World University Rankings 2024

THE 2024 World University Rankings Data Masterclass – Africa

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Rankings Product Owner

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Senior Rankings Product Owner



Agenda

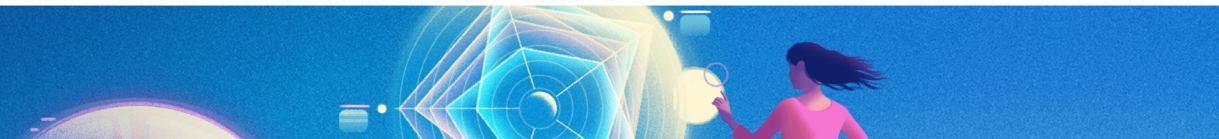
World University Rankings 2024

Methodology Review

Africa Trends and Analyses

How to participate

Sub-Saharan Africa University Rankings



50+ Years of Insights

To help **universities** understand their position against their mission.

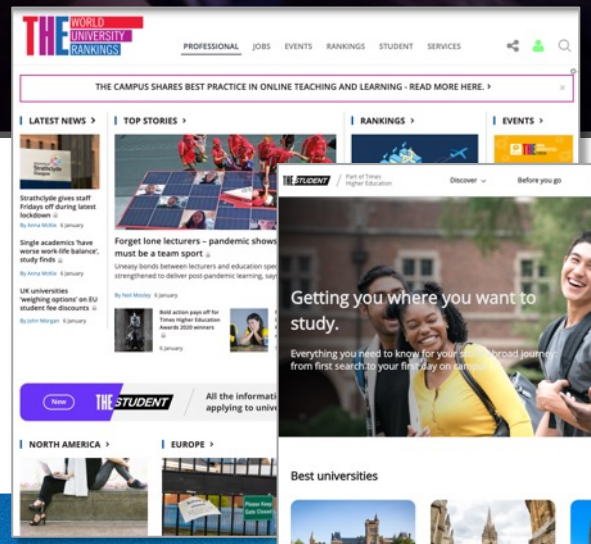
To help **students** find and access the university best suited to their abilities and aspirations.

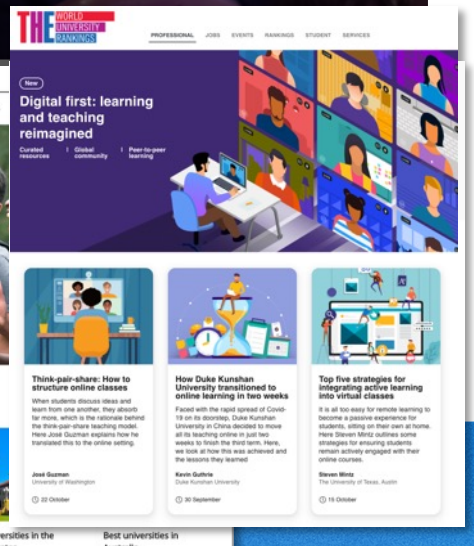
To help **higher education** deliver transformational teaching, research and innovation.

1971


THE TIMES
Higher Education
SUPPLEMENT
Opinion
From James to McNair via Robbins
Science and engineering vacancies pose serious dilemma for UGC
Edwin Kerr is CNAA's new chief officer
$100m grant to black colleges
Modern studies course at Sheffield

2023





Our Rankings

TEACHING

THE Japan University Rankings

Focus: student satisfaction, employer reputation, graduation rate + more

Participation rules: country specific

RESEARCH

THE World University Rankings

Focus: research output, research quality, research collaboration, reputation + more

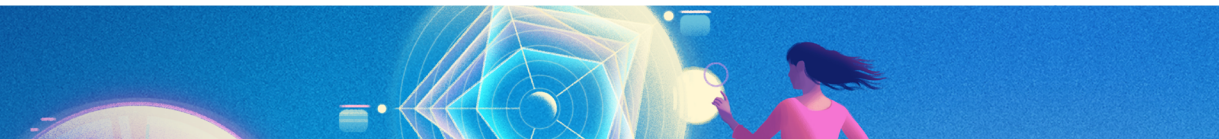
Participation rules: 1,000+ publications over 5 years, teach undergraduates across a range of subjects

IMPACT & SUSTAINABILITY

Times Higher Education Impact Rankings

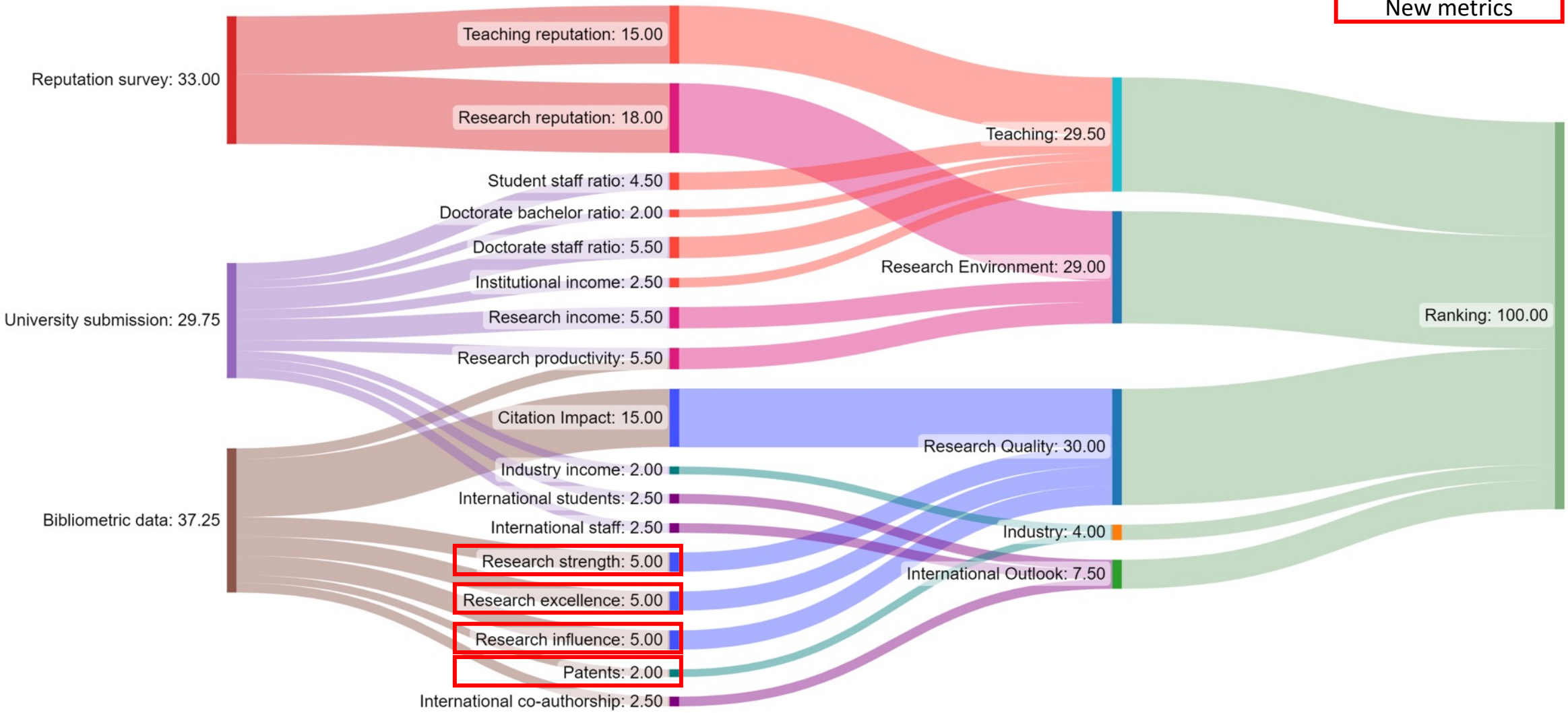
Focus: research, teaching, stewardship and outreach against the UN's 17 Sustainable Development Goals

Participation rules: all UG or PG higher education institutions



Methodology

New metrics



THE World University Rankings

The world's biggest university ranking

Universities

The world's biggest university ranking

Universities submitted data
2,673

Number of countries represented
127

Bibliometrics

In partnership with ELSEVIER

Research papers
16.5m

Citations
134m

Universities Data

The world's largest data gathering exercise from universities

Data values
411,789

Data queries resolved
34,455

Academic Survey

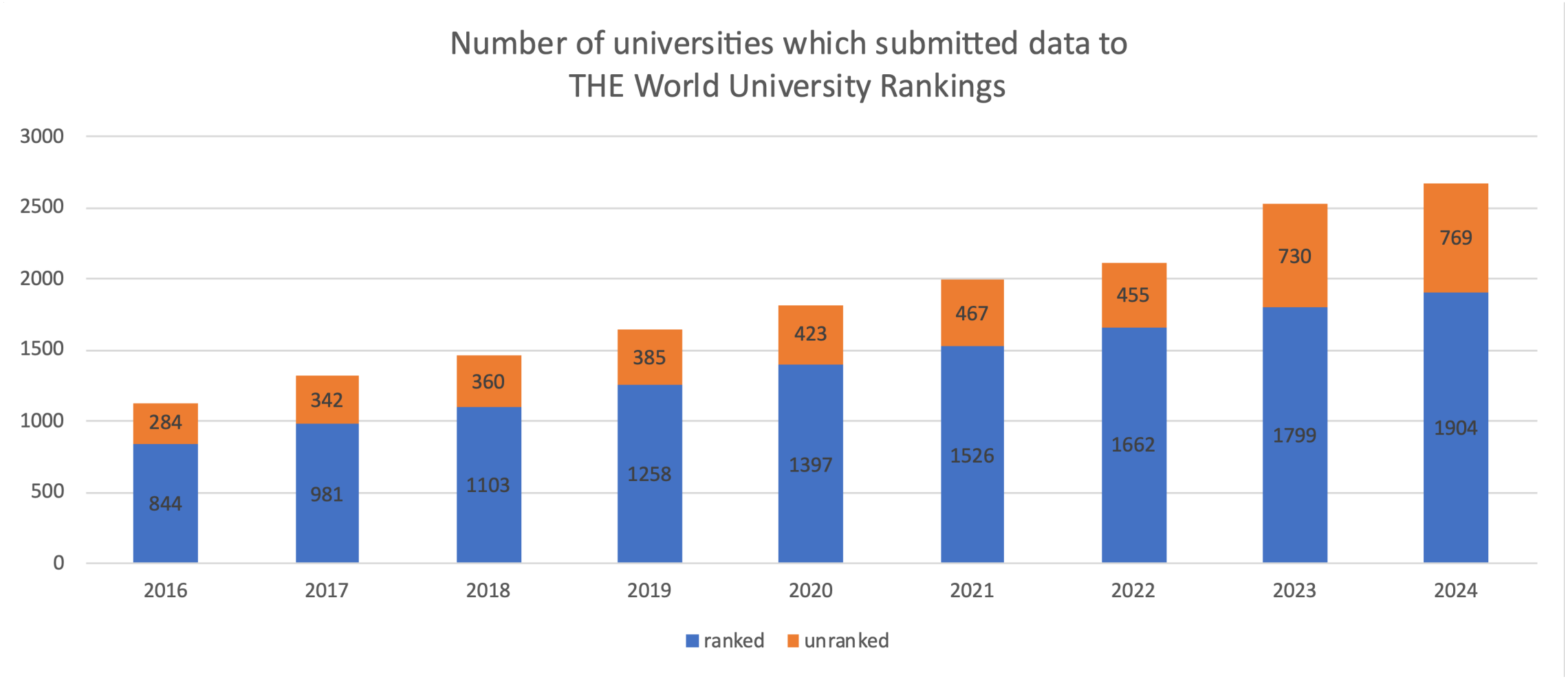
The world's largest academic survey

Respondents
68,402

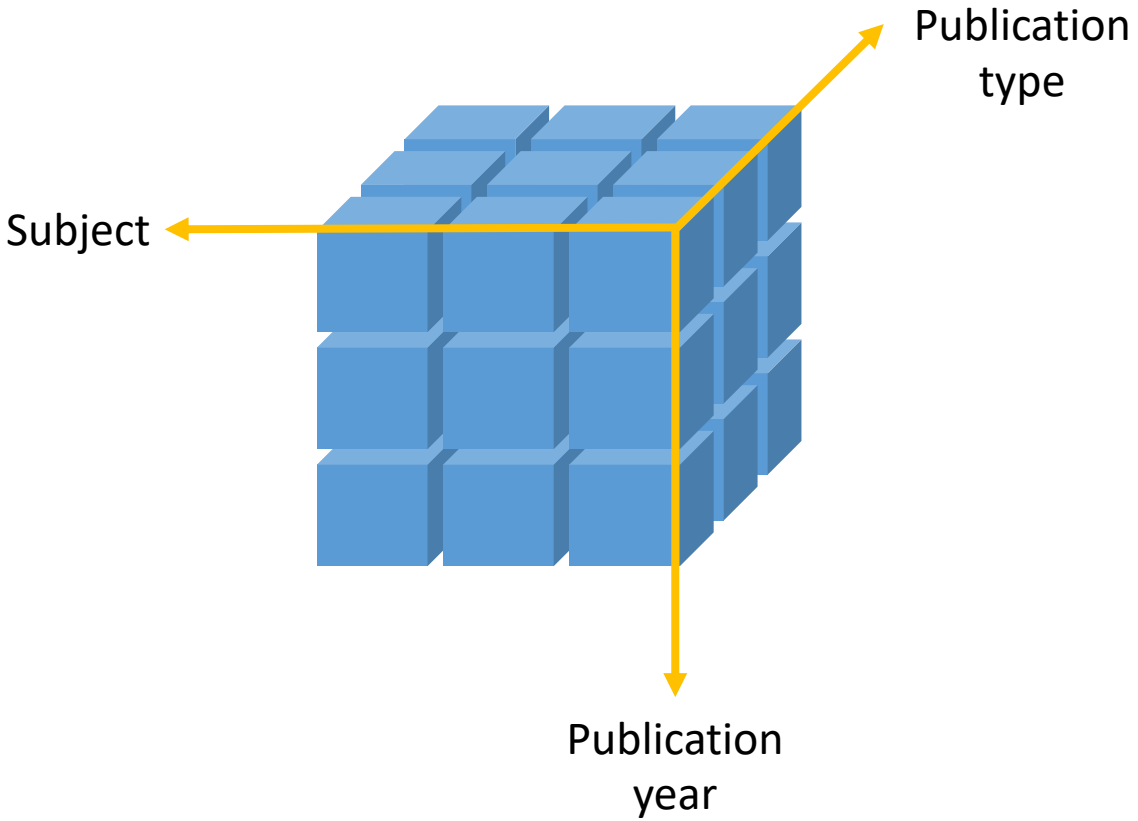
Votes
944,509

Countries
166

20th Anniversary of THE World University Rankings



What is Field Weighted Citation Impact?

