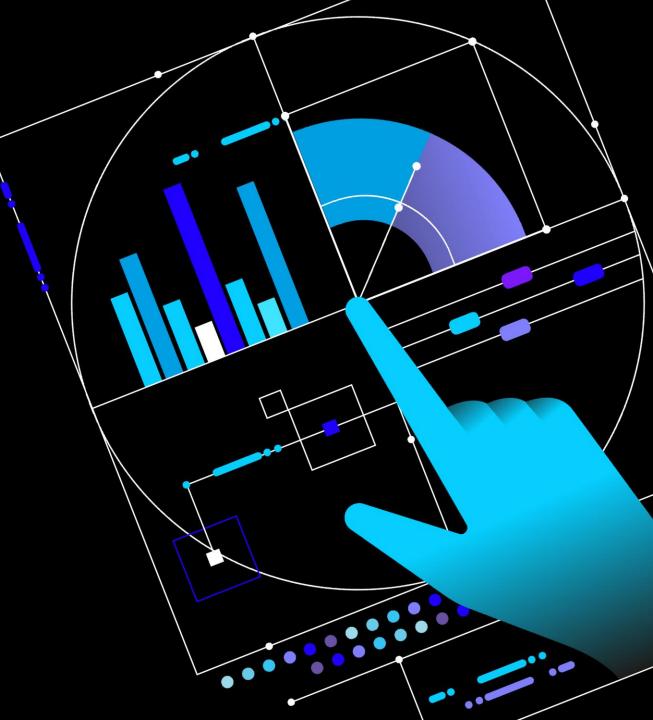


# The 2025 World University Rankings Masterclass – North America

**David Watkins** Managing Director, Data

Danae Banette WUR Product Owner Times Higher Education



#### **50+ Years of Insights**

Empowering higher education by combining data and expertise within a global platform, THE helps universities deliver transformative impact for people, places and the planet.

We connect the world's higher education community, facilitate the flow of ideas and talent, and help academics and students fulfil their potential.

We are proud to support universities, and believe that together we will build a better, more sustainable future.





**Higher Education** 

2024

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### **Our Rankings**

#### RESEARCH



**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**

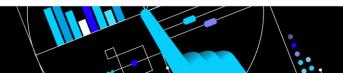




**Focus:** research, teaching, stewardship and outreach against the UN's 17 Sustainable Development Goals

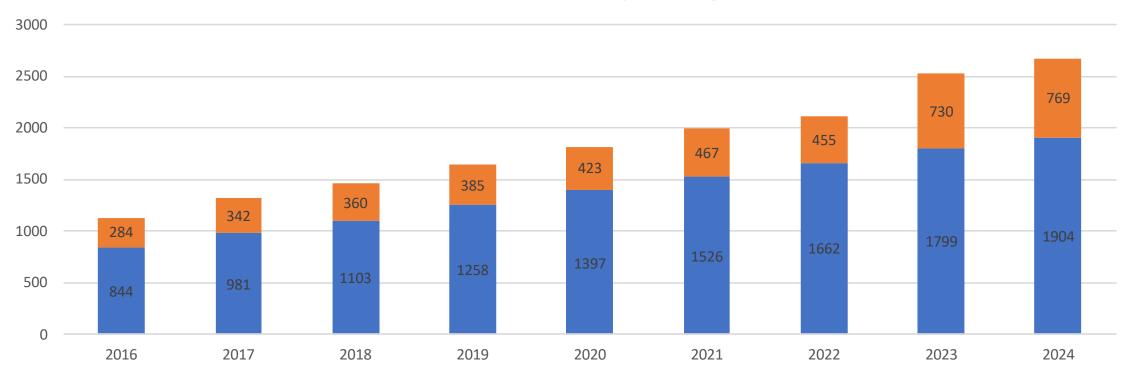
Participation rules: all UG or PG higher education institutions





#### WUR 2024: 20<sup>th</sup> Anniversary of THE World University Rankings

Number of universities which submitted data to THE World University Rankings



ranked unranked



#### **2092 Ranked Universities**

WORLD ECONOMIC FORUM

#### Africa moves up the rankings

Africa's representation is surging, as more institutions develop their research infrastructure, increase research productivity and seek to compete with the best in the world. Nigeria added six universities to the global rankings, taking its total to 21, while in the north, Egypt added seven to reach 35.

Seven countries make their debuts in the world rankings: Bahrain; Democratic Republic of the Congo; Mongolia; Paraguay; Rwanda; Syria and Uzbekistan, as their universities begin to compete in global research.

And, the two decades since the first ranking have not just witnessed the emergence of a much more diverse range of countries with universities represented among the growing global research elite – it has also seen a surge in performances that challenge the traditionally dominant Western nations. BBC Sign in

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### Oxford University keeps global top spot



The university has kept the top spot in the world for the ninth year in a row

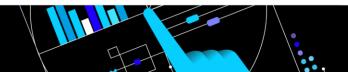
Emily Ford & PA News
BBC News

9 October 2024 · 📮 19 Comments

The University of Oxford has kept top place in an international league table for a record-breaking ninth year in a row.

It's featured in the first position of the <u>Times Higher Education (THE) world</u> rankings.







## The world's biggest university ranking

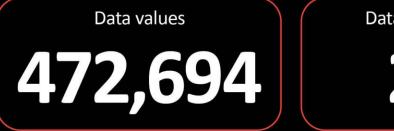
#### Universities

The world's biggest university ranking



#### **Universities** Data

The world's largest data gathering exercise from universities



Data fields collected



#### **Bibliometrics**

In partnership with  $\begin{tabular}{c} ELSEVIER \\ \hline \end{tabular}$ 



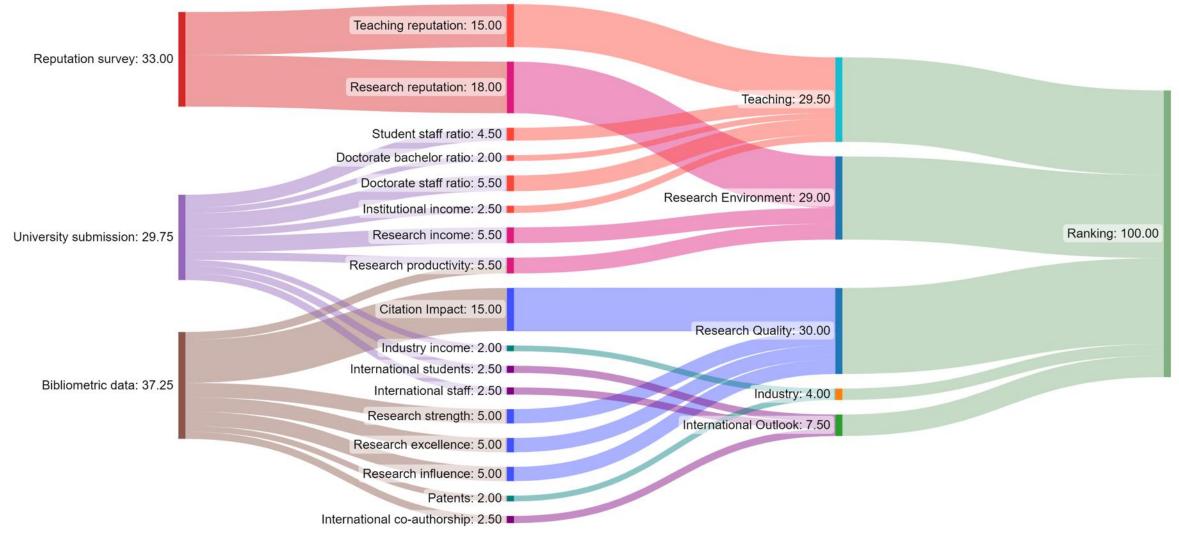
#### Academic Survey

The world's largest academic survey

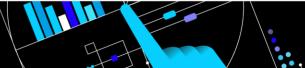




## Methodology







#### **Data Source – University submissions**



Nominated data provider



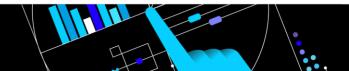
Institutional scope Institutional data

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Publicly available data Year on year Data submitted for other rankings Similar institutions

