Quick guide to 7 major ranking reports
Quick guide to **7 major** ranking reports

By understanding the inner workings of rankings, universities gain insights into how their practices and data can ultimately influence a rankings outcome. The focus area, algorithms and methodologies vary across the growing number of ranking tables and reports produced by ranking organizations worldwide; as do institutional priorities and research outputs.
Quick guide to 7 major ranking reports

This quick reference table provides a look into 7 major and influential ranking reports. Use the information to quickly compare and identify what each of the 7 reports focuses on, and what contributes to their methodologies.

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Ranking organization: Academic Ranking of World Universities (ARWU)

Ranking report: Shanghai Rankings/ARWU

Report focus: Global

Stated goal: Provide a starting point for identifying national strengths and weaknesses as well as facilitating reform and setting new initiatives

Scope: 1800+ institutions are ranked annually, top 1000 are published in the report

Data sources: Nobel Prize | Fields Medals (www.mathunion.org) | HiCi: Clarivate
N&S: Web of Science | Bibliometrics: Web of Science
Number of academic staff: National agencies such as National Ministry of Education, National Bureau of Statistics, National Association of Universities and Colleges, National Rector’s Conference.

Timing: Annually (August)

Website accessed on: 19 May 2020
The highest scoring institution is assigned a score of 100, and other institutions are calculated as a percentage of the top score. An institution’s rank reflects the number of institutions that sit above it.

- **10% Quality of Education**: Alumni of an institution winning Nobel Prizes and Fields Medals
- **20% Quality of Faculty**: Staff of an institution winning Nobel Prizes and Fields Medals
- **20% Quality of Faculty**: Highly Cited Researchers
- **20% Research Output**: Papers published in *Nature* and *Science*
- **20% Research Output**: Papers indexed in Science Citation Index-Expanded and Social Science Citation Index
- **10% Per Capita Performance**: Per capita academic performance of an institution

*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.*
Ranking organization:
Times Higher Education (THE)

Ranking report:
World University Rankings

Report focus:
Global

Stated goal:
• Evaluate research-intensive universities across all their core missions: teaching, research, knowledge transfer and international outlook.
• Provide trusted performance data on universities for students and their families, university academics, university leaders, governments and industry

Scope:
1,400+ institutions

Data sources:
Academic Reputation Survey | Elsevier's Scopus database

Timing:
Annually (September)

Source: https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2020-methodology
Website accessed on: 19 May 2020
THE uses 13 performance indicators to position more than 1,400+ institutions worldwide. These performance indicators are grouped into five areas (as shown to the right).

### 30% Teaching (the learning environment):
- 15.0% Reputation survey
- 4.50% Staff-to-student ratio
- 2.25% Doctorate-to-bachelor’s ratio
- 6.00% Doctorates-awarded-to-academic-staff ratio
- 2.25% Institutional income

### 30% Research (volume, income and reputation):
- 18% Reputation survey
- 6.0% Research income
- 6.0% Research productivity

### 30% Citations (research influence)

### 7.5% International outlook (staff, students and research)
- 2.5% Proportion of international students
- 2.5% Proportion of international staff
- 2.5% International collaboration

### 2.5% Industry income (knowledge transfer)

Quick guide to 7 major ranking reports
Ranking organization:
QS

Ranking report:
QS World University Rankings

Report focus:
Global

Stated goal:
For students seeking to understand how their prospective university choices are perceived by the global academic community, and by potential employers across the world.

Scope:
1,000 institutions

Data sources:
Elsevier's Scopus database

Timing:
Annually (Spring)

Source: https://www.topuniversities.com/qs-world-university-rankings/methodology
Website accessed on: 19 May 2020
QS uses a consistent methodological framework, compiled from six simple metrics to capture university performance. Faculty area normalization was introduced in 2015 to ensure that institutions specializing in Life Sciences and Natural Sciences were not unduly advantaged. QS has avoided fundamental changes, with the aim to provide a consistent year-on-year comparison.

QS World University Rankings evaluates universities according to six metrics:

- 5% International student ratio
- 5% International faculty ratio
- 20% Citations per faculty, sourced from Scopus
- 20% Faculty/student ratio
- 10% Employer reputation
- 40% Academic reputation
Ranking organization:
US News &World Report

Ranking report:
Best University Rankings

Report focus:
Global

Stated goal:
For potential students: used to explore higher education options beyond their own countries' borders and to compare key aspects of schools' research missions.

For universities: provide a way to benchmark themselves against other schools, become more visible globally, and find top schools in other countries to collaborate with.

Scope:
1,500 institutions across more than 80 countries

Data sources:
Bibliometric data and indicators: Web of Science and InCites
Reputation Indicators: Clarivate Analytic’ Academic Reputation Survey

Timing:
Annually (October)

Source: https://www.usnews.com/education/best-global-universities/articles/methodology
Website accessed on: 19 May 2020
The rankings focus specifically on schools’ academic research and reputation overall and not on their separate undergraduate or graduate programs.

To arrive at a school's rank, the overall global scores are calculated using a combination of the weights and z-scores for each of the 13 indicators used in the rankings.