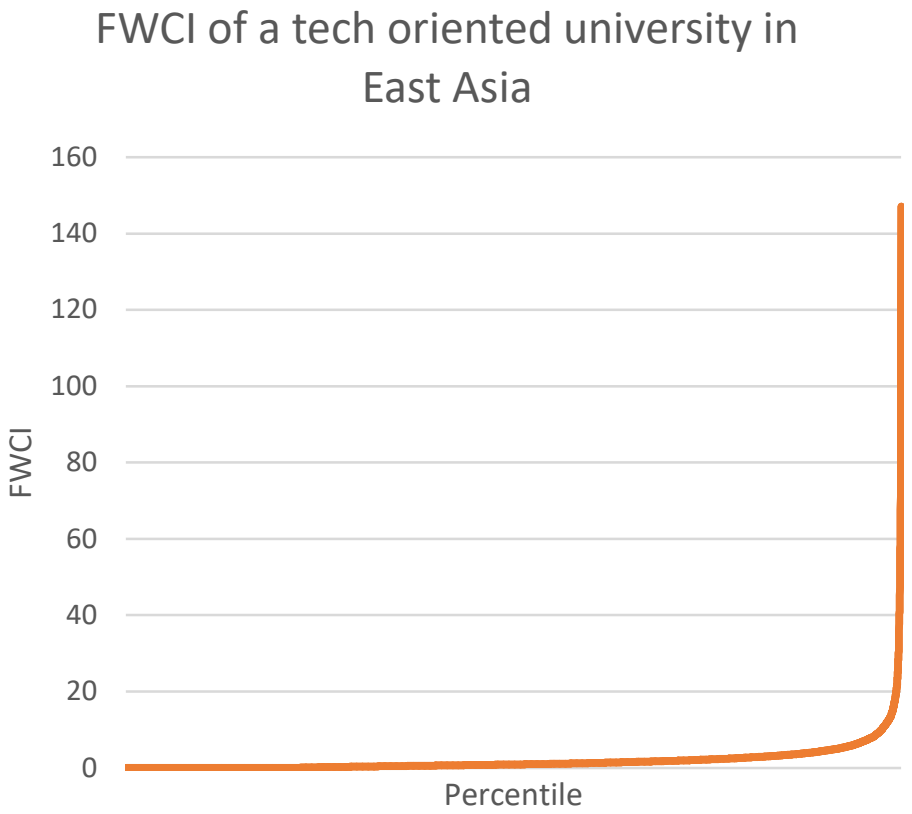


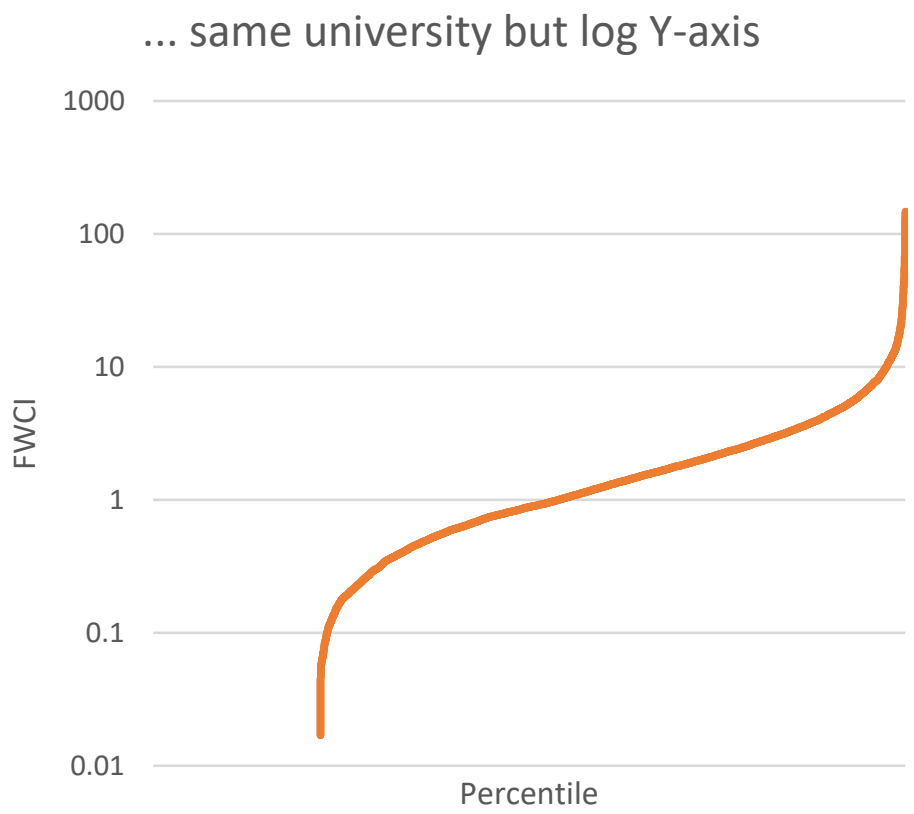
Let's say I published a journal article in 2019 on artificial intelligence, and it received 6 citations so far…

…and the average number of citations received by publications of the same type, same year and same subject is 2…

…then the FWCI of this publication is 6/2 = 3

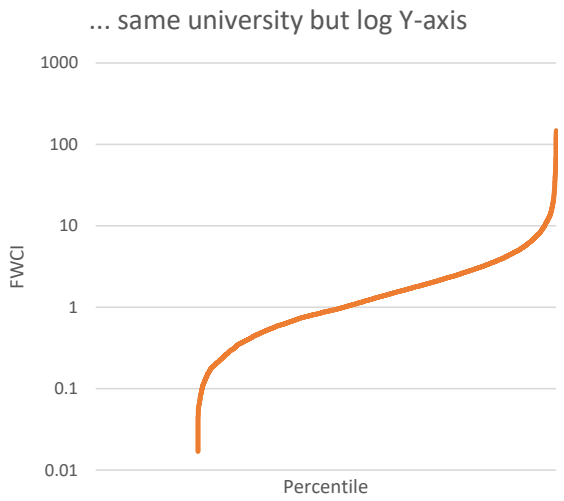
What about FWCI of an author or an institution?





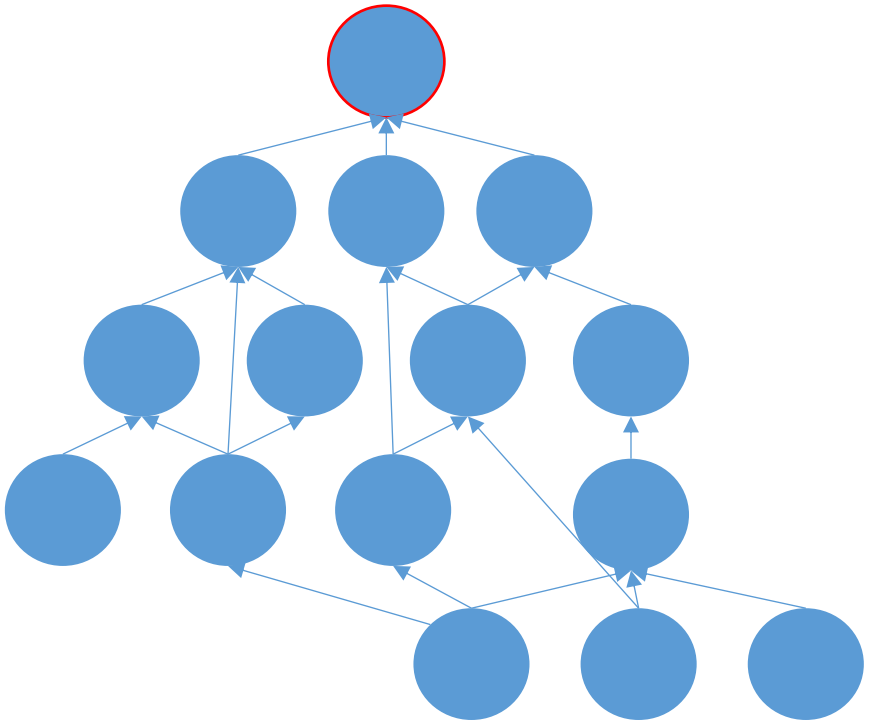
THE World University Rankings Research Quality Metrics

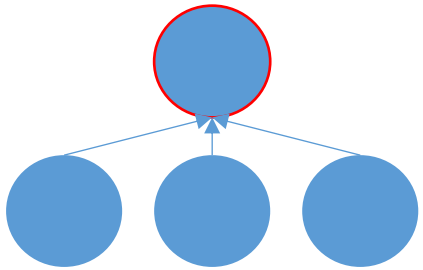
- Citation Impact – Mean FWCI of an institution's output, but with tweaks
  - Kilo-author papers
  - Country normalisation
- Research Strength – 75th percentile FWCI of an institution's output
- Research Excellence – Number of papers in top 10 percent by FWCI
- Research Influence – Different from others research quality metrics
  - Not all citations are created equal
  - Citations from important papers counts more
  - How to define "important papers"?



Research Influence - Papers

Both papers have 3 citations. Which one is likely to be more “influential”?



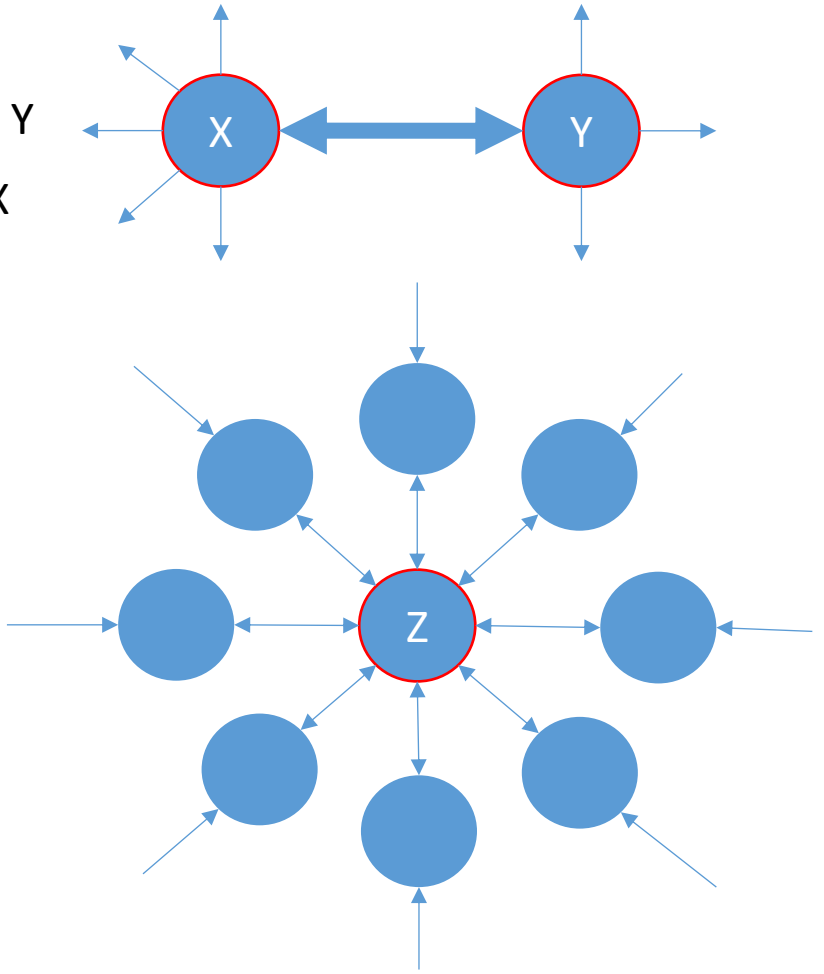




Research Influence - Universities

In Computer Science in 2022:

- University X has a set of papers with 1000 citations, all from University Y
- University Y has a set of papers with 900 citations, all from University X
- Papers from X & Y universities do cite other universities papers
- University Z has a set of papers with 800 citations, from universities around the world, including universities who receive over 10000 citations for all their papers



Papers from University Z had the least citations, but it is the most influential university of these 3.

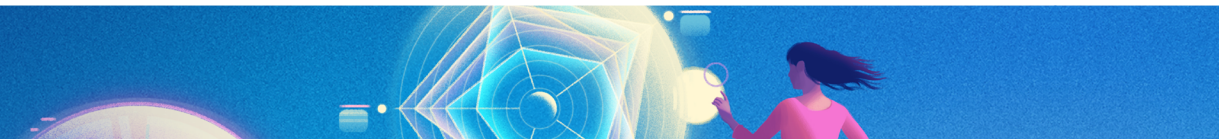
Research Influence – What is it?

Research Influence looks at the network of citations around papers to understand what impact they are having around the world.

In essence, it works like a popularity contest for papers. It's not just about the quantity of citations but also the quality, with citations from reputable papers carrying more weight.

Each paper gets an influence score based on how many other papers cite it and how influential those citing papers are. If a lot of influential papers cite a paper, it gets a higher influence score.

The calculation for Research Influence is based on Google's "Page Rank" algorithm.



