

How responsible are rankings

...and how responsible is the use
we make of them?

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Definition

ranking

Oxford Dictionaries

1.(noun): A position in a hierarchy or scale.

1.1. (mass noun): The action or process of giving a specified rank to someone or something.

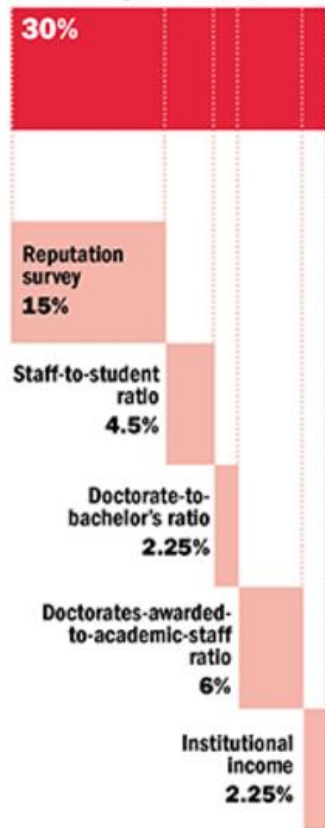
Macmillan Dictionaries

1. (noun): A position on a list that shows how good someone or something is compared to others, especially how good someone is at a sport.

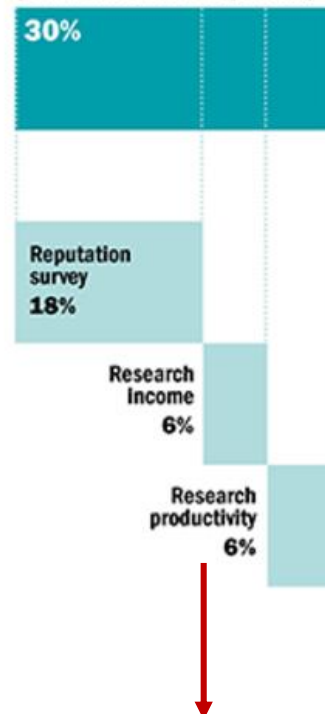
Some of them...



Teaching (the learning environment)



Research (volume, income and reputation)



No of papers in academic journals indexed by Scopus per scholar, **scaled for institutional size** and **normalised for subject**.

Citations (research influence)

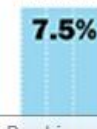


Citations to journal **articles, reviews, conference proceedings and books and book chapters** published over five years.

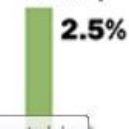
Data are normalised.

Papers with **more than 1,000** authors are included but under a **fractional** counting approach

International outlook (staff, students, research)



Industry income (knowledge transfer)



World University Rankings methodology table

THE WORLD UNIVERSITY RANKINGS

PROFESSIONAL JOBS SUMMITS RANKINGS

RANKING SCORES

One single table

Rank	Name	Overall	Teaching	Research	Citations	Industry Income	International Outlook
1	University of Oxford United Kingdom Explore	94.3	86.7	99.5	99.1	63.7	95.0
2	University of Cambridge United Kingdom Explore	93.2	87.8	97.8	97.5	51.5	93.0
=3	California Institute of Technology United States Explore	93.0	90.3	97.5	99.5	92.6	59.7

ARWU considers every university that has any Nobel Laureates, Fields Medalists, Highly Cited Researchers, or papers published in Nature or Science.

Universities with significant amount of papers indexed by Science Citation Index-Expanded (SCIE) and Social Science Citation Index (SSCI) are also included.

Total number of papers indexed in Science Citation Index-Expanded and Social Science Citation Index in 2016.

Only publications of 'Article' type considered.

Special weight of two was introduced for papers indexed in Social Science Citation Index.

Indicators and Weights for ARWU

Criteria	Indicator	Code	Weight
Quality of Education	Alumni of an institution winning Nobel Prizes and Fields Medals	Alumni	10%
Quality of Faculty	Staff of an institution winning Nobel Prizes and Fields Medals	Award	20%
	Highly cited researchers in 21 broad subject categories	HiCi	20%
Research Output	Papers published in Nature and Science*	N&S	20%
	Papers indexed in Science Citation Index-expanded and Social Science Citation Index	PUB	20%
Per Capita Performance	Per capita academic performance of an institution	PCP	10%
Total			100%