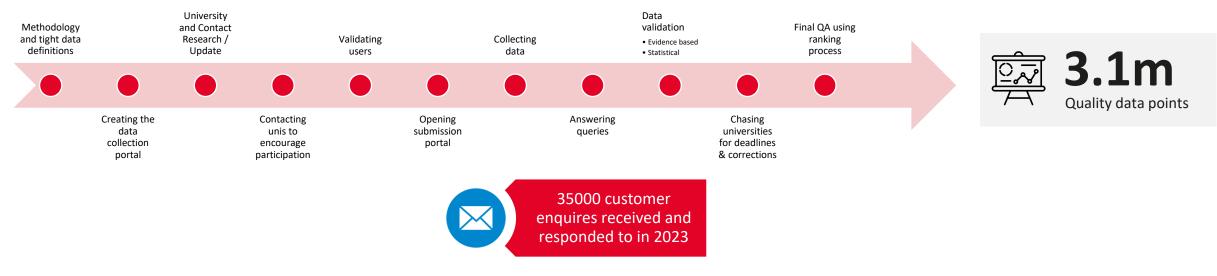
#### profilerankings@timeshighereducation.com





## Key building block: University performance data

- Data is collected direct from universities every year
- Data is collected for the entire university, and in 11 broad subject areas
- Data is validated using statistical techniques, and verified against over 70 external datasets more are added each year



•



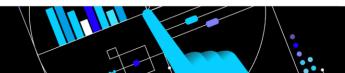
## **Financial fairness**

- Domestic currency vs reporting currency
- Conversion to domestic currency
- Purchasing power parity
- Conversion to PPP USD

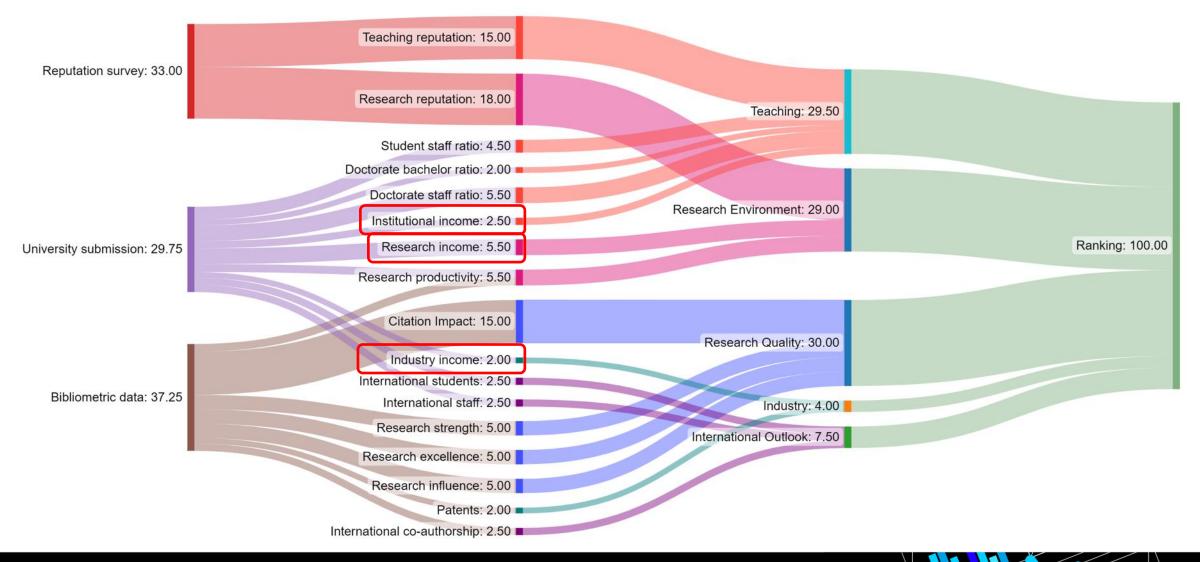
#### **Example**

- University A in <u>Hong Kong</u> reports 1,000,000
   <u>USD</u> as their industry income
- Average USD:HKD exchange rate in 2022 is 7.83
  - 1,000,000 USD
  - = 1,000,000 \* 7.83 HKD
  - = 7,830,000 <u>HKD</u>
- PPP rate for HKG in 2022 is 5.55
   7,830,000 HKD
  - = 7,830,000 / 5.55 PPP USD
  - = 1,410,810 <u>PPP USD</u>





## Fairness across subjects





#### **Data Source – Global Academic Reputation Survey**











#### Methodology

- Invitees are selected by Times Higher Education. Strictly invitation-only. Universities cannot make nominations or supply contact lists, and individuals cannot nominate themselves for participation.
- Survey is sent to active academics.
- The results are benchmarked using an independent dataset. This is to ensure the ranking is representative of the global distribution of scholars, both by country and subject.





#### Methodology

- Scholars are questioned at the level of their specific subject discipline and are asked to name up to 15 universities that they believe are the best in research and teaching. Voting is unordered.
- We also ask about demographics and the rationale behind why people vote the way they do.
- Translated into 12 languages.



### Academic survey details

	1	2	3		4	5	6
	Data sources	Initial participation rules	Selection method	Stratificatio	ion	Quality checks	Number of responses
New approach	Contact details from openly available research papers	Have published at least once in last five years, with one or more citations	Random	on c 2) Subj on p	tional based country, bject based previous vey results*	National and university level	c 55,000
Previous approach	Contact details from research papers within Scopus	Have published at least once in last five years. Not included in another Elsevier survey.	Random	on c 2) Subj on p	tional based country, bject based previous vey results	Mainly national level only	c 10,000





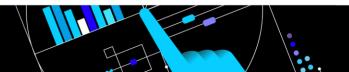
### **Effect of new approach**

The new in-house survey attracts more than 5 times as many votes as the previous out-sourced survey, giving us far more representation, plus deeper insight as we know more about the respondents

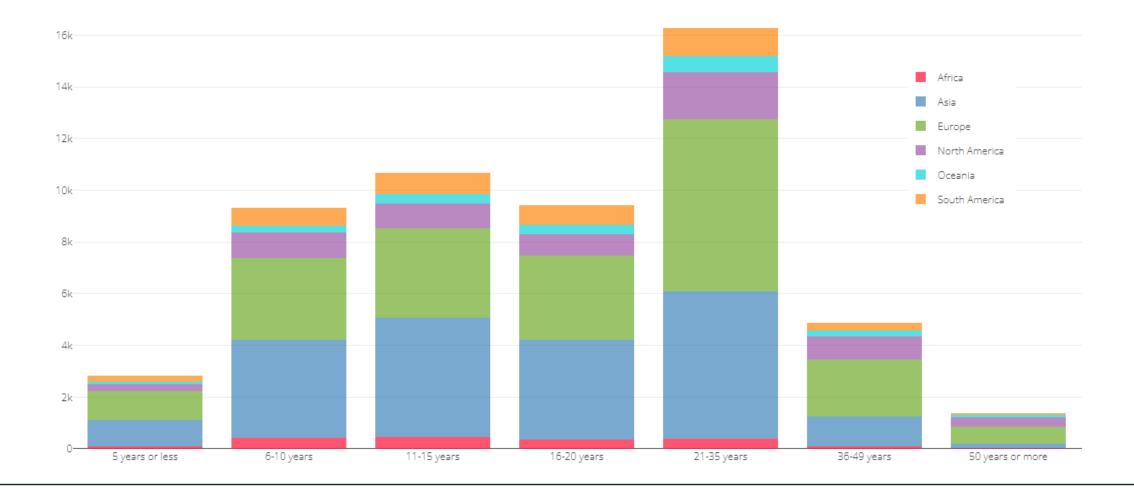
	2021 (Elsevier)	2023 (In house)	2024 (In house)	Ratio 2021-2024
Respondents	10,963	38,796	55,037	500%+
Ranking votes	149,536	524,305	764,397	510%+
Countries participating	128	166	193	150%
Response rate	1.6%	1.8%	1.8%	