Research Influence – How it works

Papers start with the same influence

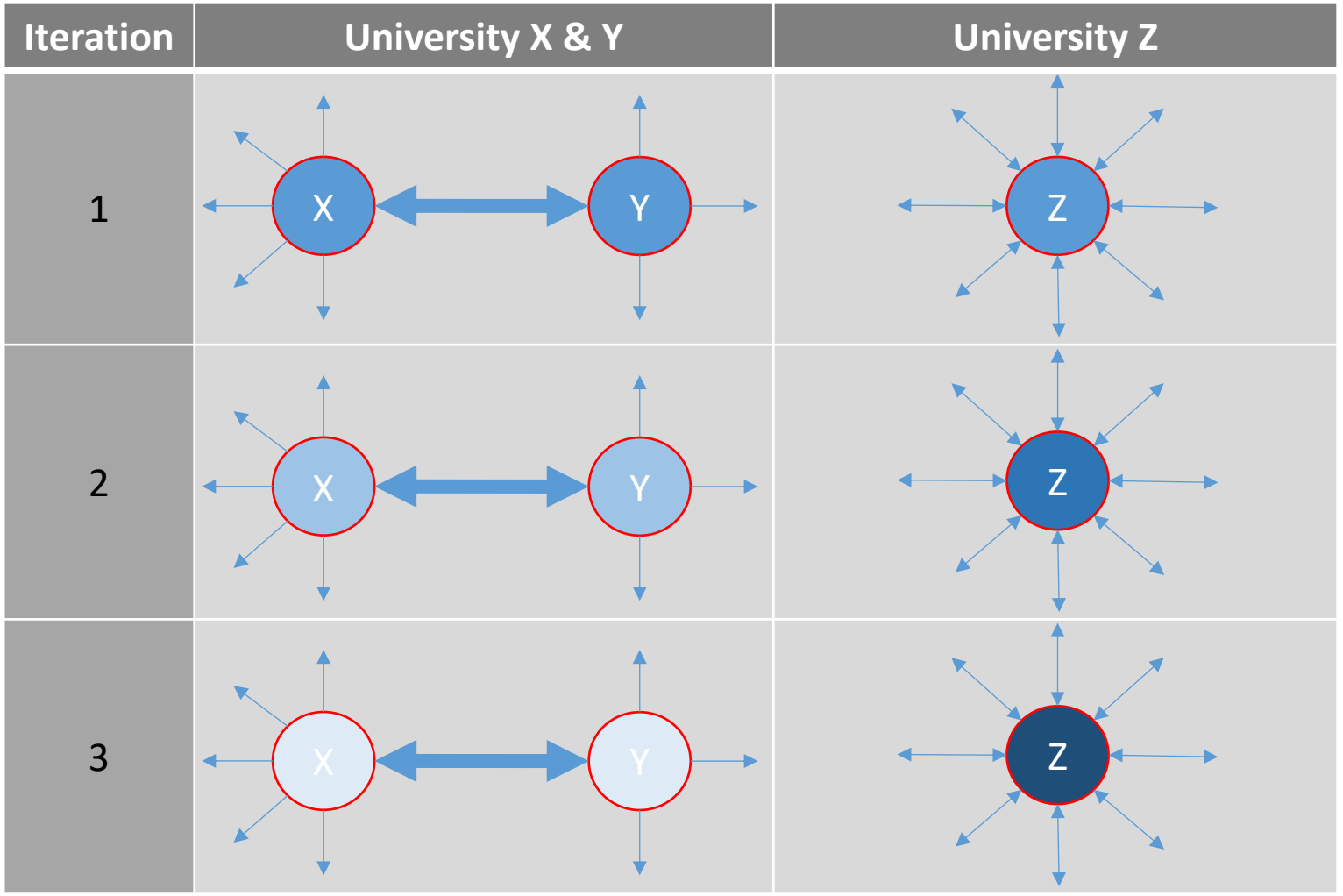
We can then think of some of a papers influence being shared amongst the papers it cites

This process is repeated multiple times through a number of iterations (page rank is an iterative algorithm)

The effect is that papers that are well connected receive more influence scores than from papers that aren't

This is then rolled up to the university level to calculate university influence

The diagram shows the effect at university level which is an aggregation of the papers produced by the university; this is done to aid understanding.
The algorithm works at the paper level.



Deeper Blue indicates more Research Influence

Industry: Patents

- The extent to which universities are supporting their national economies through technology transfer is an area that deserves greater recognition. We will be introducing an additional measure.

- Directly measures research output, specifically how much an institution's research is cited by patents. This is similar to one that we already use within the THE Impact Rankings (in SDG 9: Industry, Innovation and Infrastructure).

- This measure is subject weighted to avoid penalising universities producing research in fields low in patents.

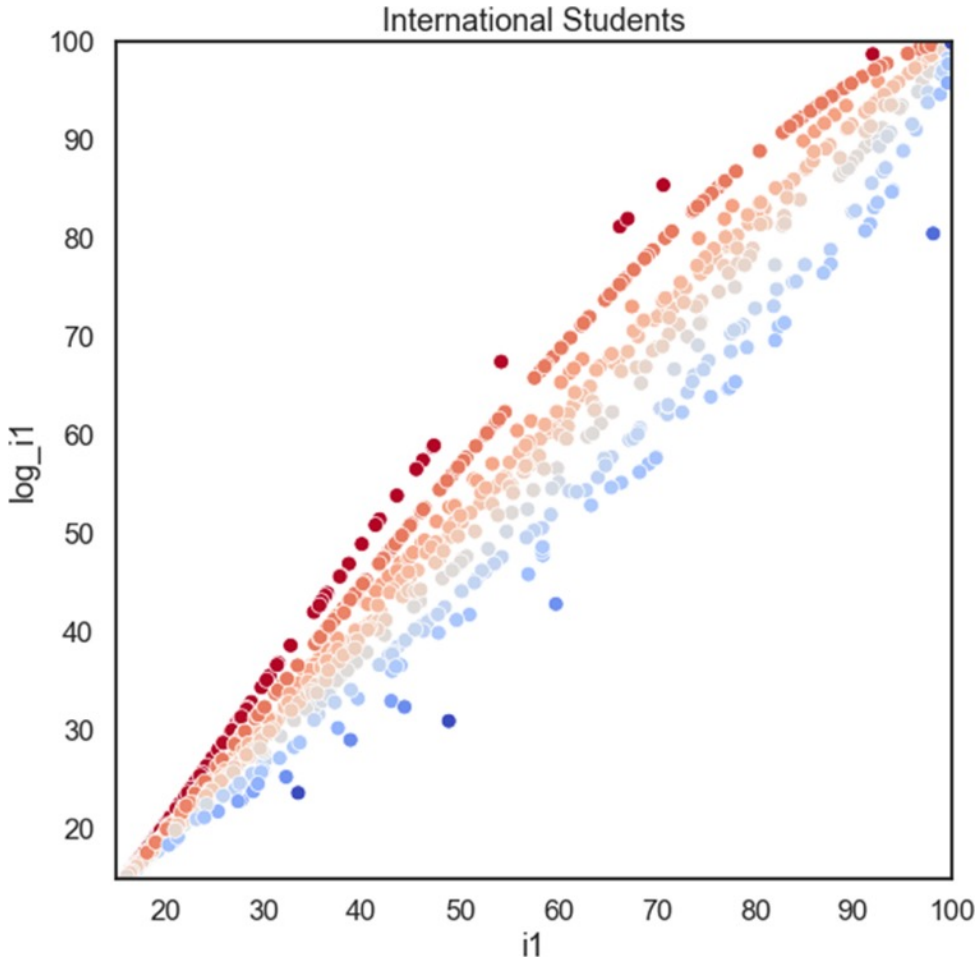
- This is a count of patents, normalised by staff numbers.

International Outlook

- Large countries had been disadvantaged compared to small countries in our international metrics, in that it is “easier” for staff and students in small countries to work/study abroad.

- The existing metrics is now normalised to account for the populations size:
  - Proportion of international students
  - Proportion of international staff
  - Proportion of publications with at least one co-author from an international institution

- New Studying abroad metric at zero weight

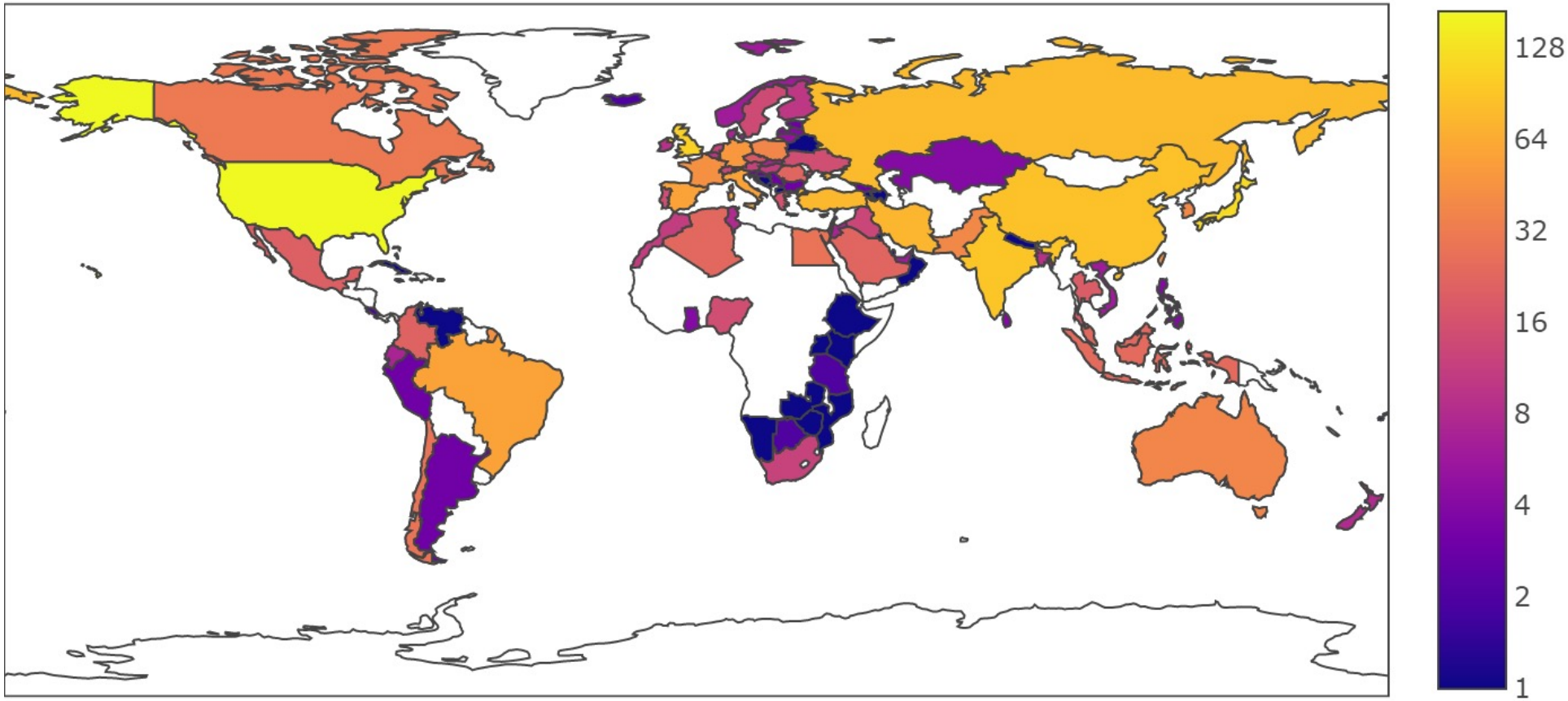


Africa Trends and Analyses

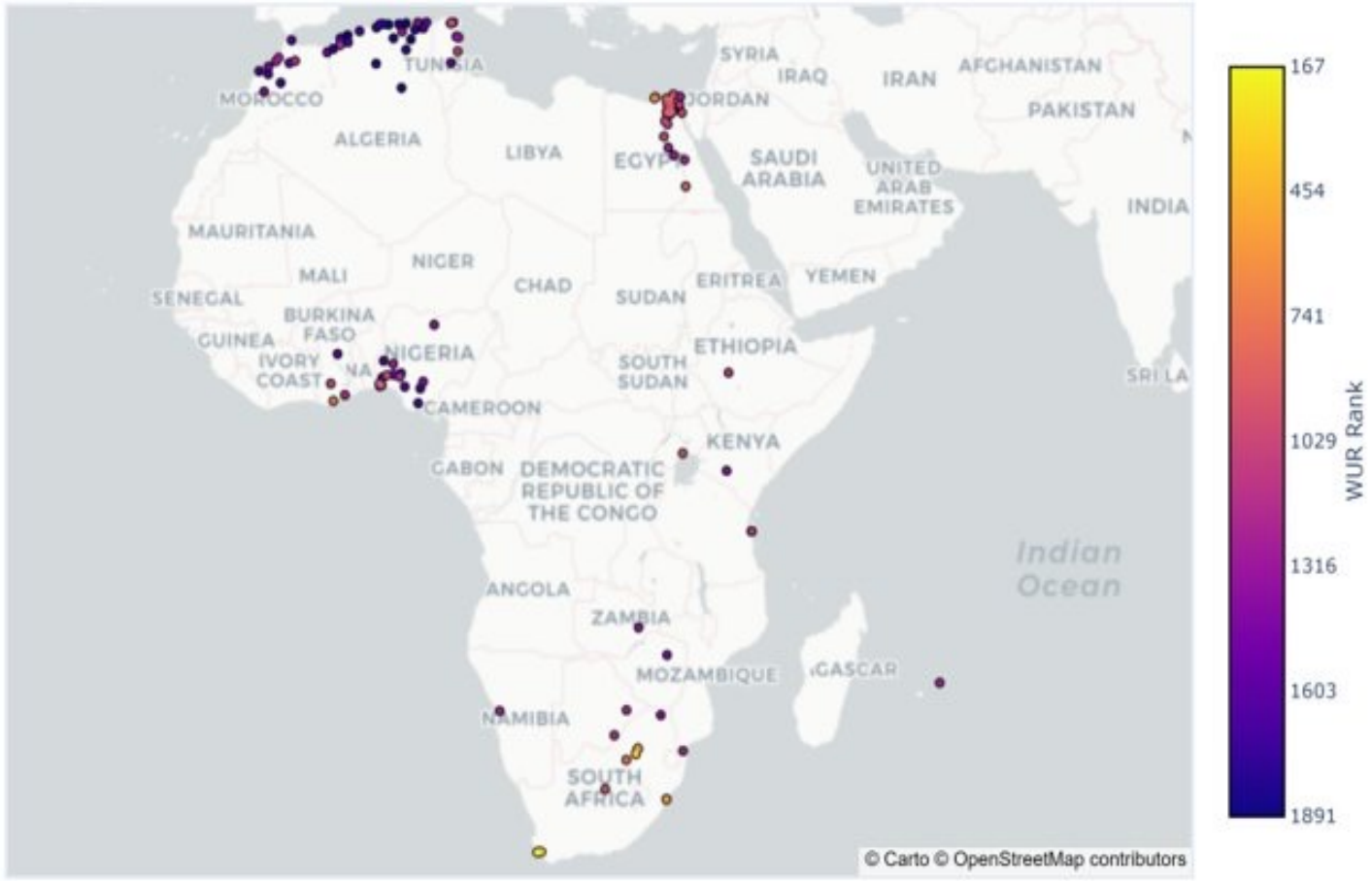


Universities per country in the World in WUR 2024

There are a total of 1904 institutions in The World ranked in the World University Rankings 2024, from 108 countries
113 institutions from Africa were ranked.