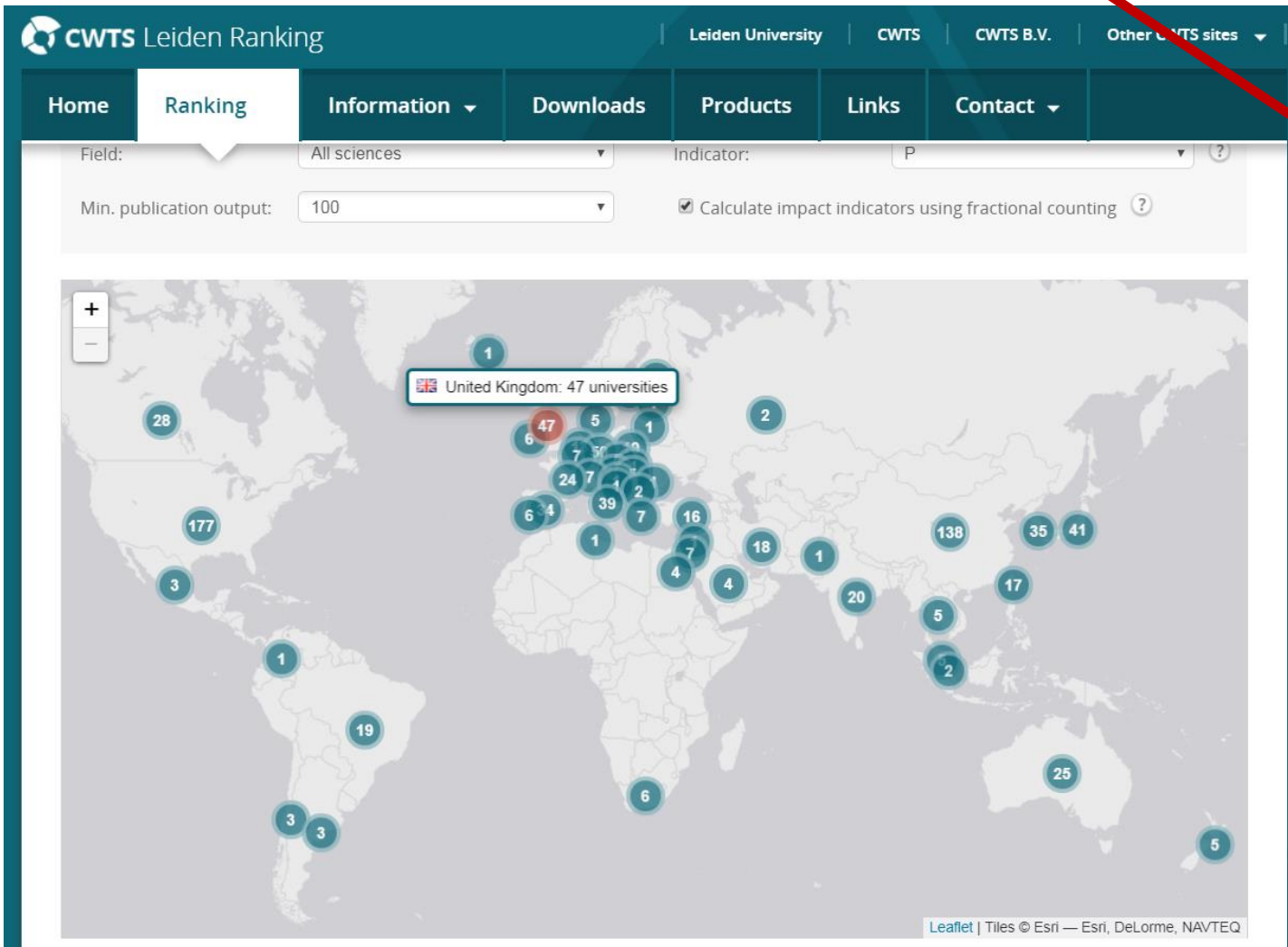
* For institutions specialized in humanities and social sciences such as London School of Economics, N&S is not considered, and the weight of N&S is relocated to other indicators.

- Academic Reputation (40%) – based on a based a QS Survey
- Employer Reputation (10%) – based on a based a QS Survey
- Faculty/Student Ratio (20%)
- Citations per faculty (20%) – All papers (Scopus excluding self citations) produced by an institution across a five-year period by the number of faculty members at that institution.
- International Faculty Ratio (5%)
- International Student Ratio (5%)

Led by the Massachusetts Institute of Technology (MIT).
The top four universities are all based in the US, with Stanford, Harvard and the California Institute of Technology all following hot on MIT's heels.
 Only 51 of 76 British universities falling at least one place.



903 universities from 54 different countries. These are all universities worldwide that have produced at least 1000 Web of Science indexed publications in the period 2012–2015. Only so-called core publications are counted



- Written in English.
- The publication has appeared in a core journal.

From 70 with the word 'literature' in the title, only 4 are considered core journals.