WUR 2025 will utilise reputation survey results from 2023 and 2024 surveys, utilising more than 5.2 times as many votes in the reputation metrics compared to WUR 2022





#### Participants are experienced academics





## **Changes to reputation**

#### Self-voting is not wrong, unless it is abused

- Self-votes are now limited to a maximum of 10% of an institution's votes
- Only a small number of institutions are affected

#### **Voting distribution**

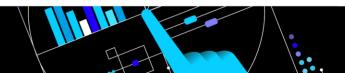


- Where votes come from a small range of institutions it may be an indicator of inappropriate behaviour
- We are now limiting the ratio of votes per institution to 12:1
- Less than 15 institutions are affected

#### **Country distribution**

- The current dataset of national researcher numbers is being discontinued
- Need to find a new stratification approach





# Pairwise comparison



#### Pairwise comparison

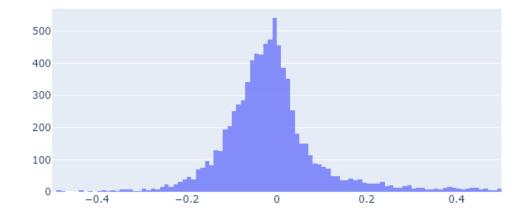
- The existing survey allows participants to select any university that comes to mind.
- We can also present specific institutions to respondents and ask them to pick their preference. This pairwise comparison creates an ordered list of universities.
- This approach can help move voters away from the superbrands and get them to consider those further down the ranking.



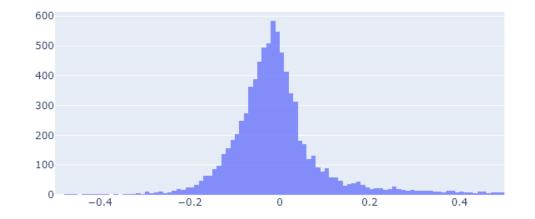


#### More universities lie in the centre ground with this approach

Pairwise comparison parameters - research



#### Pairwise comparison parameters - teaching





# Voter diversity



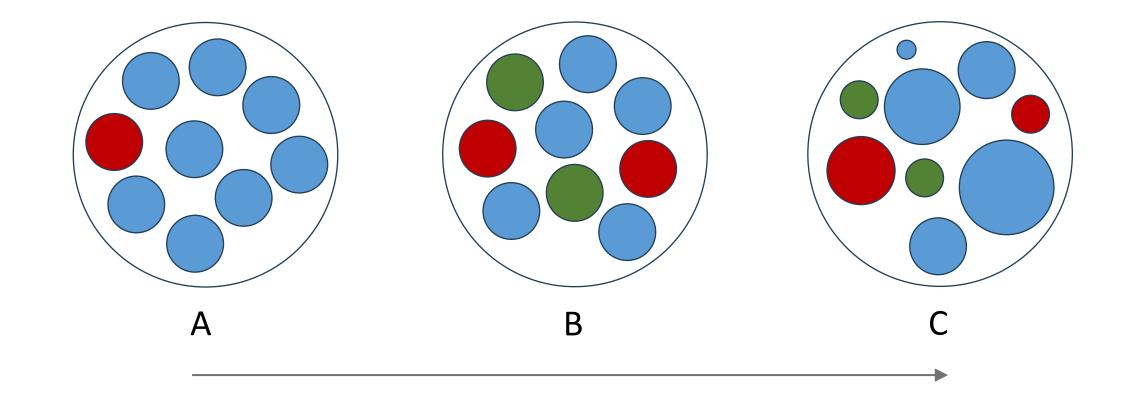
When discussing reputation, the current ranking scores universities on the number of votes they receive.

But if two universities have similar vote counts, how could we differentiate between them?

In a global ranking, we might argue that a university with votes coming from many subjects and territories has a stronger brand than one that sources its votes from a narrow pool of respondents.



Entropy measures how much diversity a dataset has





This method can be used to reward universities that have a brand that ranges across different disciplines and territories.

It is the diversity of respondents that count, not the number of votes.



#### **Data Source – Bibliometric data**



2019-2023



Journal papers, conference proceedings, books, book chapters, reviews

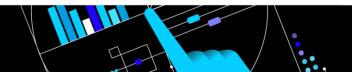


Discontinued journals



Patent offices increased from 5 to 103 (of which 43 have valid data)





### **Partnership with Elsevier**

THE and Elsevier have recently renewed their partnership agreement.

THE will now be calculating bibliometric measures directly from the source data, with support from Elsevier.

Both companies will share expertise, experience and data to support the sector.





## **Key building block: Bibliometrics**

Data comes from Elsevier's Scopus dataset

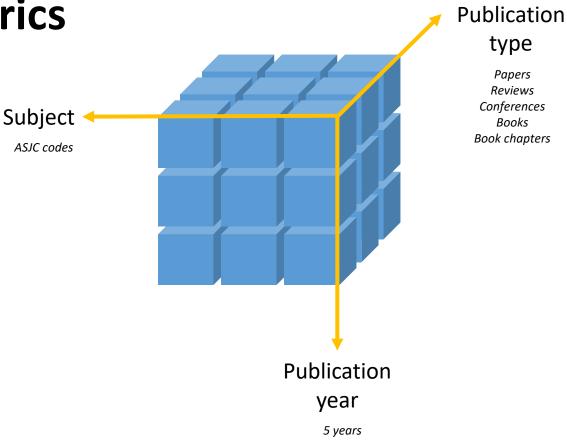
A fundamental measure is Field Weighted Citation Impact.

We want to calculate the average number of citations that a piece of research from an institution receives

We normalise by

- Year
- Type of publication
- Subject

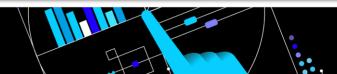
Within each cell we compare a paper to the average



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 <u>same type</u>, <u>same year</u> and <u>same subject</u> is 2...

