METHODOLOGY FOR THE ARAB UNIVERSITY RANKINGS 2023

Summary of the Rankings methodology:

The methodology for the *Times Higher Education* Arab University Rankings is looking at research-intensive universities across all their core missions: teaching, research environment, research quality, society (including industry income and impact), and international

1) Data collection and sources

Institutional data – self-submitted on the Portal

Reference data

THE incorporates reference datasets into its model to convert country-level data provided by institutions via the portal (e.g. research income in a local currency) to a single comparable dataset for all institutions.

The sources of this data are:

- The Her Majesty Revenue and Customs (HMRC) monthly datasets: [https://www.gov.uk/government/publications/hmrc-exchange-rates-for-2020-monthly], which provides accurate foreign exchange rates to convert datasets into GBP and then back into their local currency if an institution reports in a foreign currency;

- The World Bank Purchase Power Parity (PPP) dataset [http://data.worldbank.org/indicator/PA.NUS.PPP], which is used to convert the local currency to common-PPP-scaled USD. PPP is used to exemplify the differing currency strengths in each country 67 reW*Pp6.54 Tm0 322.qey strengths

2) Criteria for exclusion, inclusion, and data processing

Exclusion and inclusion criteria

1. They are required to publish 500 or more relevant publications over the previous 5 years.

AND

2. They must have supplied “overall” numbers for the ranking year.

AND

3. They must not be featured in the custom exclusions list. Institutions that have requested not to participate in the ranking or that are not eligible for other institution-specific reasons have been excluded.

AND

4. They must not have more than two of the critical values (academic staff, international academic staff, research st

Data adjustments

After the deadline of the submission of data via the Portal by institutions,

Ω[vi] as described below.

On the occasions where an institution does not provide a data point which would result in the inability to generate a metric, the missing metric may be calculated by imputing the value as the higher of:

The average of the two lowest metric scores for an institution; or
The minimum score awarded across the whole population for that metric.

Data processing pre-rankings

Ω[vii] (provided by the World Bank), for use in the Rankings calculation.

Ω[viii]

3) Calculation, scoring and ranking

Calculation of metrics

There are 20 indicators, each combined into=˙ MЧ eЏoⅈ ⎯ ⅈ rH

2. *Research Environment*

Research Reputation

- We conducted an Arab region-specific survey which yielded over 35,000 votes. Only academics who have been cited in published papers were invited to participate. The most recent Arab Reputation Survey that underpins this metric was carried out from May to June 2023. It examined the perceived prestige of institutions in research. This metric consists of the number of research votes obtained from the Arab reputation survey 2022 scaled to the growth in this category in 2023, as well as the research votes from the 2023 survey. Universities that received no votes are scored a zero for this metric.

Research Income

- This metric is generated by dividing the total subject weighted research income adjusted for PPP, by the total subject weighted number of academic staff and is normalised after calculation. This is a somewhat controversial indicator because it can be influenced by national policy and economic circumstances. Income is crucial to the development of world-class research, and because much of it is subject to competition and judged by peer review, our experts suggested that it was a valid measure. This indicator takes account of each institution's distinct subject profile, reflecting the fact that research grants in science subjects are often bigger than those awarded for the highest-quality social science, arts and humanities research.

Research Productivity

- This metric is generated by dividing the total subject weighted number of papers published in the academic journals indexed by Elsevier's Scopus database per scholar, divided by the sum of the total subject weighted number of FTE research staff and FTE academic staff. This metric is normalised after calculation. The indicator gives a sense of the institution's ability to get papers published in quality peer-reviewed journals. The measure includes a method to give credit for cross-subject research that results in papers being published in subjects where a university has no staff. For subjects where there are papers, but not staff, we will reassign the papers to subjects where there are staff. We will do this proportionally according to the number of staff in populated subjects, and according to the median publications per staff for populated subjects. We will have a maximum threshold of the proportion of papers that we are willing to reassign (10% of the total of papers).

3. *Research Quality*

Research Strength

- Our research strength indicator looks at universities' role in spreading new knowledge and ideas. We examine research influence by capturing the 75th percentile of the Field-Weighted Citation Impact (FWCI) of all papers published by a university. We look at the academic journals indexed by Elsevier's Scopus database and all indexed publications between 2018 and 2022. Citations to these publications made in the six years from 2018 to 2023 are also collected. The data is normalised to reflect variations in citation volume between different subject areas. This means that institutions with high levels of research activity in subjects with traditionally high citation counts do not gain an unfair advantage.

4. *Society*

Industry income

- An institution's ability to help industry with innovations, inventions and consultancy has become a core mission of the contemporary global academy. This category suggests the extent to which businesses are willing to pay for research and an institution's ability to attract funding in the commercial marketplace – useful indicators of institutional quality. The indicator seeks to capture such knowledge-transfer activity by looking at how much research income an institution earns from industry (adjusted for PPP), divided by the by the total number of FTE academic staff it employs. This variable is normalised after calculation.

Another mission of many higher education institution is to positively impact the wider society and the world. In this ranking, this is defined as their contributions towards the United Nations Sustainable Development Goals (SDG)s, as measured by the THE Impact Rankings. This is measured in two parts:

Impact Participation

- Institutions are measured by the number of SDGs for which they are ranked in latest THE Impact Rankings. A maximum of 100 points are awarded to institutions that participate in 4 SDGs or more; eighty points for 3 SDGs; sixty points for 2 SDGs; fifty points for 1 SDG and zero point if they are not ranked.

Impact Performance

- Institutions that are ranked in the overall table of the latest THE Impact Rankings receives a metric score which is] TJETQscore which is] TJETQscore wiaq43.08 156.7422owr8re

5. *International Outlook*

International Students

- This metric captures the proportion of international students on campus. International students are those whose nationality differs from the country where the institution is based. The metric is calculated as the total FTE number of international students divided by the total FTE number of students. This variable is normalised

Normalisation

Moving from a series of specific data points to indicators, and finally to a total score for an institution, requires us to match values that represent fundamentally different data. To do this we use a standardisation approach for each indicator, and then combine the indicators in the proportions indicated below.

The standardisation approach we use is based on the distribution of data within a particular indicator, where we calculate a cumulative probability function, and evaluate where a particular institution's indicator sits within that function.

For all indicators except the Arab Reputation Survey metrics, Impact Participation, Research Excellence, Research Influence, and Patents, we calculate the score using a normal cumulative probability function. The distribution of the data in the Arab Reputation Survey, as well as Research Strength, Research Excellence, and Patents, require us to use an exponential scoring function. Impact Participation is scored by counting the number of Sustainable Development Goals that the universities participated in the Impact 2023 rankings. A maximum score is awarded for 4 SDG submissions.

Weightings of metrics to final scores and rankings

The 20 performance metrics representing the five pillars are weighted according to *THE*'s assessment of relative importance.

Pillar	Metric	% weighting
1. Teaching	Teaching Reputation	18.0%
	Students Staff Ratio	4.0%
	Doctorates Bachelor Ratio	2.5%
	Doctorates Staff Ratio	5.0%
	Institutional Income	1.5%
2. Research Environment	Research Reputation	23

Arab