	U Hertfordshire	Open University	U Greenwich
	♥	♥	♥
<div>Show symbols</div>			
Teaching & Learning			
Bachelor graduation rate	A	-	A
Masters graduation rate	D	B	B
Graduating on time (bachelors)	C	-	C
Graduating on time (masters)	-	-	-
Research			
Citation rate	B	A	B
Research publications (absolute numbers)			
Research publications (size-normalised)			
External research income			
Art related output			
Top cited publications			
Interdisciplinary publications			
Post-doc positions			
Strategic research partnerships			
Professional publications			
Knowledge Transfer			
Co-publications with industrial partners	<div>Share on TwitterShare on Facebook</div>		
Income from private sources			
Patents awarded (absolute numbers)			
Patents awarded (size-normalised)			
Industry co-patents	E	E	C
Spin-offs	E	E	E
Publications cited in patents	D	D	C
Income from continuous professional development	D	D	D
Graduate companies	D	D	E
International Orientation			
Foreign language bachelor programmes	-	-	-
Foreign language master programmes	-	-	-
Student mobility	D	E	D
International academic staff	-	-	-
International joint publications	A	A	A
International doctorate degrees	-	-	-
Regional Engagement			
Bachelor graduates working in the region	C	E	B
Master graduates working in the region	C	E	B
Student internships in the region	-	-	-
Regional joint publications	B	D	C
Income from regional sources	-	-	-
Strategic research partnerships in the region	-	-	-
● A (Very good) ● B (Good) ● C (Average) ● D (Below average) ● E (Weak) — Data unavailable ✕ Not applicable Latest update: 2017			



U-MULTIRANK BIBLIOMETRICS 2017:
TECHNICAL SPECIFICATIONS

U-Multirank 2017 bibliometrics: information sources, computations and performance indicators

Center for Science and Technology Studies (CWTS), Leiden University
(CWTS version 16 March 2017)

1 Information sources: research publications and patents

1.1 Web of Science database

All bibliometric scores are based on information extracted from publications that are indexed in the Web of Science - Core Collection database (Science Citation Index Expanded, Social Sciences Citation Index, and Arts & Humanities Citation Index). CWTS operates this WoS database under a commercial license agreement with Thomson Reuters.

The WoS contains some 14,000 active sources, both peer-reviewed scholarly journals and conference proceedings. The underlying bibliographic information relates to publications classified as 'research article' and 'review article'. The WoS database is incomplete (there are many thousands more science journals worldwide) and it is biased in favor of English-language. Hence, there will always be missing publications. WoS-based bibliometric data are never comprehensive and fully accurate; scores are therefore always estimates with a margin of statistical error.

Nonetheless the WoS is currently one of the two best sources, covering worldwide science across all disciplines. The only possible alternative database, Elsevier's Scopus database, has more or less the same features. All in all, one may expect comparable bibliometric results from both databases, especially at higher aggregate levels.

The WoS-indexed publications in Arts and Humanities (A&H) journals have not been included in the three citation-based indicators: (i) mean normalized citation score, (ii) top 10% most frequently cited publications, and (iii) interdisciplinarity indicator. There are three reasons: (1) the citation frequency counts are often zero or low; (2) citation patterns and counts tend to be much more affected by journal- or sub-field specific characteristics; (3) the relatively low level of validity of WoS-indexed peer-reviewed A&H journals as fully representative publication outlets of all research activities in these research disciplines.

The compounded effect of these three constraints is the high likelihood of unreliable and biased outcomes. In combination, the numbers of citations are usually too low to ensure representative, reliable and statistically robust citation-based indicators. Especially in those cases where a higher

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- Multidimensional
- Does not refer to a single table
- Detailed methodology

Not comprehensive, depends on the data provided by the institutions

London, January 30, 2018

Use and interpretation of University rankings

Interpretation of university rankings

5. Comparisons between universities should be made keeping in mind the differences between universities (Consider if the disciplinary profile of a university has been corrected for or not).
6. Uncertainty in university rankings should be acknowledged
7. An exclusive focus on the ranks of universities in a university ranking should be avoided; the values of the underlying indicators should be taken into account (One university may seem to perform much better than another, while the performance difference may in fact be relatively small).

Use of university rankings

8. Dimensions of university performance not covered by university rankings should not be overlooked (the Leiden Ranking has a quite narrow scope, the U-Multirank is probably the most comprehensive)
9. Performance criteria relevant at the university level should not automatically be assumed to have the same relevance at the department or research group level
10. University rankings should be handled cautiously, but they should not be dismissed as being completely useless

Any ideas for the
debate?



London, January 30, 2018