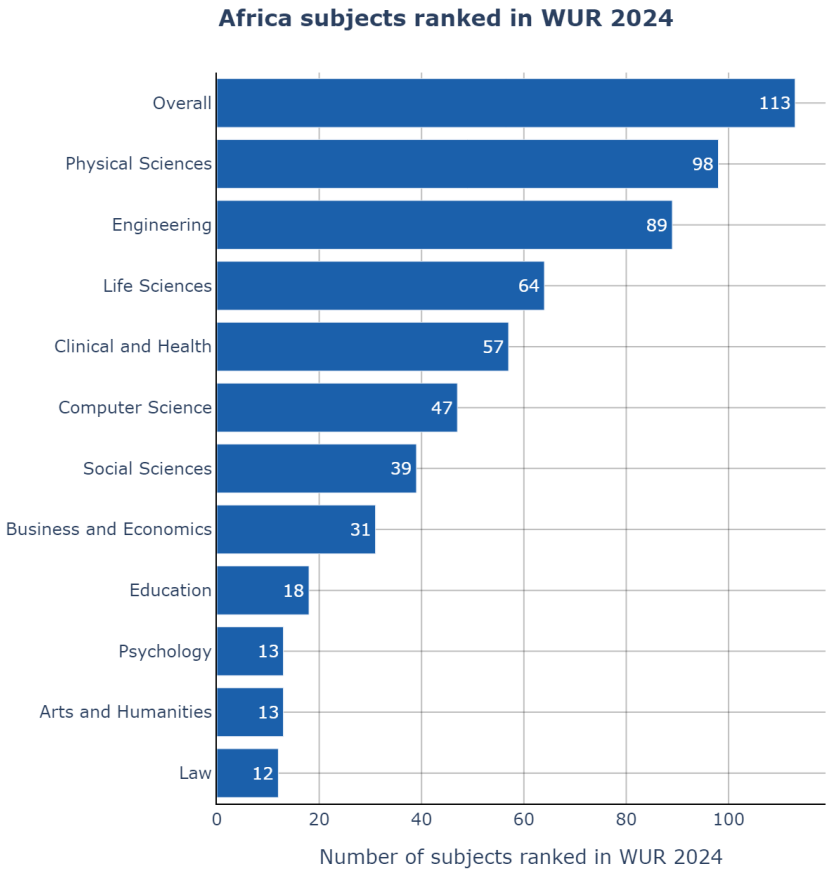
Representation and Growth

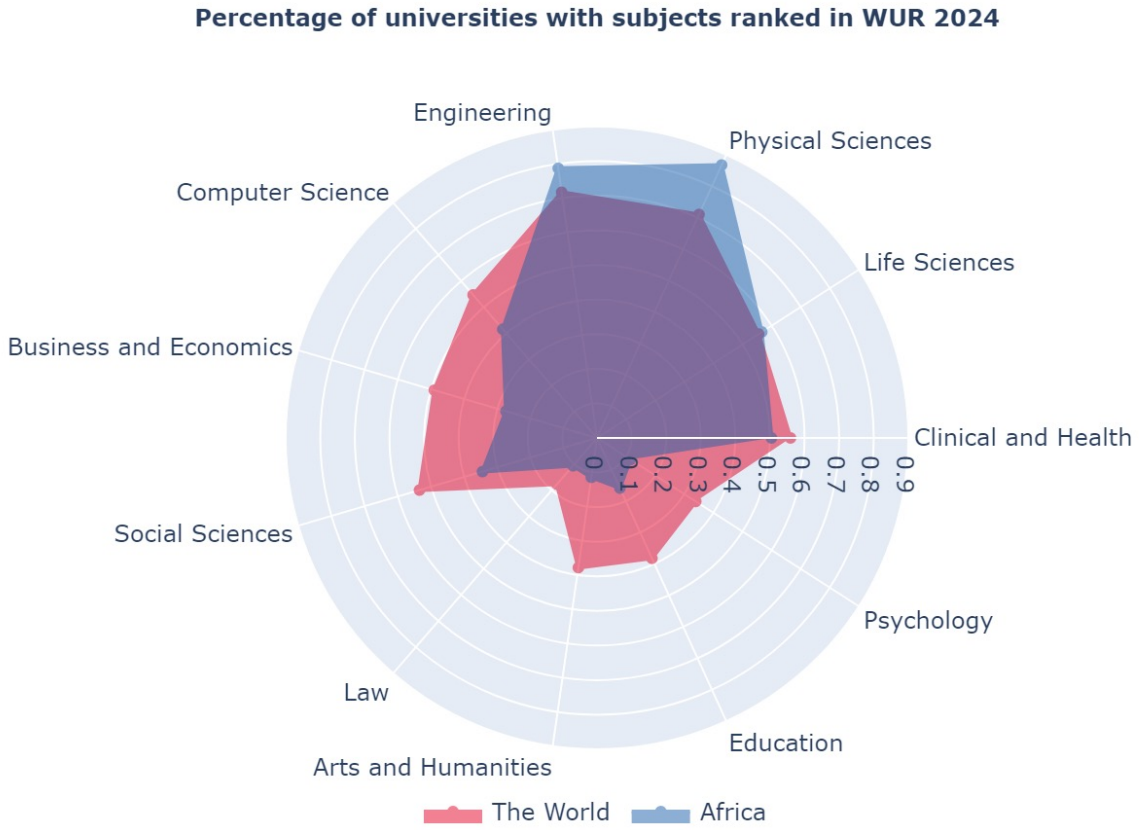


	The World	Africa
2018	1258	48
2019	1397	57
2020	1526	63
2021	1662	71
2022	1799	97
2023	1904	113

The top ranked university in Africa is University of Cape Town, which is ranked 167th

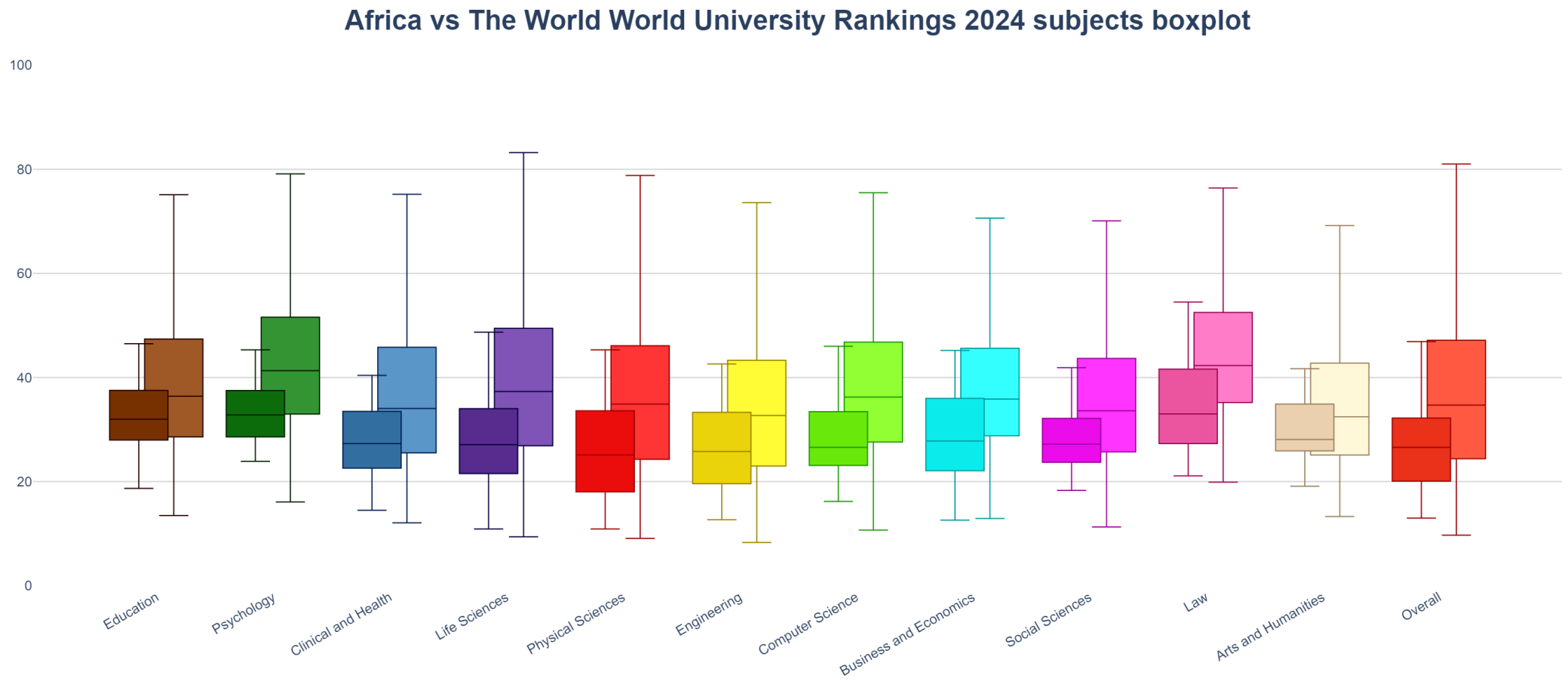
Representation & Growth





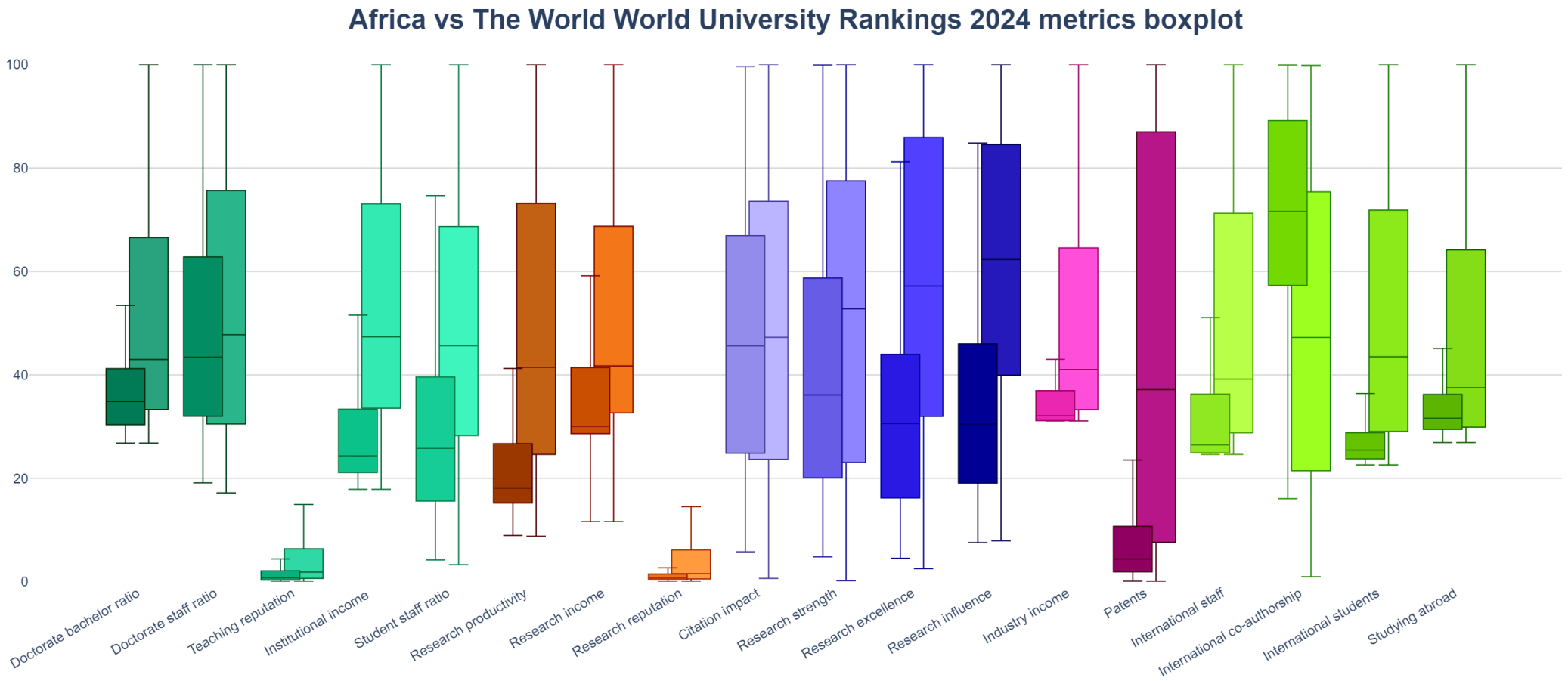
Across Africa, Physical Sciences was the most frequently ranked subject in 2024 where it was ranked for 98 universities.
Law was the least frequently ranked subject in 2024 with just 12 universities ranked.

