-school-performance.service.gov.uk/download-data?currentstep=datatypes&regiontype=all&la=0&downloadYear=2015-2016&datatypes=ks5>

Similar ranking system as uni ranking system.

e.g if student studied law

Things to consider:

* More than 3 A-Levels, you cannot just similar add it to the formula. It should be given a higher weighting, not the first three.
* It’s harder to get a B in further maths than it is to get an A in film, that should be taken in account.

<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486936/3-inter-subject-comparability-of-exam-standards-in-gcse-and-a-level.pdf> Table at the bottom details relative difficulty of A-Lvl.

* This data is just for 2013
* Need to consider the new grading system
* Abbreviations (physical education is typically written as P.E)
* college/6th form ranking (bucket the intuitions)
* What about if A-Level was done before the age if 17

**GSCE/high school**

Calculated in a similar fashion to the above grading systems.

The **g’s** represent the grades. A\*=0, A = -1, B = -2, C=-3, D= -4, E= -5, F=-6, G=-7, U=-8

**SR** is the school ranking. Note **SR** is normalised

<https://www.compare-school-performance.service.gov.uk/schools-by-type?step=phase&geographic=all&region=0&phase=secondary&for=Performance&basedon=Overall+performance&show=All+pupils&&schoolTypeFilter=allSchools&dataSetFilter=prov&page=20>

To consider:

* It’s harder to get a F in latin than it is to get an D in french, that should be taken in account.

<https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486936/3-inter-subject-comparability-of-exam-standards-in-gcse-and-a-level.pdf> Table at the bottom details relative difficulty of GCSE.

* Data is just for 2013
* Need to consider the new grading system
* What they did certain GCSE before 16
* Abbreviations (physical education is typically written as P.E)
* School ranking (this can be done, I will be looking at ofstead reports)