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

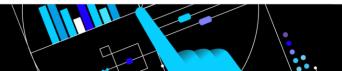




### **Research Quality Metrics**

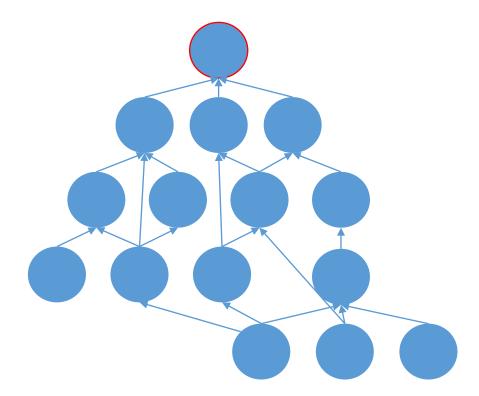
Citation Impact	<ul> <li>Mean FWCI of an institution's research ouput</li> </ul>	same university but log Y-axis
Research Strength	<ul> <li>75<sup>th</sup> percentile FWCI of an institution's research output</li> </ul>	1000 100 10 I0
Research Excellence	<ul> <li>Number of papers in top 10% by FWCI</li> </ul>	1 0.1 0.01 Percentile
Research Influence	<ul> <li>Network of citations rather than just one level of citation</li> </ul>	

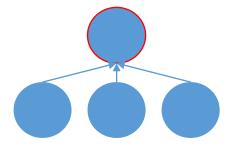




#### **Research Influence - Papers**

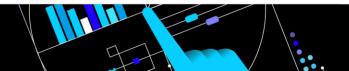
Taking a broader look at how citations interlink gives us deeper insight into the value of research



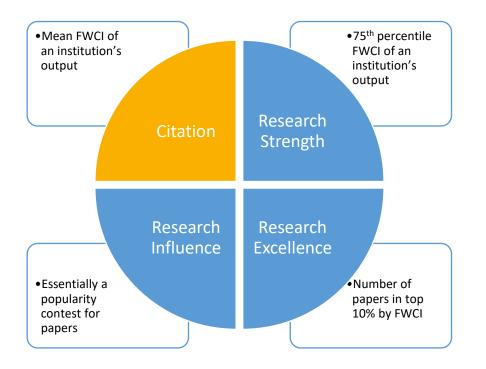








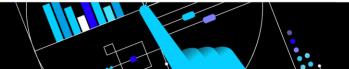
## **Research Quality in the World University Rankings**



#### WUR 2025 Research Quality Top 10

- Massachusetts Institute of Technology
- Stanford University
- Harvard University
- Carnegie Mellon University
- University of California, Berkeley
- Vita-Salute San Raffaele University
- Princeton University
- University of Oxford
- Imperial College London
- Humanitas University
- UCL





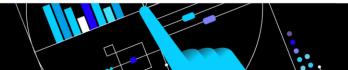
## **Effect on participation rules**

Using a basket of bibliometric measures makes the assessment of quality more stable and robust.

We expect that this will enable us to reduce the number of papers required for participation in the World University Rankings

- Initial reduction in the number of papers per year (maintaining an overall requirement)
- Possible reduction in the overall number of papers required
- Ability to build more sophisticated approaches accounting for subject balance





### **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.





### Subject weighting worked example

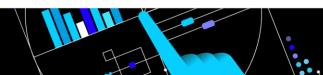
Non subject weighted metric – Doctorate undergrad ratio

	Overall
Portal Data	
Doctorates Awarded	713
Undergrad Awarded	3562
Ratio	0.20
Statistics of ratio	
mean	0.08
stdev	0.12
Score	84.9

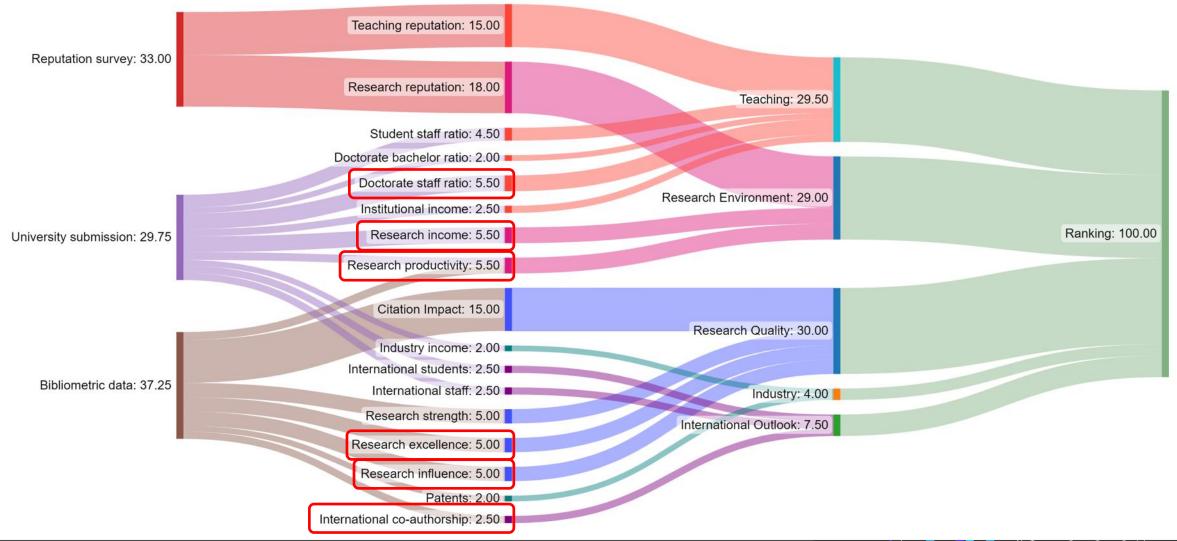
Subject weighted metric – Doctorate staff ratio

	Arts	Medicine	Science	Total
Portal Data				
Doctorate awarded	43	173	72	288
Academic staff	128	286	92	506
Ratio	0.34	0.60	0.78	0.57
Statistics of Ratio				
mean	0.1	0.23	0.18	
stdev	0.13	0.41	0.23	
Z-score of ratio	1.81	0.91	2.62	
Weighted sum of Z-	score			1.45
Statistics of weighte	d sum			
mean				0.00
stdev				0.80
Score				96.5

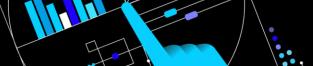




## Fairness across subjects



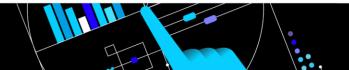




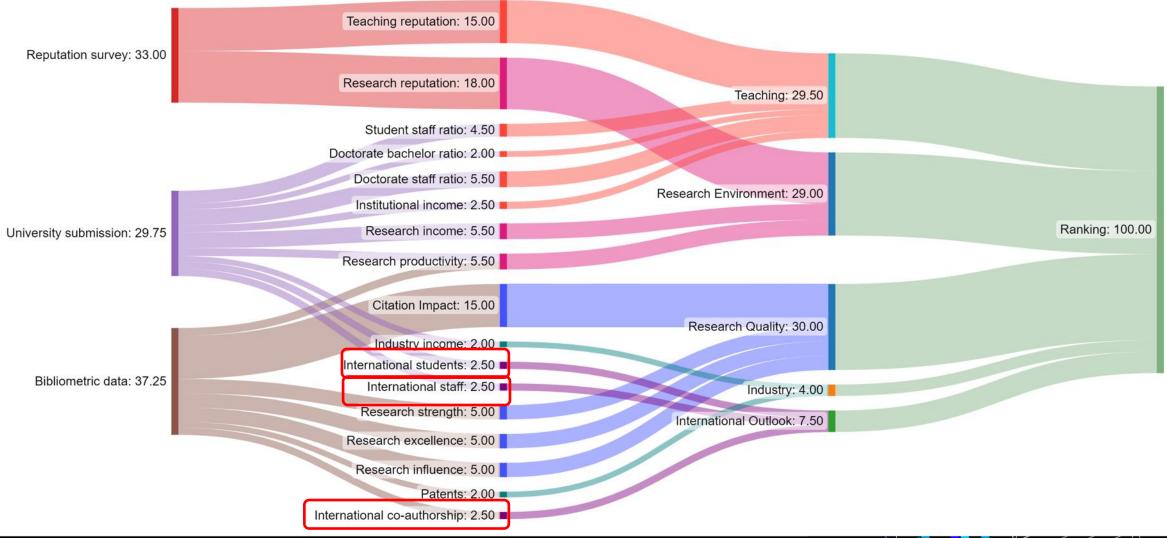
## International Outlook: country size

- Large countries have been disadvantaged compared to small countries in our international metrics, in that it is more likely for staff and students at universities in small countries to have come to work/study from abroad.
- The international metrics are 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