Africa vs the World WUR 2024 subjects comparison



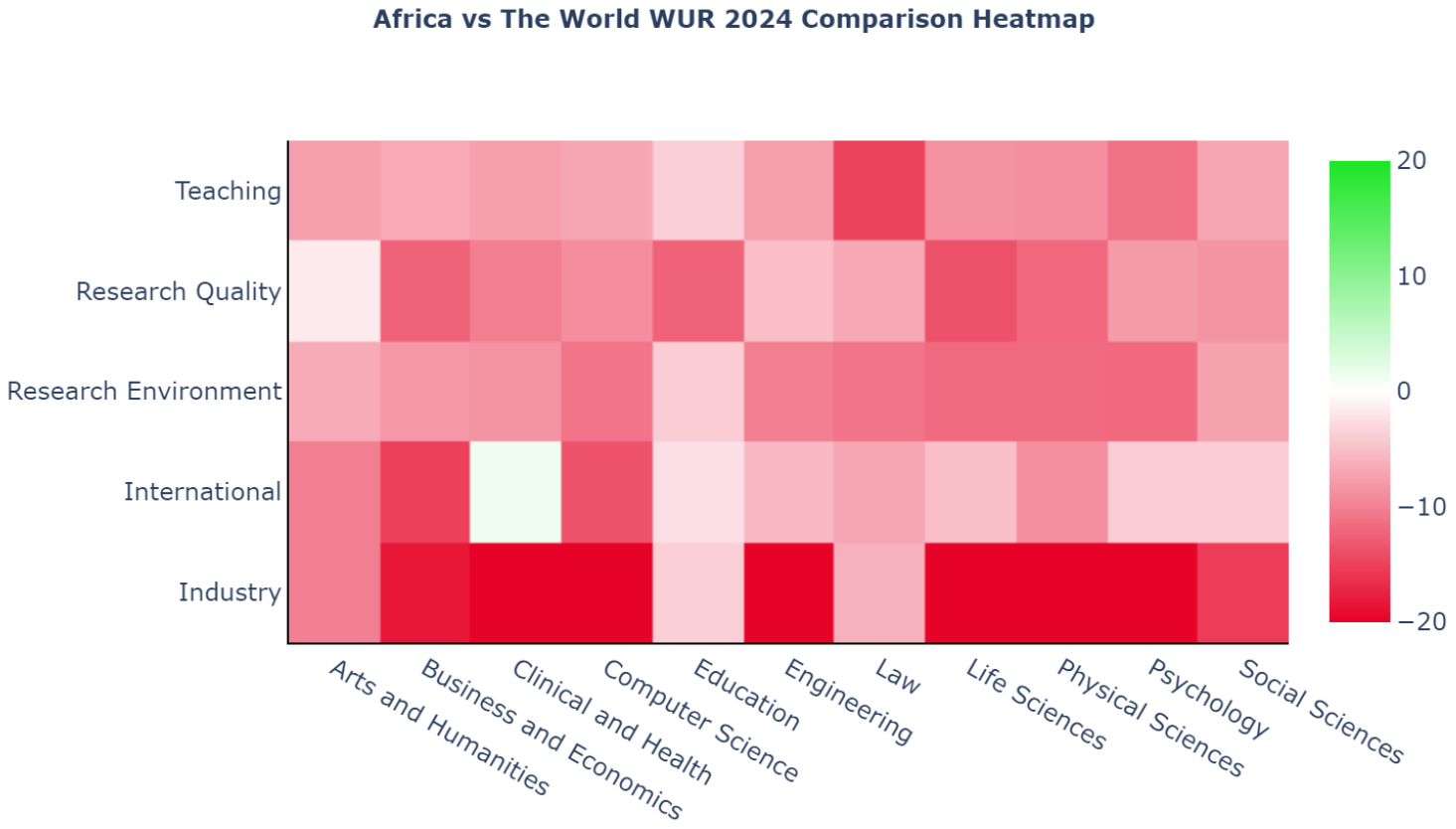
The boxes for Africa are on the left, the boxes for The World are on the right

Africa vs the World WUR 2024 metrics comparison



The boxes for Africa are on the left, the boxes for The World are on the right

Africa vs the World WUR 2024 comparison heatmap



High Growth Areas

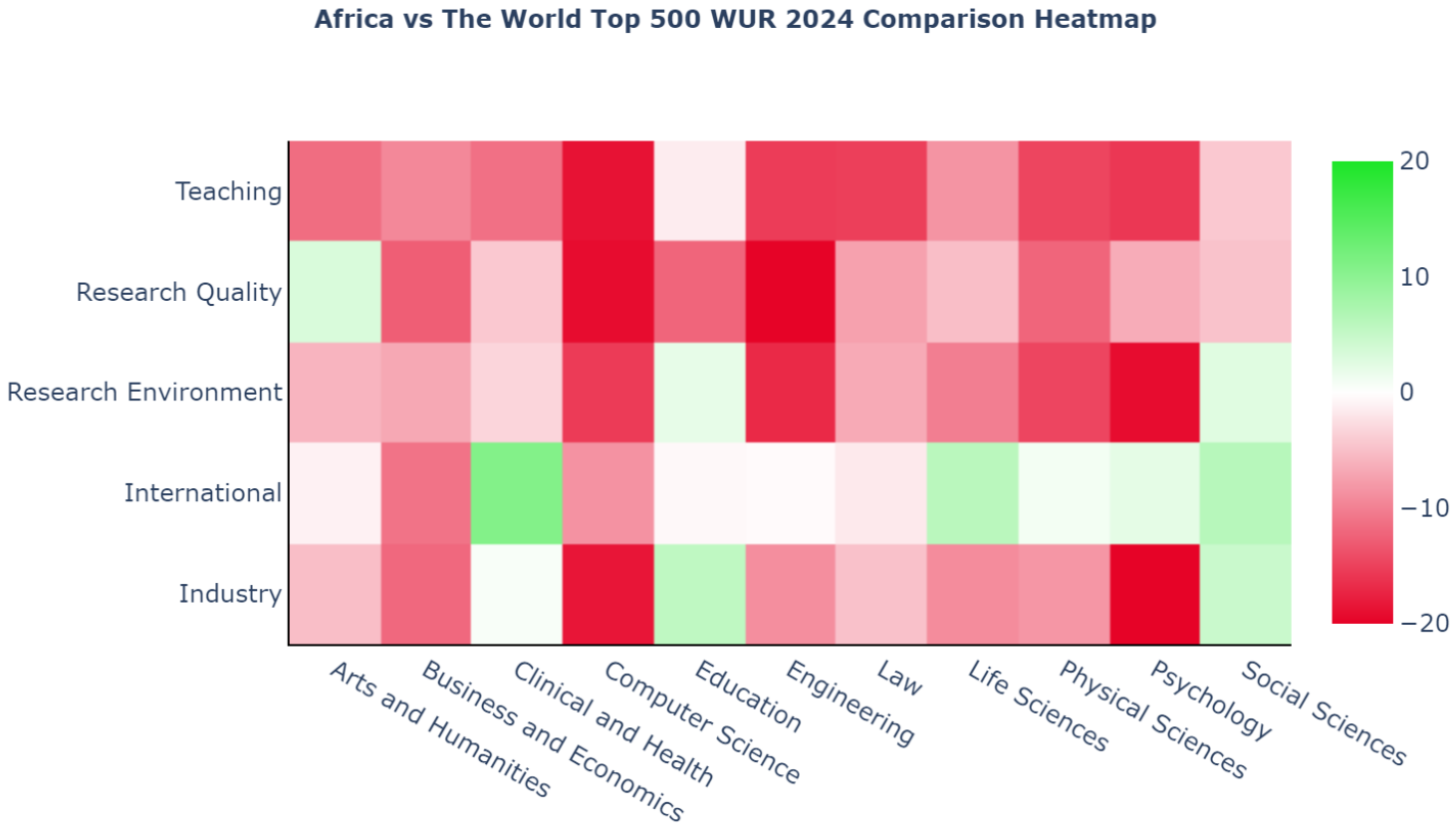
Clinical and Health - International
Arts and Humanities - Research Quality
Education - International
Education - Industry
Education - Teaching

Low Growth Areas

Computer Science - Industry
Engineering - Industry
Life Sciences - Industry
Physical Sciences - Industry
Psychology - Industry

The heatmap shows the difference in scores between Africa and The World, with green representing a higher score for Africa

Africa vs the World Top 500 comparison heatmap



High Growth Areas

Clinical and Health - International
Social Sciences - International
Life Sciences - International
Education - Industry
Social Sciences - Industry

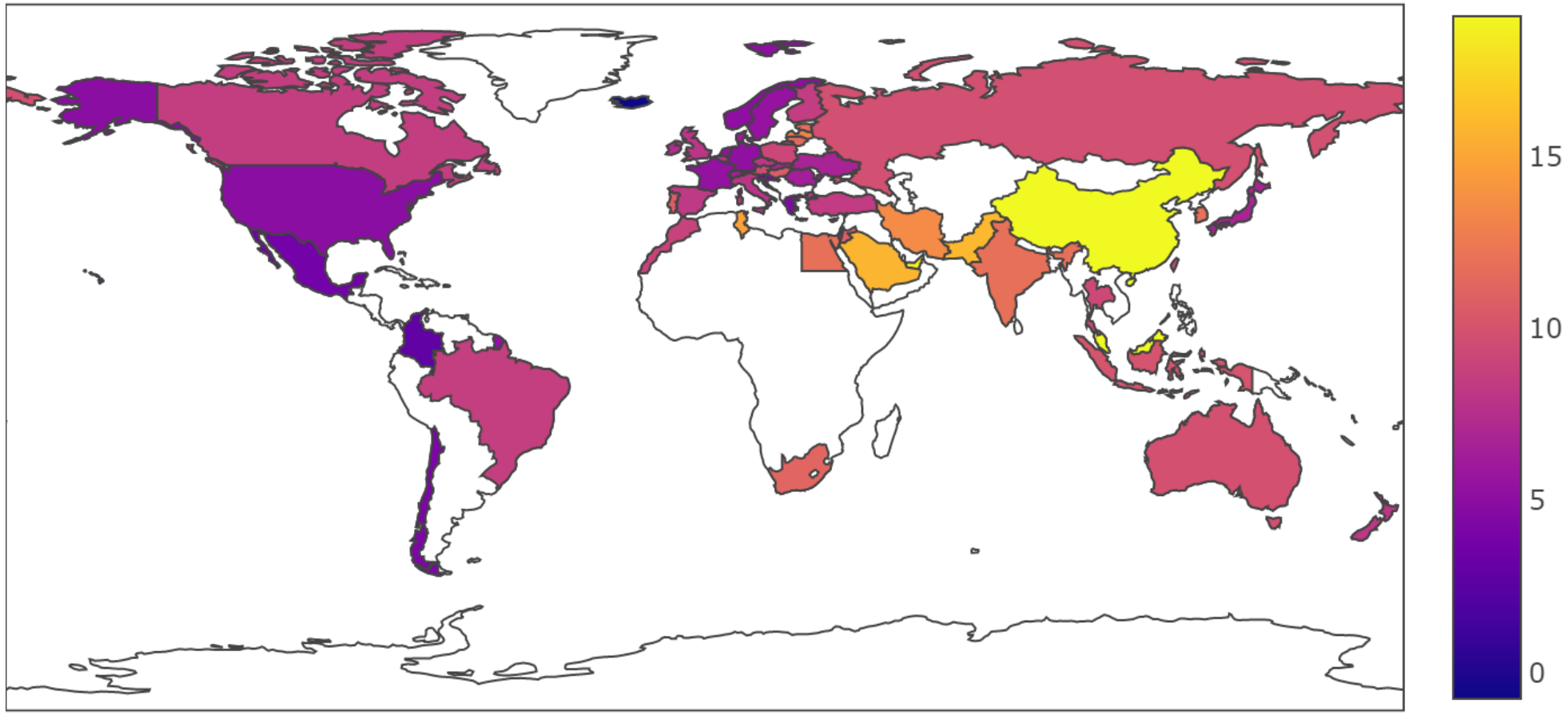
Low Growth Areas

Psychology - Industry
Engineering - Research Quality
Computer Science - Research Quality
Psychology - Research Environment
Computer Science - Teaching

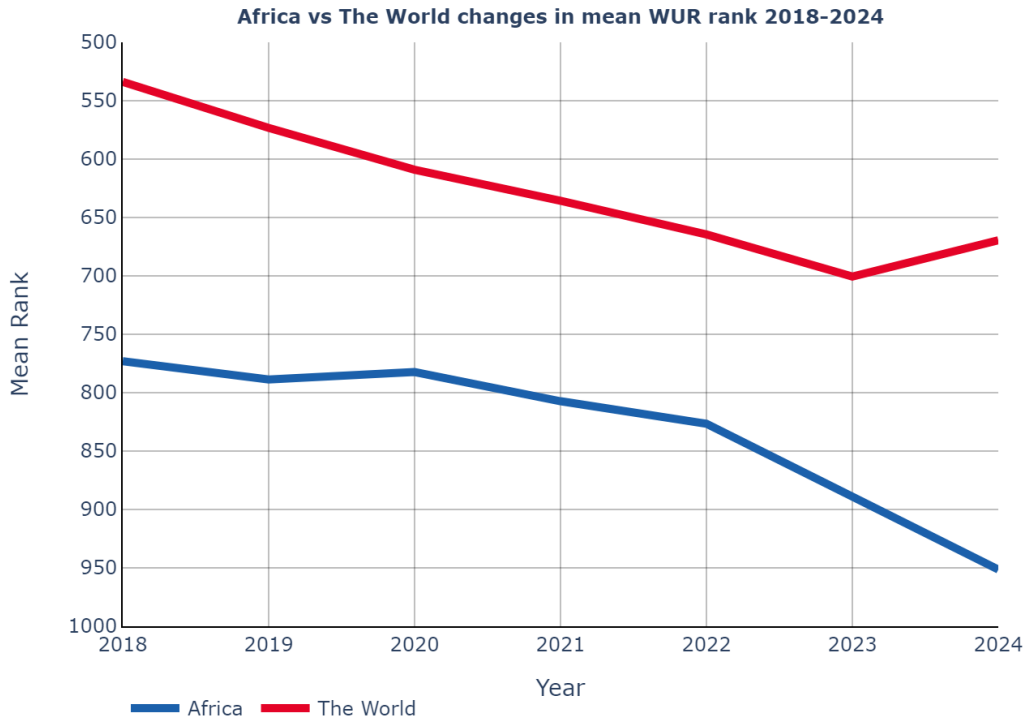
The heatmap shows the difference in scores between Africa and The World Top 500, with green representing a higher score for Africa