- 12.5% Global research reputation
- 12.5% Regional research reputation
- 10% Publications
- 2.5% Books
- 2.5% Conferences
- 10% Normalized citation impact
- 7.5% Total citations
- 12.5% Number of publications among the 10% most cited
- 10% Percentage of total publications among the 10% most cited
- 5% International collaboration
- 5% International collaboration - relative to country
- 5% Number of highly cited papers among the top 1% most cited in their respective field
- 5% Percentage of total publications among the top 1% most highly cited papers
Ranking organization: Times Higher Education (THE)

Ranking report: Impact Rankings

Report focus: United Nations' Sustainable Development Goals (SDGs)

Stated goal: To provide a showcase for the work being delivered by universities in our communities, and an opportunity to shine a light on institutional activities and efforts not covered in other rankings and demonstrate the differences a university is making to the world we live in.

Scope: 1,250 institutions (changes annually)

Data sources:
- Universities can submit data on as many of the 17 SDGs as they are able
- Elsevier's Scopus database

Timing: Annually (April)

Website accessed on: 19 May 2020
How universities are ranked
THE uses indicators to provide comparisons across three broad areas: research, outreach, and stewardship, across all of the SDGs.
Any university that provides data on SDG 17 and at least three other SDGs is included in the overall ranking.
The methodology was developed in conjunction with THE’s partners Vertigo Ventures and Elsevier, and after consultation and input from individual universities, academics, and sector groups.
Universities can submit data on as many of the SDGs as they are able. Each SDG has a series of metrics that are used to evaluate the performance of the university in that SDG.
As well as the overall ranking, THE also publishes the results of each individual SDG. This rewards any university that has participated with a ranking position, even if they are not eligible to be in the overall table.

Methodology
A university’s final score in the overall table is calculated by combining its score in SDG 17 with its top three scores out of the remaining 16 SDGs. SDG 17 accounts for 22% of the overall score, while the other SDGs each carry a weight of 26%. This means that different universities are scored based on a different set of SDGs, depending on their focus.
The score from each SDG is scaled so that the highest score in each SDG in the overall calculation is 100. This is to adjust for minor differences in the scoring range in each SDG and to ensure that universities are treated equitably whichever SDGs they have provided data for. It is these scaled scores that we use to determine which SDGs a university has performed most strongly in; they may not be the SDGs in which the university is ranked highest or has scored highest based on unscaled scores.

Quick guide to 7 major ranking reports
Ranking organization:
QS

Ranking report:
QS World University Rankings by Subject

Report focus:
Individual subject areas (48 subject areas)

Stated goal:
Help prospective students identify the world’s leading schools in their chosen field in response to high demand for subject-level comparisons.

Scope:
1,000 institutions

Data sources:
International Reputation
• QS global survey of academics
• QS global survey of employers

Research impact from Elsevier’s Scopus database
• Research citations per paper
• h-index in relevant subject

Timing:
Annually (Spring)

Source: https://www.topuniversities.com/qs-world-university-rankings/methodology
Website accessed on: 19 May 2020
Four components are combined to produce the results for each of the subject rankings, with weightings adapted for each discipline:

- Academic reputation
- Employer reputation
- Research citations per paper
- h-index

As research cultures and publication rates vary significantly across academic disciplines, the QS World University Rankings by Subject applies a different weighting of the four indicators in each subject.

For example, in medicine, where publication rates are very high, research citations and the h-index account for 25% of each university’s total score. On the other hand, in areas with much lower publication rates such as history, these research-related indicators only account for 15% of the total ranking score. Meanwhile, in subjects such as art and design, where there are too few papers published to be statistically significant, the ranking is based solely on the employer and academic surveys.
Ranking organization: CWTS

Ranking report: CWTS Leiden Ranking

Report focus: Research-intensive universities

Stated goal: The Leiden Ranking stands for a multidimensional perspective on university performance.

Scope: 1,000 institutions

Data sources: Web of Science data from the Science Citation Index Expanded, the Social Sciences Citation Index, and the Arts & Humanities Citation Index, which is then enriched by CWTS. Excludes conference proceeding publications and book publications.

Timing: Annually (June)

Source: https://www.leidenranking.com/
https://www.leidenranking.com/information/indicators
https://www.leidenranking.com/information/universities
Website accessed on: 19 May 2020
The Leiden Ranking provides information exclusively about the research done at universities. They offer important insights into the scientific performance of nearly 1000 major universities worldwide. Research is represented in publications, and the collected data about these publications forms the basis for the Leiden Ranking. A set of bibliometric indicators are used to provide statistics on scientific impact, collaboration, open access publishing, and gender diversity.

Identification of universities: Typically, a university is characterized by a combination of education and research tasks in conjunction with a doctorate-granting authority. However, these characteristics do not mean that universities are particularly homogeneous entities that allow for international comparison on every aspect. As a result of its focus on scientific research, the Leiden Ranking presents a list of institutions that have a high degree of research intensity in common.

These indicators include:
- Publications
- Size-dependent vs. size-independent indicators
- Scientific impact indicators
- Collaboration indicators
- Open access indicators
- Gender indicators
- Counting method
- Trend analysis
- Stability intervals
- Trend analysis
- Stability intervals

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Thank you