## Fairness across countries

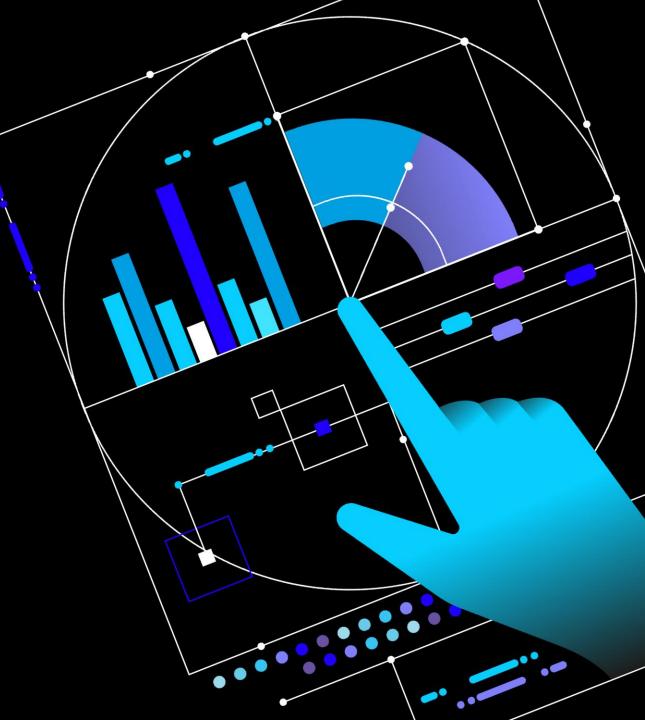






# Insights

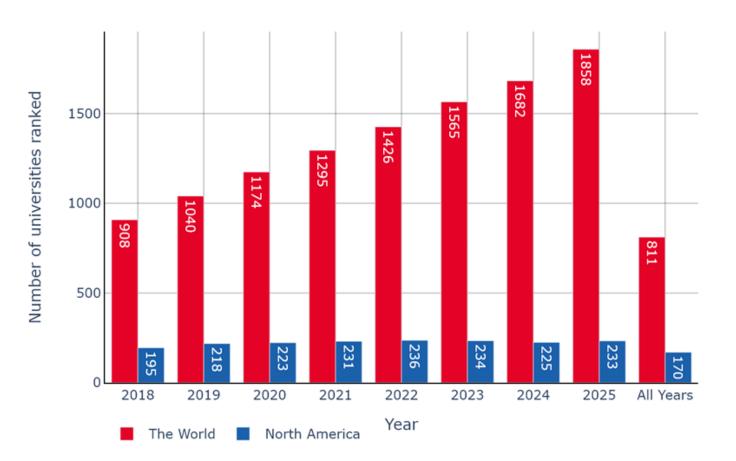




# **Ranking numbers**

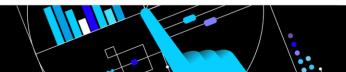
In 2018, North America represented **17.7%** of the 1103 universities ranked across The World.

In 2025, North America represented **11.1%** of the 2091 universities ranked across The World.



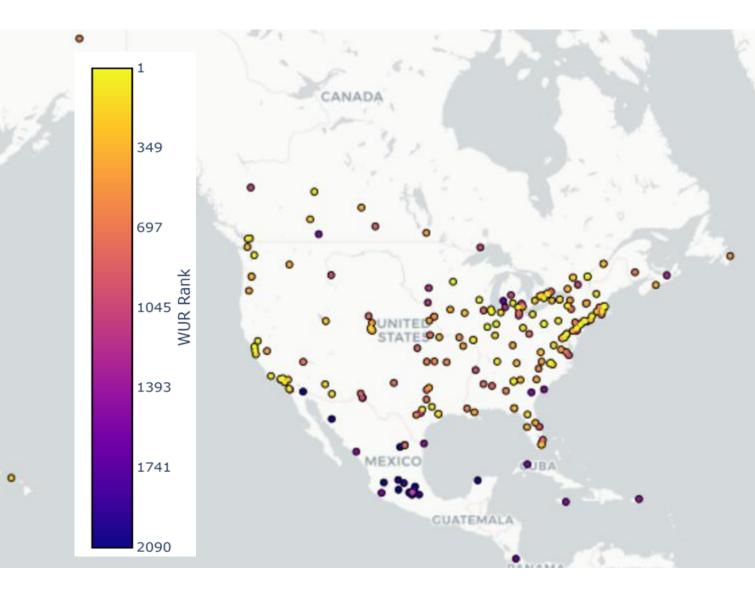
### North America vs The World WUR Ranked per year





## **Top Universities**

Name	Rank
Massachusetts Institute of Technology	2
Harvard University	3
Princeton University	4
Stanford University	6
California Institute of Technology	7
University of California, Berkeley	8
Yale University	10
The University of Chicago	=14
University of Pennsylvania	=14
Johns Hopkins University	16
Columbia University	=18
University of California, Los Angeles	=18
Cornell University	20
University of Toronto	21
University of Michigan-Ann Arbor	=22





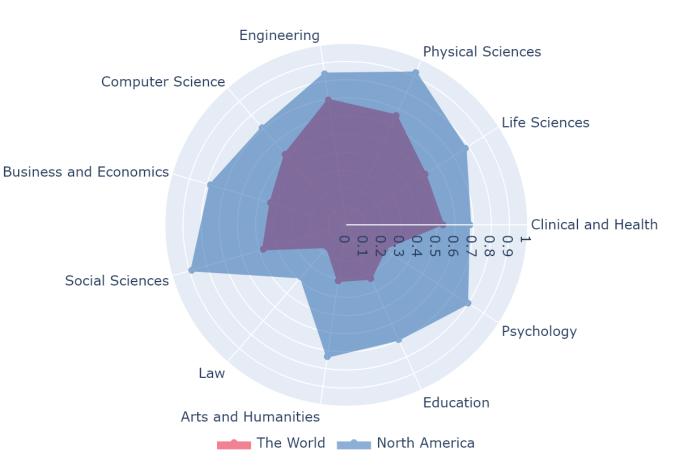


## **Subjects**

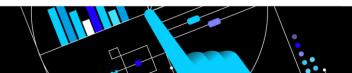
### Percentage of universities with subjects ranked in WUR 2025

Across North America, Physical Sciences was the most frequently ranked subject in 2025 where it was ranked for 215 universities.

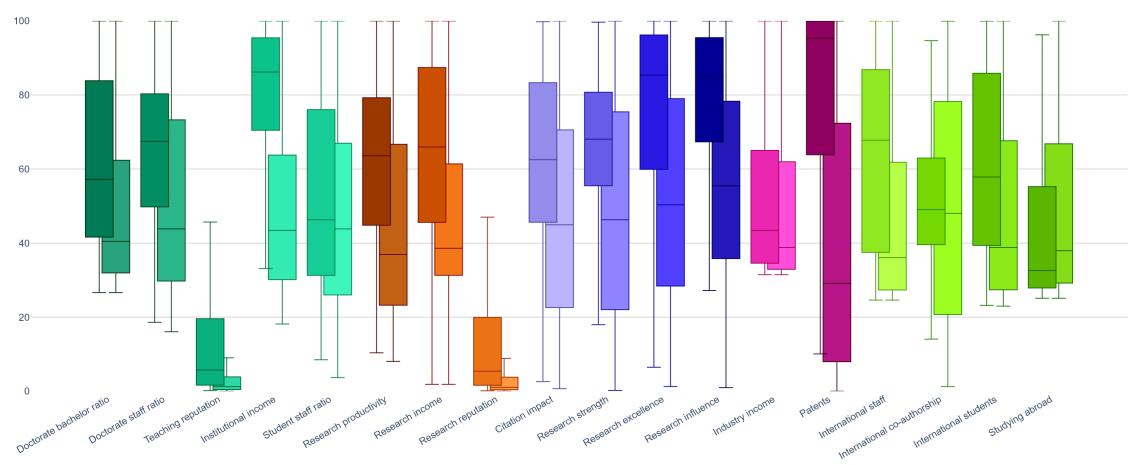
Law was the least frequently ranked subject in 2025 with just 89 universities ranked.