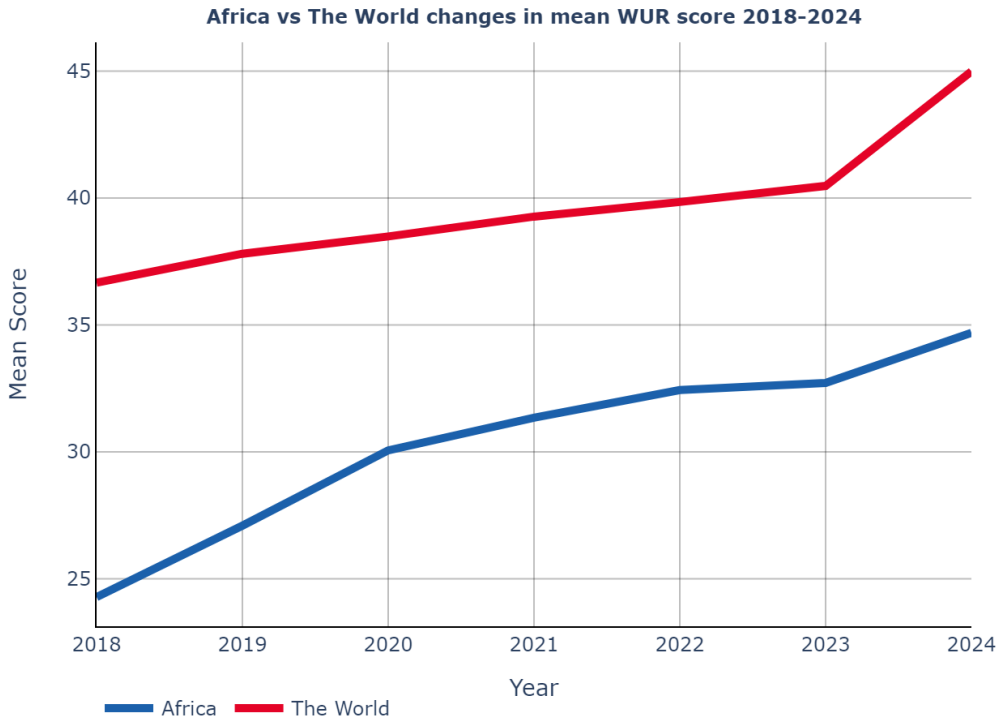
Countries average WUR score changes 2018-2024

The WUR Score for Africa has increased by an average of 10.4 between 2018 and 2024, The World has increased by an average of 8.3 during the same period.



Africa vs The World 2018-2024 Overall WUR changes

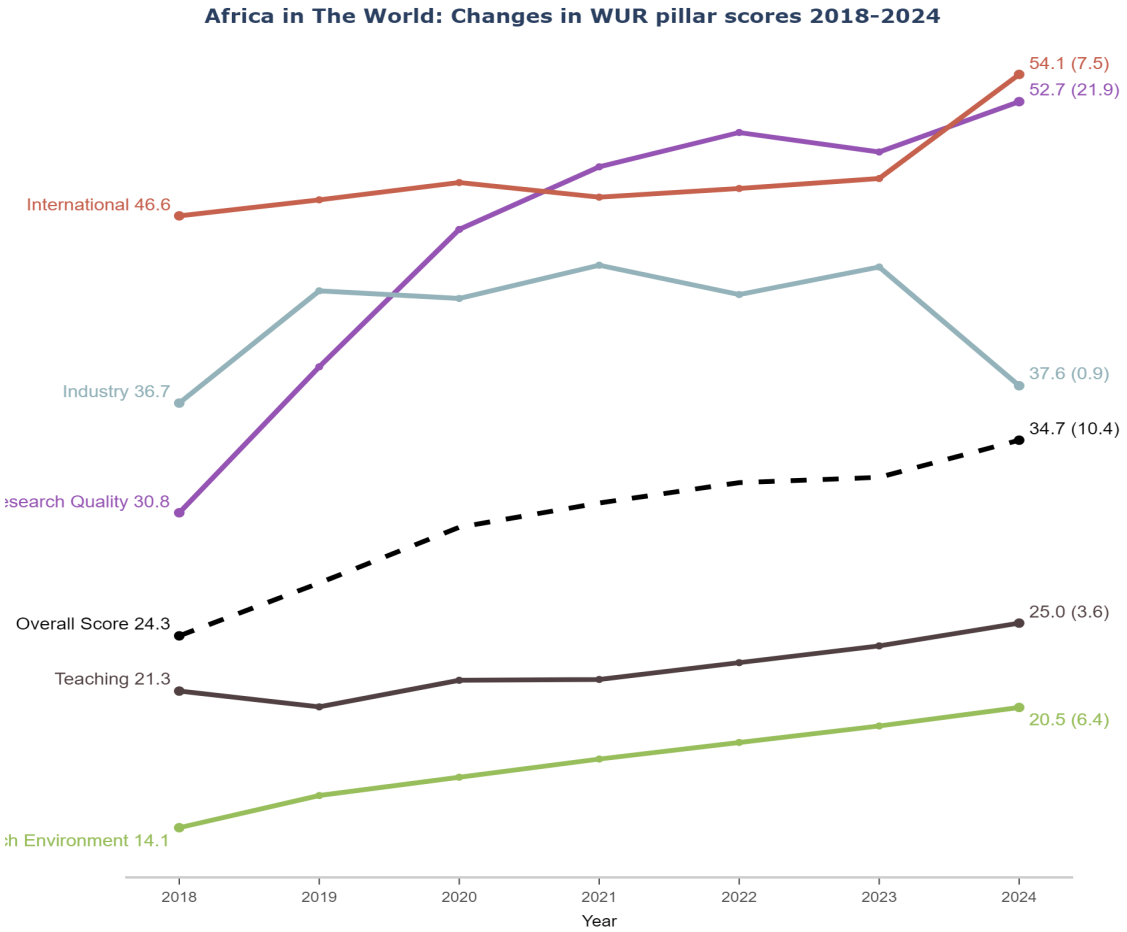




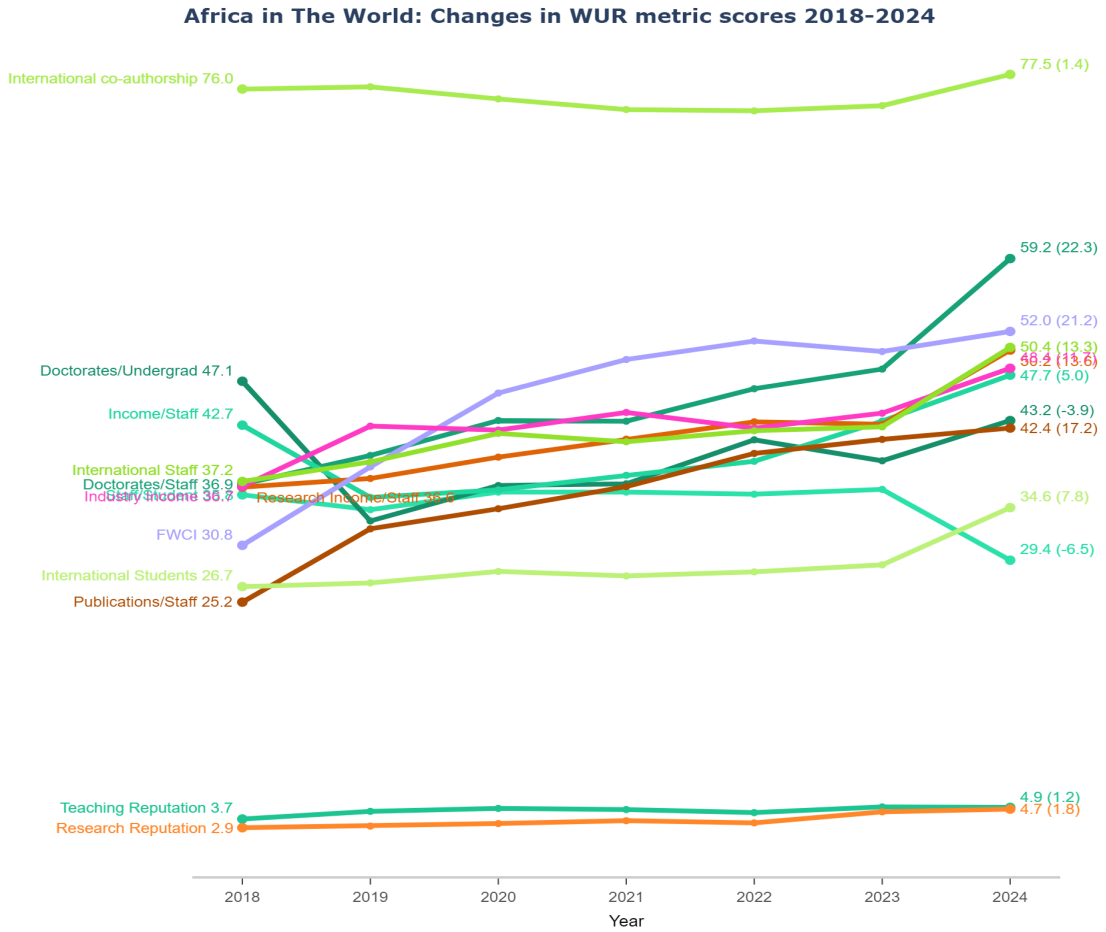
The WUR rank for Africa has decreased by an average of 178 between 2018 and 2024, The World decreased by an average of 136. Note that the number of universities in WUR has risen from 1103 in 2018 to 1904 in 2024.

The WUR Score for Africa has increased by an average of 10.4 between 2018 and 2024, The World has increased by an average of 8.3 during the same period.

Africa in The World changes in WUR scores 2018-2024

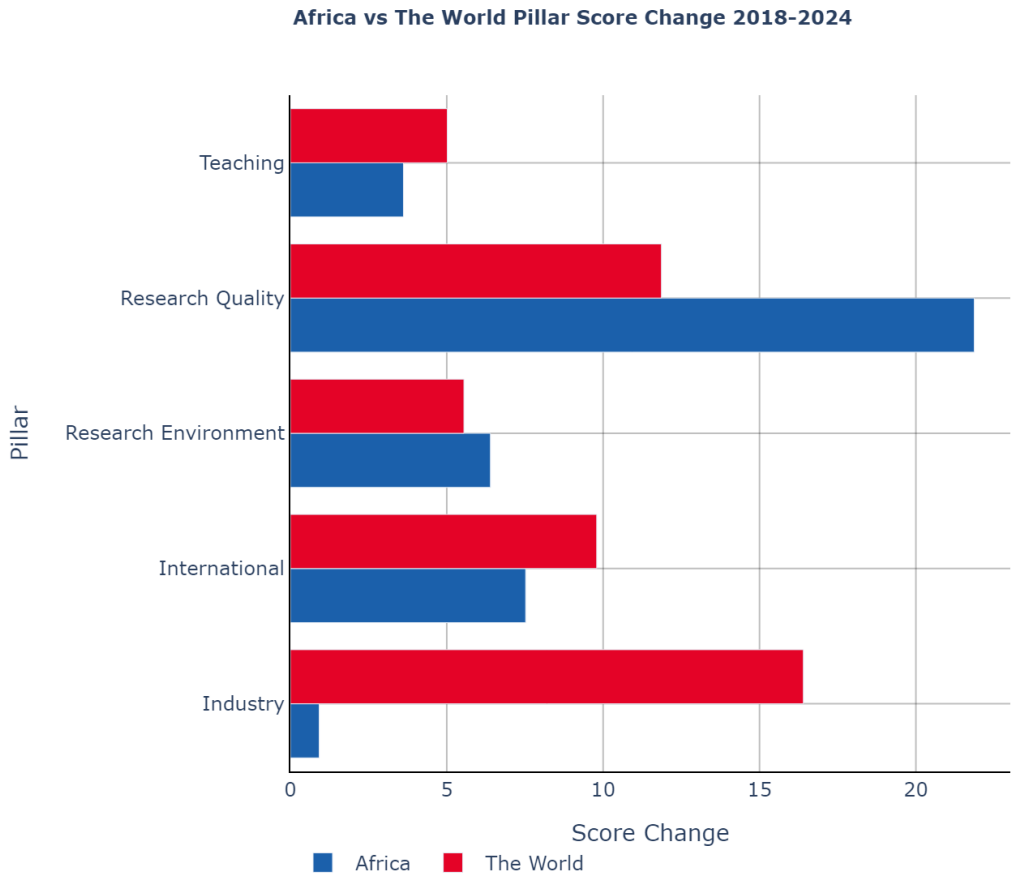


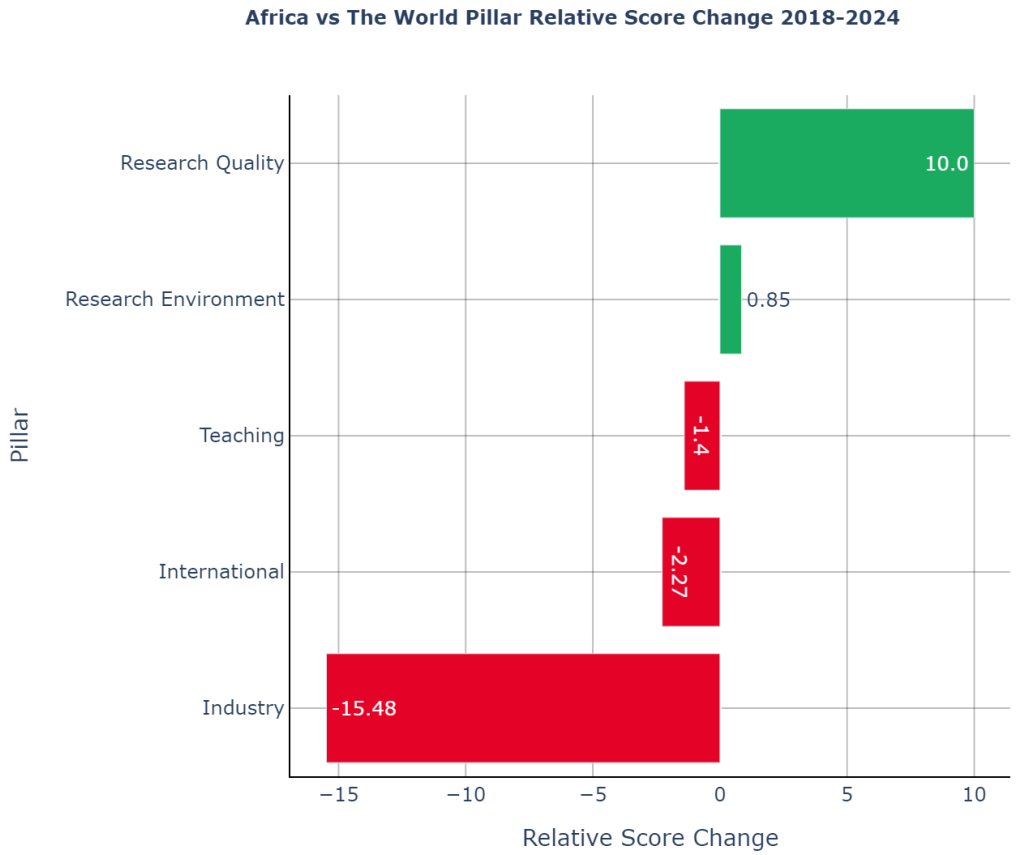
Between 2018 and 2024, the Research Quality score has increased by an average of 21.9.



