Of all the universities in the world, which are the best?

Ranking universities is a difficult, political, and controversial practice. There are hundreds of different national and international university ranking systems, many of which disagree with each other. This dataset contains three global university rankings from very different places.

**University Ranking Data**

The **Times Higher Education World University Ranking** is widely regarded as one of the most influential and widely observed university measures. Founded in the United Kingdom in 2010, it has been criticized for its commercialization and for undermining non-English-instructing institutions.

The **Academic Ranking of World Universities**, also known as the Shanghai Ranking, is an equally influential ranking. It was founded in China in 2003 and has been criticized for focusing on raw research power and for undermining humanities and quality of instruction.

The **Center for World University Rankings**, is a less well know listing that comes from Saudi Arabia, it was founded in 2012.

* How do these rankings compare to each other?
* Are the various criticisms levied against these rankings fair or not?
* How does your alma mater fare against the world?

**Supplementary Data**

To further extend your analyses, we've also included two sets of supplementary data.

The first of these is a set of data on **educational attainment** around the world. It comes from The World Data Bank and comprises information from the UNESCO Institute for Statistics and the Barro-Lee Dataset. How does national educational attainment relate to the quality of each nation's universities?

The second supplementary dataset contains information about **public and private direct** **expenditure on education across nations**. This data comes from the National Center for Education Statistics. It represents expenditure as a percentage of gross domestic product. Does spending more on education lead to better international university rankings?

**Data Fields**

**timesData.csv**

* **world\_rank** - world rank for the university. Contains rank ranges and equal ranks (eg. =94 and 201-250).
* **university\_name** - name of university.
* **country** - country of each university.
* **teaching** - university score for teaching (the learning environment).
* **international** - university score international outlook (staff, students, research).
* **research** - university score for research (volume, income and reputation).
* **citations** - university score for citations (research influence).
* **income** - university score for industry income (knowledge transfer).
* **total\_score** - total score for university, used to determine rank.
* **num\_students** - number of students at the university.
* **student\_staff\_ratio** - Number of students divided by number of staff.
* **international\_students** - Percentage of students who are international.
* **female\_male\_ratio** - Female student to Male student ratio.
* **year** - year of the ranking (2011 to 2016 included).

**school\_and\_country\_table.csv**

A lookup table for university against country from the timesData file. This is to be used to populate country data for the shanghai rankings, which are missing countries.

**shanghaiData.csv**

* **world\_rank** - world rank for university. Contains rank ranges and equal ranks (eg. 101-152).
* **university\_name** - name of university.
* **national\_rank** - rank of university within its country.
* **total\_score** - total score, used to determine rank.
* **alumni** - Alumni Score, based on the number of alumni of an institution winning nobel prizes and fields medals.
* **award** - Award Score, based on the number of staff of an institution winning Nobel Prizes in Physics, Chemistry, Medicine, and Economics and Fields Medals in Mathematics.
* **hici** - HiCi Score, based on the number of Highly Cited Researchers selected by Thomson Reuters.
* **ns** - N&S Score, based on the number of papers published in Nature and Science.
* **pub** - PUB Score, based on total number of papers indexed in the Science Citation Index-Expanded and Social Science Citation Index.
* **pcp** - PCP Score, the weighted scores of the above five indicators divided by the number of full time academic staff.
* **year** - year of ranking (2005 to 2015).

**cwurData.csv**

* **world\_rank** - world rank for university.
* **university\_name** - name of university.
* **country** - country of each university.
* **national\_rank** - rank of university within its country.
* **quality\_of\_education** - rank for quality of education.
* **alumni\_employment** - rank for alumni employment.
* **quality\_of\_faculty** - rank for quality of faculty.
* **publications** - rank for publications.
* **influence** - rank for influence.
* **citations** - rank for citations.
* **broad\_impact** - rank for broad impact (only available for 2014 and 2015)
* **patents** - rank for patents.
* **score** - total score, used for determining world rank.
* **year** - year of ranking (2012 to 2015).

**educational\_attainment\_supplementary\_data.csv**

* **Barro-Lee Dataset (2014)** - Average years of schooling; Educational attainment among age groups and genders; Population distributions. 144 countries. 1985-2010 in 5 year intervals.
* **UNESCO Institute for Statistics (UIS)** - Mean years of schooling; Percentage of population (age 25+) by educational attainment. 152 countries. 1985-2015.

**education\_expenditure\_supplementary\_data.csv**

* **country** - A set of OECD countries, plus Brazil and the Russian Federation, plus an OECD average.
* **institute\_type** - All Institutes (including preprimary education and subsidies to households, not separately shown), Elementary and secondary institutions (excludes preprimary), Higher education institutions.
* **direct\_expenditure\_type** - Public direct expenditure, private direct expenditure, or total (public + private) direct expenditure. (Private and total data are only available for 2011)
* **1995, 2000, 2005, 2009, 2010, 2011** - years