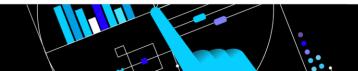


## North America vs RoW WUR 2025 metrics comparison



North America vs The World World University Rankings 2025 metrics boxplot





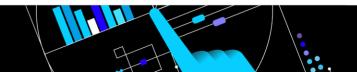
## North America vs RoW Pillars and Metrics

North America vs The World Pillar Relative Score Difference 2025



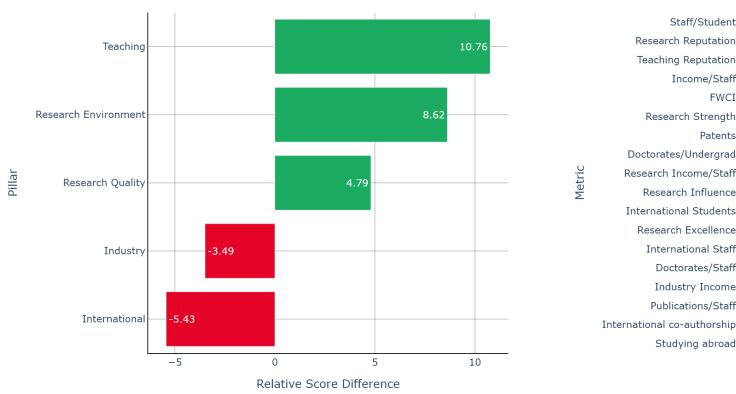






37.45

## North America vs RoW Pillars and Metrics – Top 200

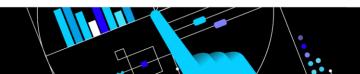


North America vs The World Top 200 Pillar Relative Score Difference 2025

#### North America vs The World Top 200 Metric Relative Score Difference 2025

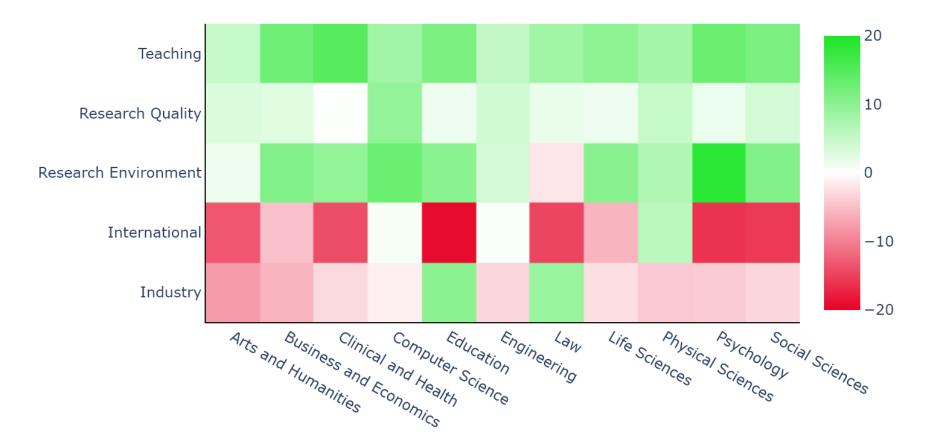




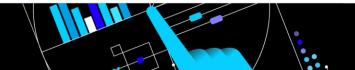


## North America vs RoW Pillars and Subjects – Top 200

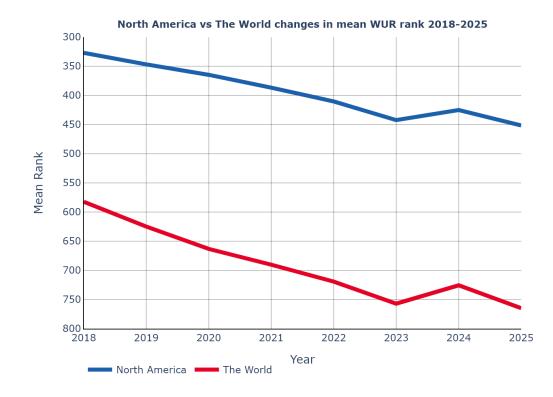
North America vs The World Top 200 WUR 2025 Comparison Heatmap

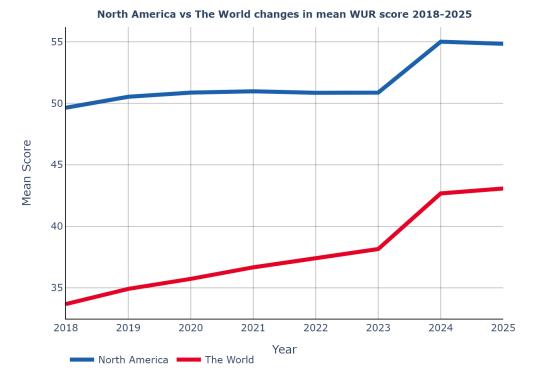




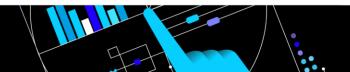


## North America 2018-2025

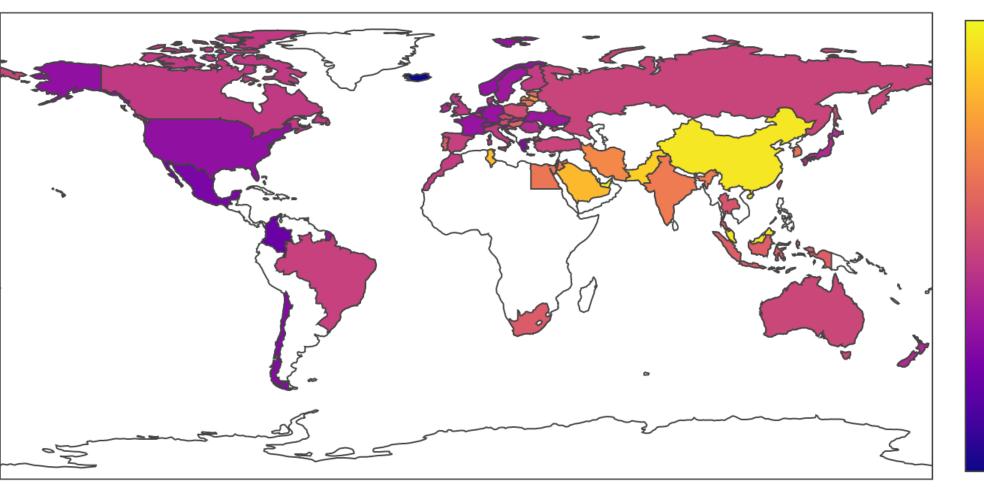




World University Rankings 2025



### **Countries average WUR score changes 2018-2025**



20 The WUR Score for North America has
15 increased by an average of 5.2 between 2018 and 2025
10

The World has increased by an average of 9.4 during the same period.