Between 2018 and 2024, the Doctorates/Staff score has increased by an average of 22.3. Conversely, the Staff/Student score has decreased by an average of 6.5

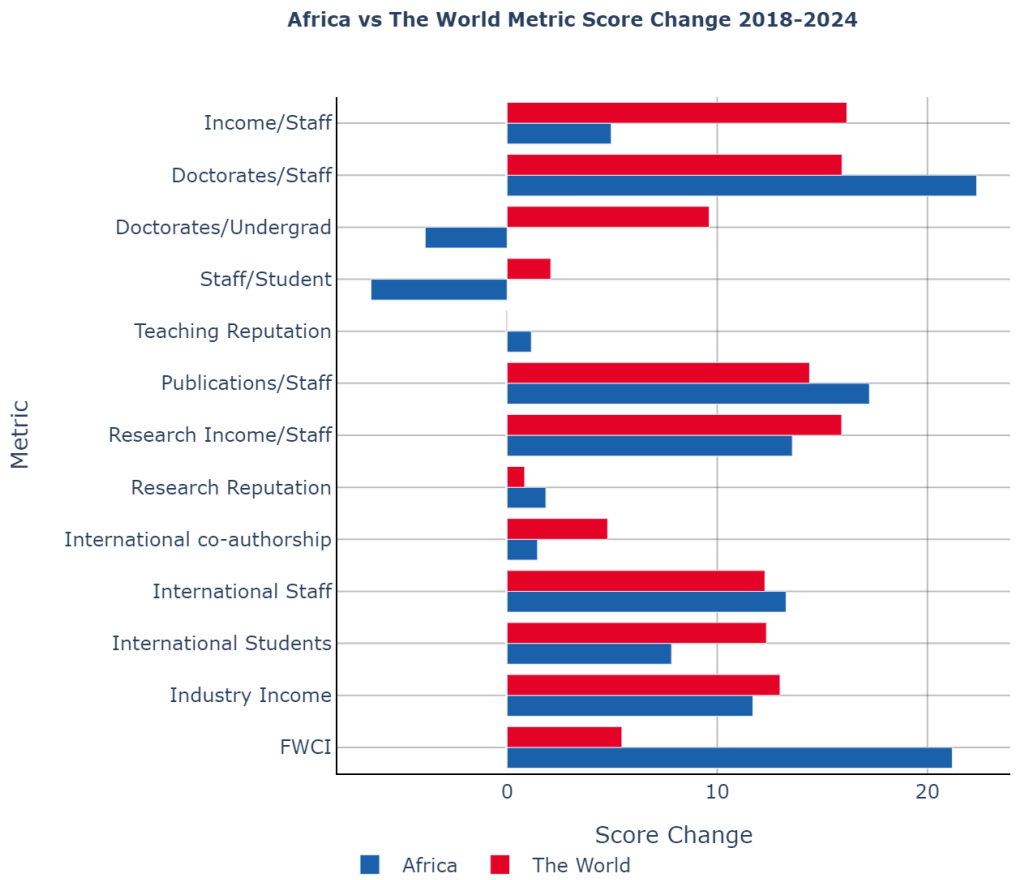
Africa vs The World 2018-2024 Pillar changes

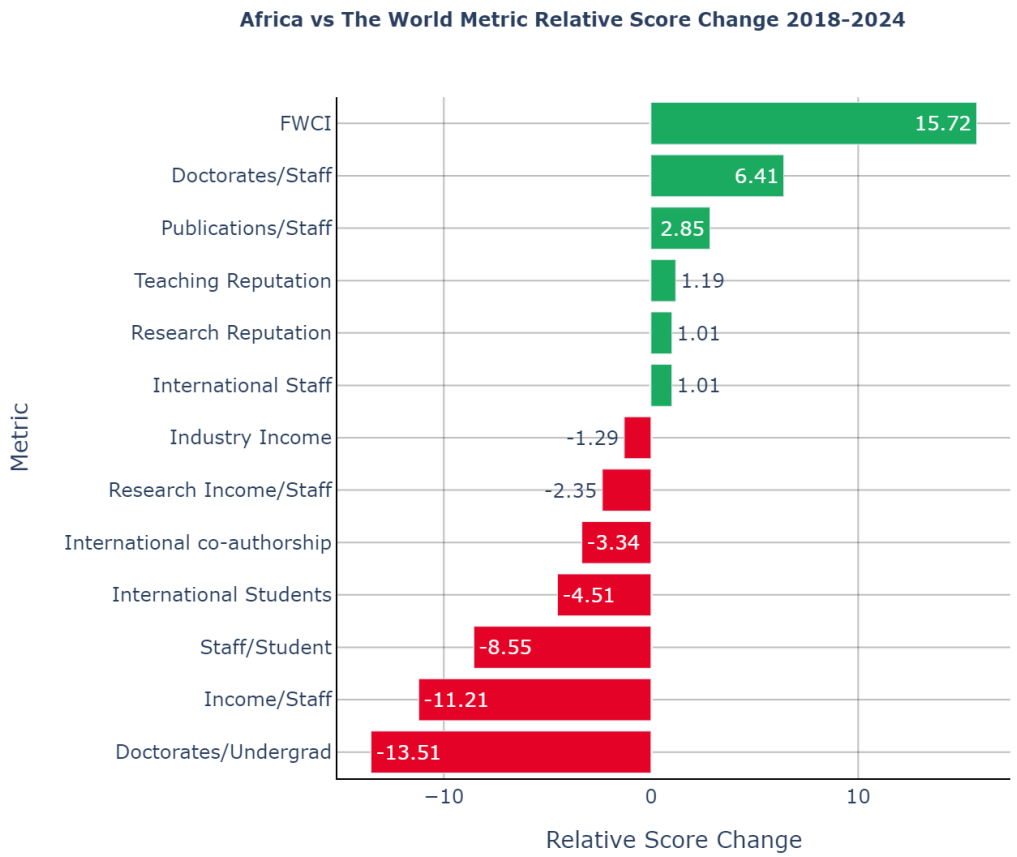




Between the years 2018 and 2024 Africa has improved in the Research Quality, Research Environment pillars in comparison with The World, but has dropped in Industry, International, Teaching

Africa vs The World 2018-2024 Metric changes





Between the years 2018 and 2024 Africa has improved in the FWCI, Doctorates/Staff, Publications/Staff, Teaching Reputation, Research Reputation, International Staff metrics in comparison with The World, but has dropped in Doctorates/Undergrad, Income/Staff, Staff/Student, International Students, International co-authorship, Research Income/Staff, Industry Income

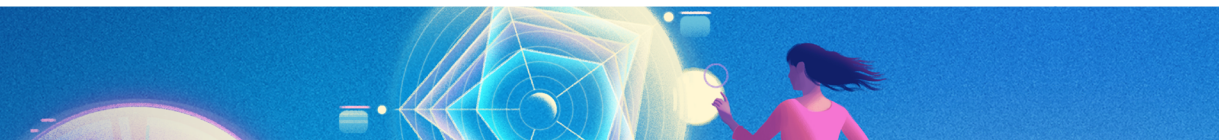
How to participate?



Eligibility Criteria

Participation in THE World University Rankings (or any other THE rankings) is always free of charge. However, there is a set of eligibility criteria

- Must teach at undergraduate level
- Publication requirements
  - At least 1000 publications in 5 years
  - At least 150 publications each year
  - Separate publication requirements for the subject rankings
- Must not be a subject specialist



How to take part

We need your help for the **institutional data**

1. Nominate a Data Provider

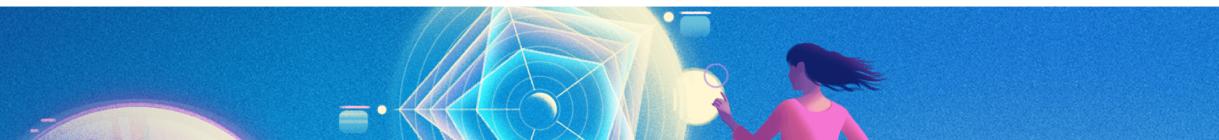
A Data Provider for your institution will need to be nominated.

Please email us at profilerankings@timeshighereducation.com

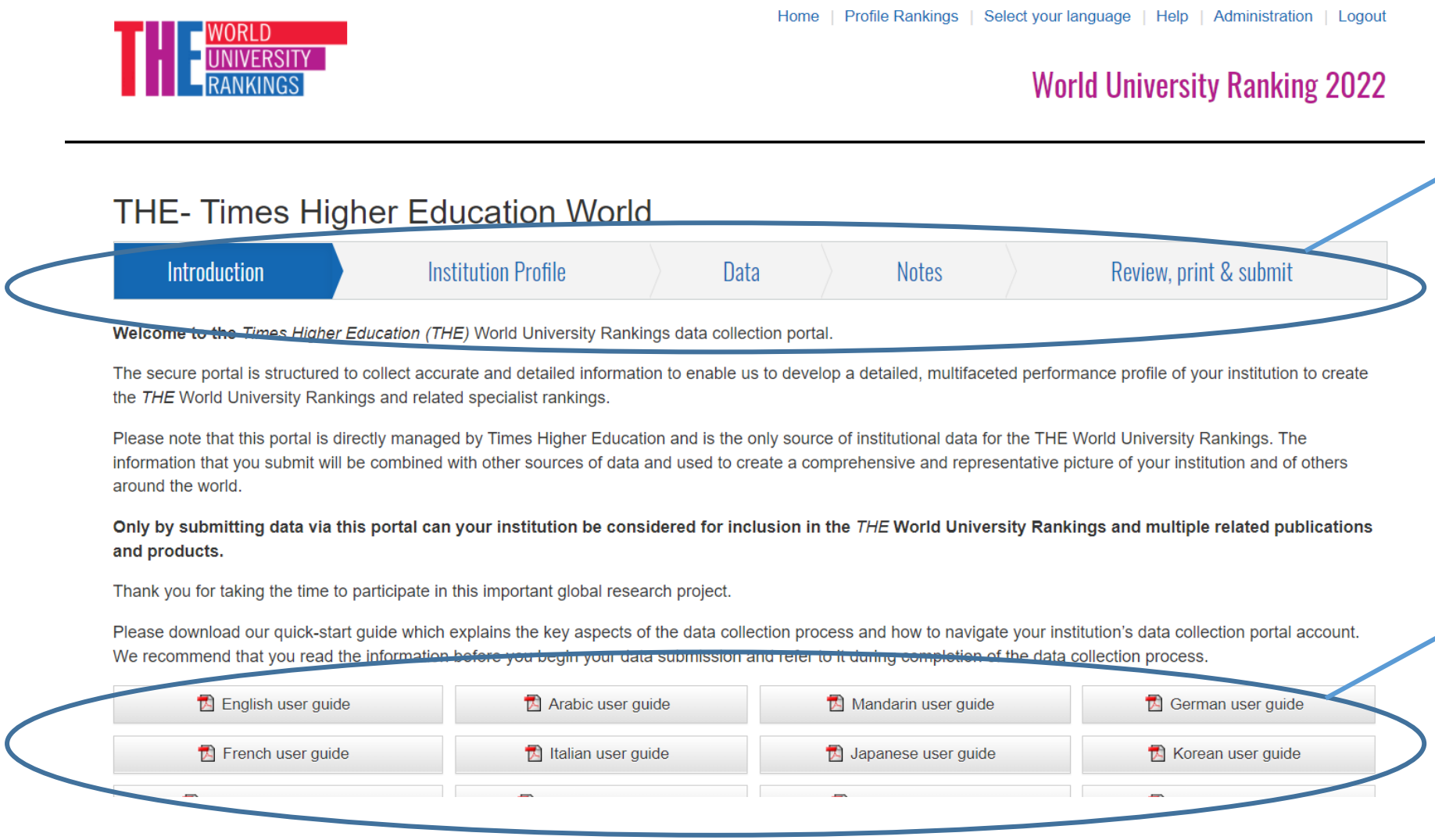
2. Connect to the Portal

Your Data Provider will receive login details to connect to the Data Collection Portal

The Portal will be open between 8 January and 30 March 2024



Data Collection Portal 1/3



Complete the stages of the data collection process

Data collection materials are available for download in 12 languages

Data Collection Portal 2/3

We collect **data** at the institution level and in our 11 subjects

- Staff and international staff
- Students and international students
- Undergraduate degrees awarded and doctorates awarded
- Income data

Since 2022: outbound exchange students

Art and Humanities

Business and Economics

Clinical and Health

Computer Science

Education

Engineering

Law

Life Sciences

Physical Sciences

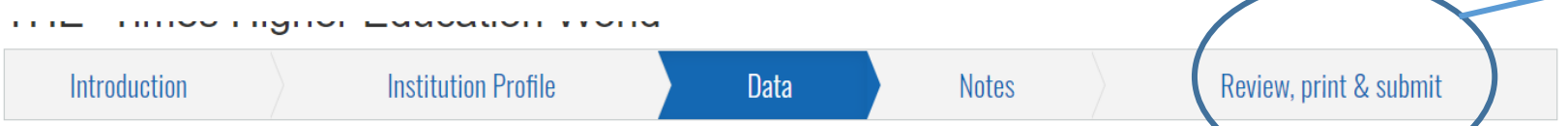
Psychology

Social Sciences



Data Collection Portal 3/3

Once you finish data entry, please go to this tab to review and submit your data



Please provide information about the teaching and research activities of your institution. The more data that you share, the more meaningful your profile will be.

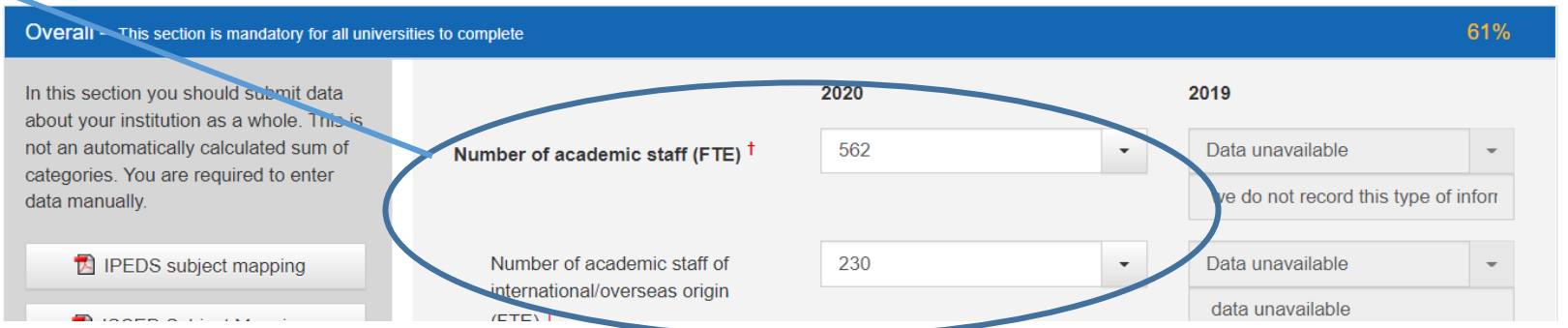
Please note that all information should be entered in English. Click on each of the sections below and complete your data.

Important notes

- Please provide data about people as full-time equivalents (FTE), with no commas or thousand separators (e.g. 18742.5).
- Please note that the income data we request at the subject level (total institutional income, research income, research income from industry and commerce) needs to be broken down by subject. Please DO NOT replicate the income data from the overall level into the subject level. Ideally, any data at the subject level should add up to the data at the overall level.
- Please provide monetary data in the currency selected and report in whole numbers (i.e. 17865456) with no punctuation. Thousands separators and decimal points are not permitted.
- If you are finding it difficult to complete the mandatory fields or in completing the form in English, please do not hesitate to contact us at profilerankings@timeshighereducation.com

Enter the data

All fields marked with a † are required in order to participate in the Overall Rankings. Note that this includes some subject fields. Additionally, fields marked with a * are also required in order to be eligible for the Subject Rankings.



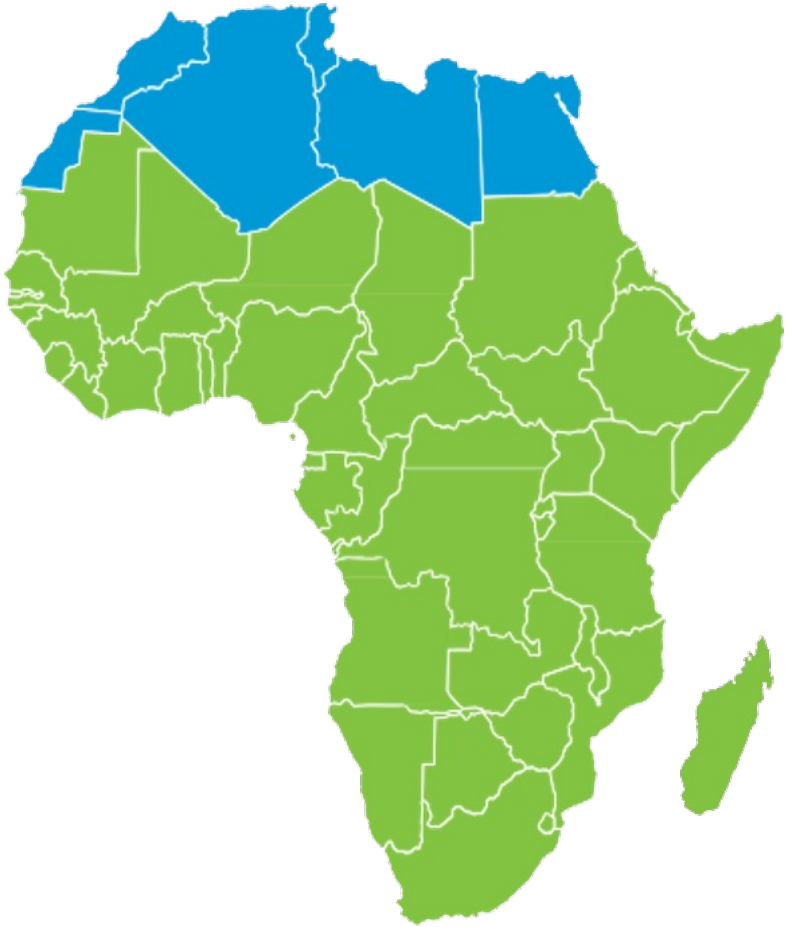
Sub-Saharan Africa University Rankings



Sub-Saharan Africa University Rankings

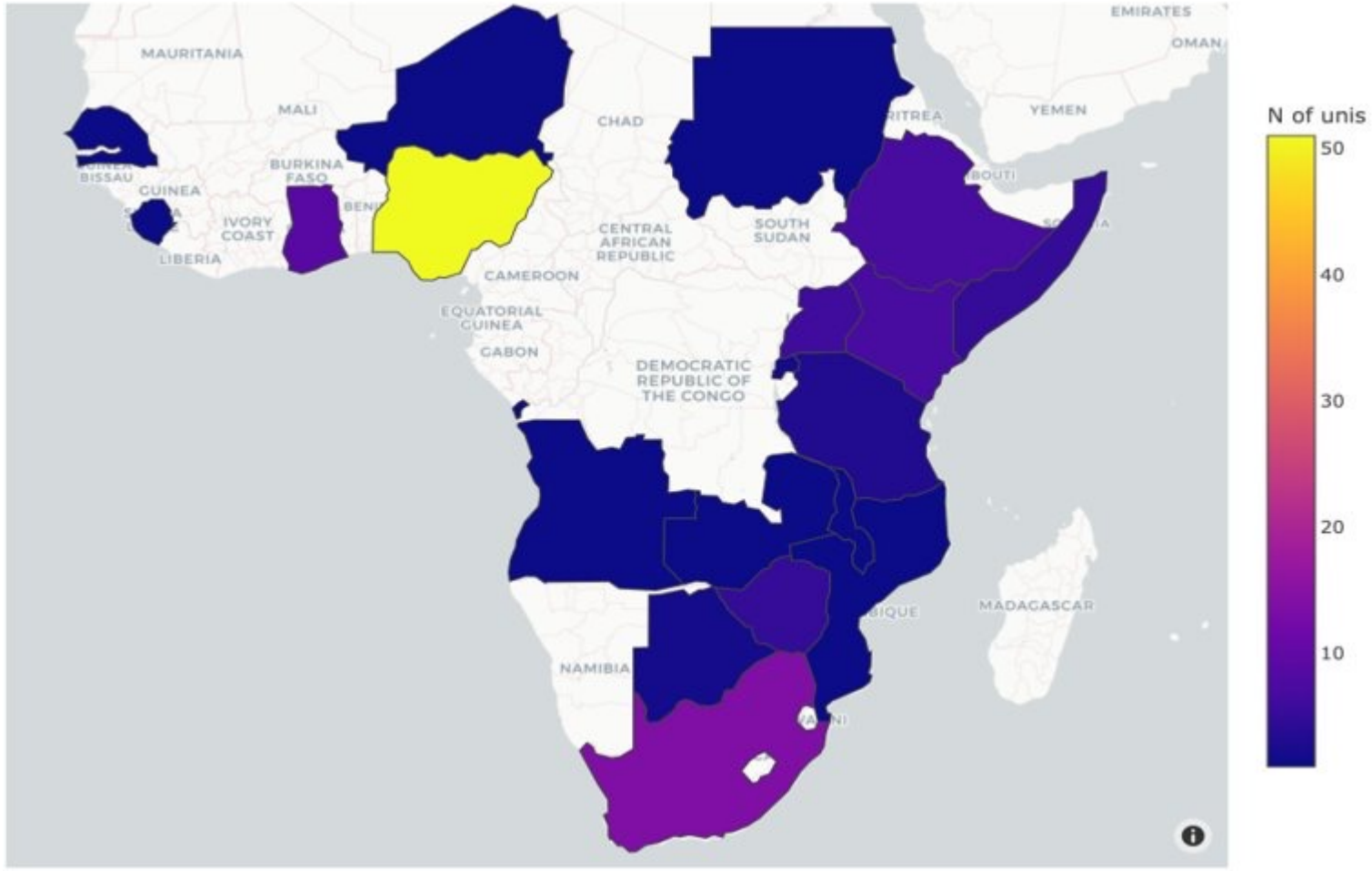
Sub-Saharan Africa
University Rankings 2023
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- In partnership with Mastercard Foundation, the rankings was developed by a consortium of African and international higher education organisations and Ghana-based Ashesi University in conjunction with THE's data team
- Closely tied to the United Nations' Sustainable Development Goals (SDGs) and the African Union's Agenda 2063
- The Sub-Saharan Africa University Rankings assesses universities based on five pillars: **resources and finances, access and fairness, teaching skills, student engagement, and Africa impact**



Sub-Saharan Africa University Rankings 2023

88 ranked institutions and a total of 120 submitted their data in SSA 2023



Sub-Saharan Africa University Rankings

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We need your help for the institutional data

1. Nominate a Data Provider

Please email us at ssaranking@timeshighereducation.com

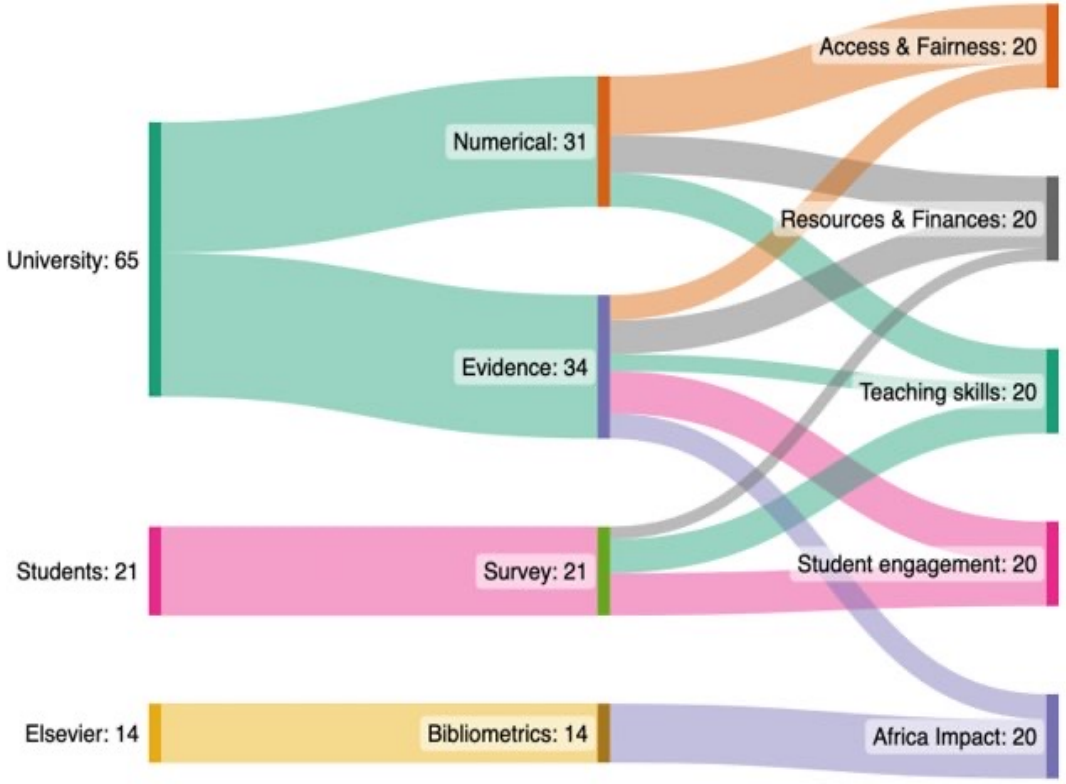
2. Connect to the Portal

The Portal will be open for the next cycle in early 2024

3. Enter and Submit Data

Universities will be requested to submit 3 types of data: continuous data, evidence for policies and initiatives. We collected bibliometric data (via Elsevier).

Eligibility criteria: (1) offering undergraduate degrees and (2) a minimum of 50 responses per institution.



Q&A



Explore more of THE's datasets

Would you like to assess the impact of WUR 3.0 on your ranking performance?

THE Consulting provides in-depth knowledge and bespoke analyses to help you navigate the changing world of global higher education

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Scan today:

Universities can submit to as many SDG's as they like, be it just one, or all 17

Times Higher Education
Impact Rankings