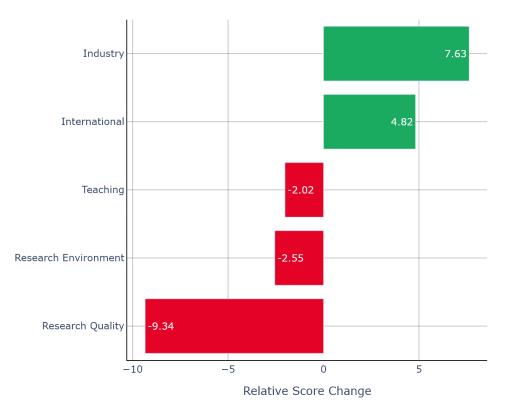
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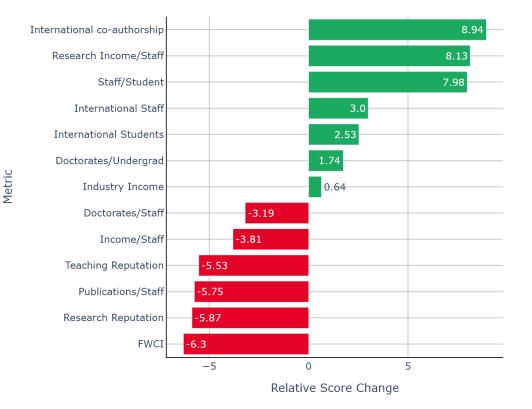


## N America vs RoW Top 200 2018-2025 Pillars and Metrics

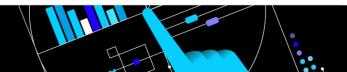


North America vs The World Top 200 Pillar Relative Score Change 2018-2025

North America vs The World Top 200 Metric Relative Score Change 2018-2025



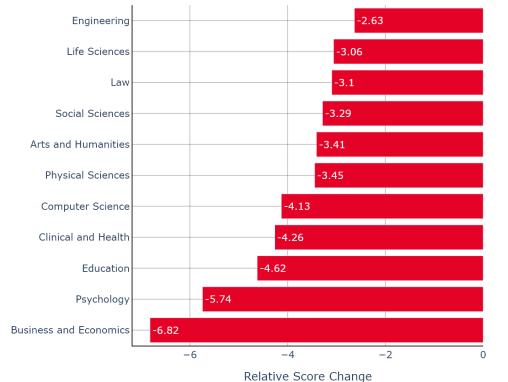




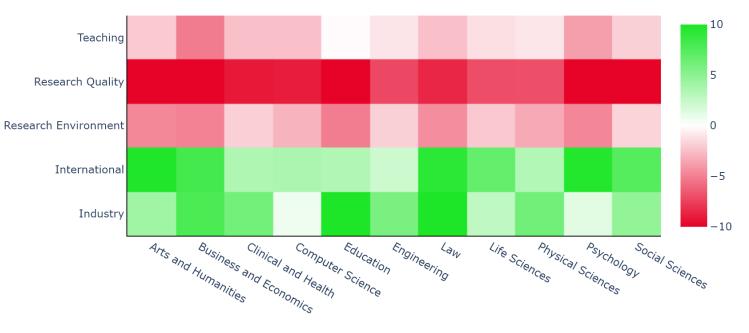
Pillar

### **Subjects**

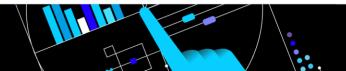
### North America vs The World Top 200 Subject Relative Score Change 2018-2025



North America vs The World Top 200 pillar comparison 2018-2025



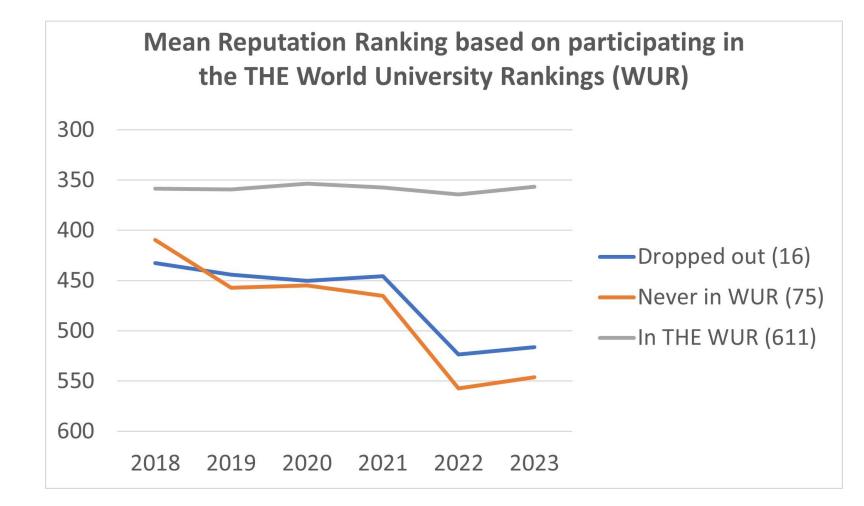




## **Ranking and Reputation**

Universities ranked in WUR maintain a healthy level of reputation.









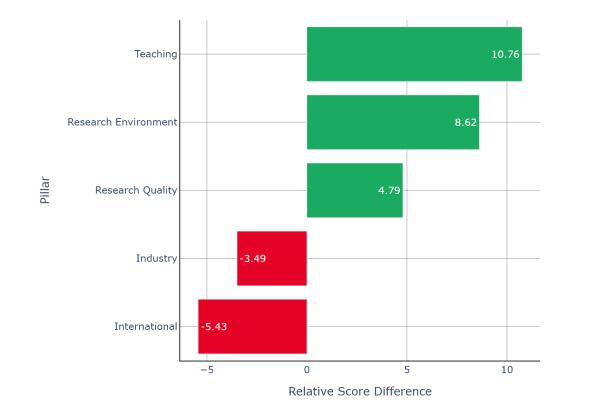
## **North America: Summary**

North America is strong compared to the Rest of the World, but is losing its advantage in key areas such as research quality

Pillar

North America vs The World Top 200 Pillar Relative Score Difference 2025

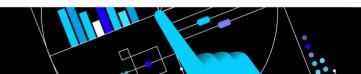
North America vs The World Top 200 Pillar Relative Score Change 2018-2025





Relative Score Change





## **Participate this year**

RESEARCH



Data collection opens January 2025



### IMPACT & SUSTAINABILITY





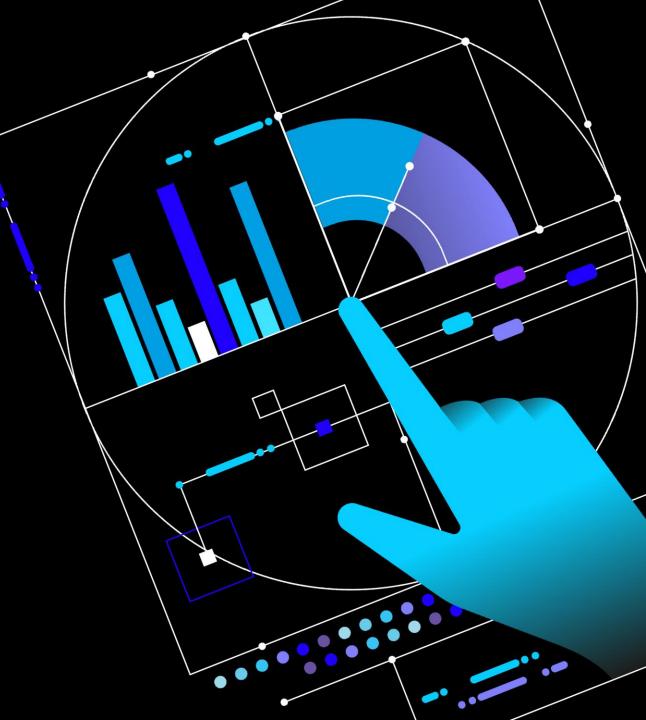
Data collection open now, until November 11th





# Thank you





### **Consultancy Services**



Empowering universities, governments and organisations around the world.

### Rankings & Performance Analysis

In-depth analysis of institutional and subject level performance in THE's suite of global rankings. We also provide institutional level simulation of rankings performance for unranked institutions, with detailed analysis of strengths,...

#### Discover more

### Internationalisation & Transnational Education (TNE)

Offering a bespoke Transnational Education (TNE) consultancy service powered by our world-leading higher education data and global network of universities.

#### **Discover more**

### Portfolio & Course Analysis

Benchmarking portfolios across faculties and institutions using qualitative & quantitative methods

#### Discover more

### **Reputation & Brand**

THE's Reputation and Brand consultancy services are built on our unparalleled experience supporting universities around the world to analyse, audit and track their global reputation and impact of their brand

Discover more

### **Research Strategy**

THE Consultancy can support universities and ministries of education enhance their academic research strategies, using THE's bibliometric data and unique artificial intelligence tools

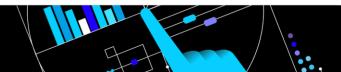
Discover more

### **Industry Insights**

Our team work closely with industry and commercial organisations to provide insights and tailored thought leadership on a topical basis to support with market awareness, sector engagement, reputation and to help in forging strategic...

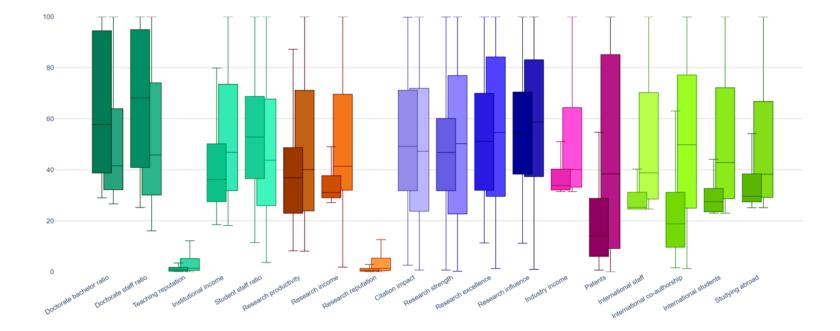
Discover more



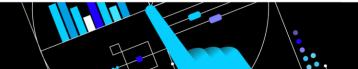


# **WUR Performance Analysis and Simulation**

Understand your institution's performance across all metrics, benchmarked against competitors







## **WUR Performance Analysis and Simulation**

1

### Metric-by-metric analysis

- Analysis of each of the metric scores benchmarked against competitors
- Analysis of temporal change
- Broken down by 11 subject areas
- Evaluation of performance across each of the metric pillar categories

2

### **Reputation vote analysis**

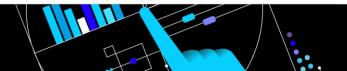
- Detailed breakdown of institutional votes from the THE academic survey
- Analysis of sources of voting, benchmarked against peers
- Broken down by 11 subject areas
- Provides insight into difference between teaching and research reputation

3

### Strategic recommendations

- Creation of KPIs for each of the metrics to support institutional strategy
- Broader institutional change management strategies,
  linked to research partnerships and academic networks, reputation and international profile

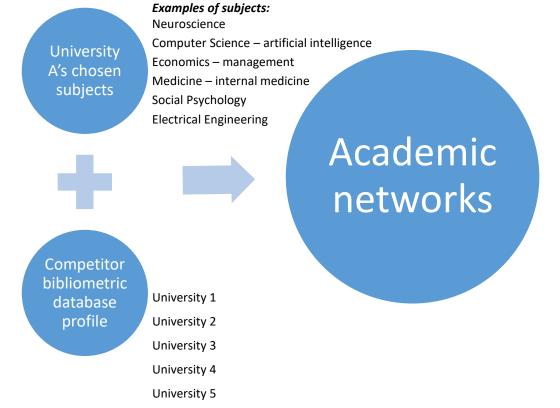




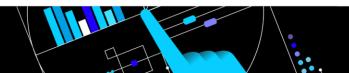
# **Academic Network Analysis**

Develop high quality research collaborations using our tool to find academic partners outside your current network

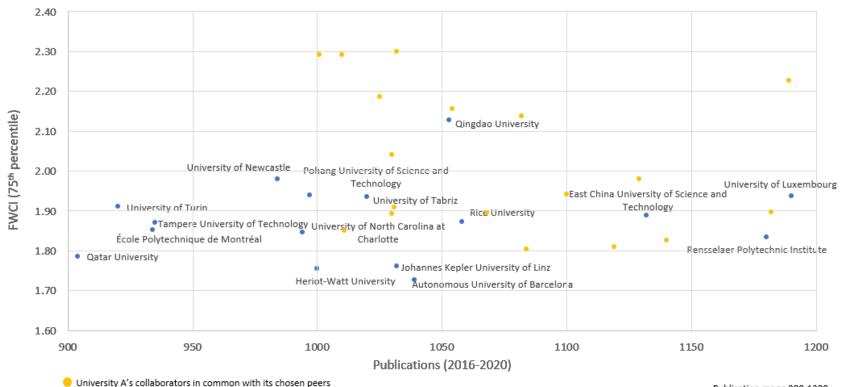








## **Academic Network Analysis**



This tool provides insight into the quality and quantity of research partnerships

In yellow are University A's current collaborators

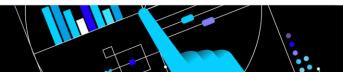
In blue are the collaborators of your chosen peers in the same subject area

 Collaborators of University A's chosen peers that are outside University A's current network

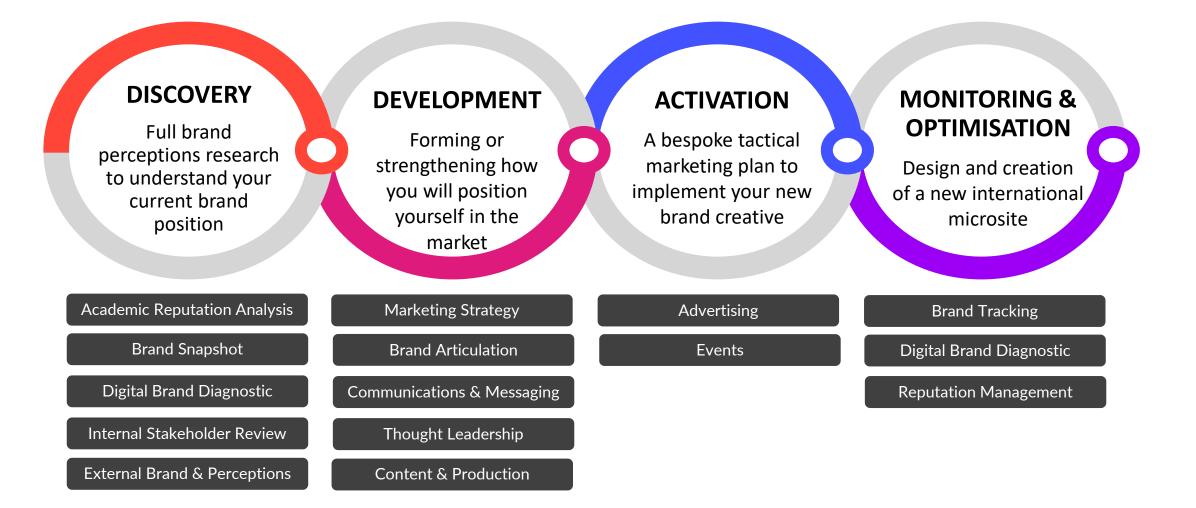
 Possible for future collaborations as they work with Universities who specialise in similar subjects as you

 Publication range 900-1200 FWCI range 1.6-2.4

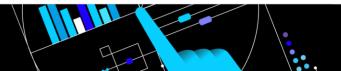




### **Brand and Reputation Transformation Framework**







# Internationalisation and TNE Framework

Discover, develop and deliver unparalleled educational collaborations with leading global universities, tailored to meet national development goals and enhance global educational standards





