

University rankings: Time to reconsider

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Abstract

University rankings offer some benefits but also come with significant drawbacks. While they can encourage healthy competition, they often lead to unethical practices and prioritize short-term gains over long-term educational purposes. Relying on biased metrics like citations and journal impact factors is a major flaw, potentially misrepresenting the true value of scholarly work. The foremost focus of universities should be on educating proficient students, advancing dependable knowledge, and addressing societal needs. Annual rankings based on one year's criteria and output prove impractical, as research outcomes and educational impact require more time to materialize. It is crucial to consider abandoning or reevaluating ranking systems to prevent biased, financially-driven approaches from causing harm. An internal assessment, gauging satisfaction levels within the university community and the quality of education provided, could offer a more effective approach to ranking universities. Acknowledging the negative impact of journal rankings took decades. It is imperative to avoid subjecting educational systems to similarly detrimental effects from university rankings. The most effective method for ranking universities is through an internal system that takes into account the satisfaction levels of university community members regarding their work conditions and overall institution, as well as whether students are acquiring the education and skills they seek.

University ranking is an annual process to evaluate and rank universities based on a number of criteria, such as Nobel prize laureates, scholarly publications, citations, and student-to-faculty ratios. University ranking has become an obsession in the media and academic world, with universities striving to improve their ranks by all the means possible, including unethical ones.

Some of the most well-known university ranking organizations include Times Higher Education (THE), QS World University Rankings, and Academic Ranking of World Universities (also known as the Shanghai Ranking). Each of these has its own criteria and data collection methods (Table 1).

However, whatever the method and criteria being used, university ranking has a few benefits but a lot of downsides. On the benefits, ranking is intended to help students choose ranked universities for their studies and to help universities improve their academic quality and performance. Universities with higher ranks are more

likely to attract funding, improving their work conditions and outcomes. University ranking can also help identify the strengths and weaknesses of university's programs allowing for targeted improvements, which was the initial purpose of the first university ranking (Shanghai Ranking) before it turns into a financial race.

On the other hand, university rankings have many shortcomings that must be highlighted and debated. The obsession with rankings and the sensationalism raised about them in media every year have created a false sense of excellence, rough competition and pressure, leading to a focus on annual short-term goals rather than on long-term academic services and societal benefits. Ranking universities based on a single year's criteria and output is problematic as scientific contributions cannot be accurately assessed over such a limited period. Worthwhile idea, theories, and scientific outcomes often require years, if not decades, to mature and demonstrate their true values. An annual university ranking is even less trustworthy than the two-year-based journal impact



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Table 1. Ranking criteria used by three major university rankers: QS World University Rankings (QS), Times Higher Education (THE), and Academic Ranking of World Universities (ARWU)

Criteria	QS World University Rankings (2024) ^a	Times Higher Education (THE) (2024) ^b	Academic Ranking of World Universities (ARWU) (2023) ^c
Academic Reputation	30%	-	-
Citations per Faculty	20%	-	-
Employer Reputation	15%	-	-
Faculty/Student Ratio	10%	-	-
International Faculty Ratio	5%	-	-
International Students Ratio	5%	-	-
International Research Network	5%	-	-
Employment Outcomes	5%	-	-
Sustainability	5%	-	-
Research quality (Citation impact, Excellence, Influence)	-	30%	-
Teaching (Learning Environment)	-	29.5%	-
Research Environment (Reputation, Income, Productivity)	-	29%	-
International Outlook (Proportion of International Students, Staff and Collaboration)	-	7.5%	-
Industry (Income, Patents)	-	4%	-
Quality of Faculty (Staff Winning Nobel Prizes and Fields Medals, Highly Cited Researcher)	-	-	40%
Research Output (Papers published in Nature and Science)	-	-	20%
Papers indexed in Science Citation Index-Expanded and Social Science Citation Index	-	-	20%
Quality of Education (Alumni Winning Nobel Prizes and Fields Medals)	-	-	10%
Per Capita Performance (Per Capita Academic Performance)	-	-	10%

Note: Each column represents a ranking system and each row represents a specific criterion and its weight in the corresponding ranking. The weight of these criteria varies from 4% for the “industry outcome” criterion in THE rankings to up to 40% for “quality of faculty” criterion in ARWU rankings.

^a <https://support.qs.com/hc/en-gb/articles/4405955370898-QS-World-University-Rankings>.

^b <https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2024-methodology>.

^c <https://www.shanghai ranking.com/methodology/arwu/2023>.

factor.¹ Nobel Prizes, used as a major booster of university rankings, and beyond their subjective attribution and paradoxes,² are typically the result of many years or decades of work, yet they are contradictorily taken into account in university ranking on an annual basis. The mere fact that a Nobel prize is awarded for a particular achievement does not guarantee its safety or flawlessness. The attribution of Nobel Prize to CRISPR, a technology to modify the DNA in living organisms with potential risks, exemplifies this fact.³

Furthermore, writing a single paper and getting it published in some journals with lengthy and procrastinating peer review process can take more than a year. Obtaining a university degree typically requires a minimum of 2-3 years of study, yet universities are ranked annually. These contradictions raise the question of how a university's ranking can be determined on an annual basis when publishing an article and the shortest period of study to earn a diploma is typically longer than that. Even if university rankings were extended beyond a year, it would not address the many shortcomings of this approach.

University rankings are prone to other types of bias

towards certain disciplines, institutions, languages, regions or journals. However, not because papers are published in this or that journal, they should be of exceptional quality or utility. If we explore the annals of the most selective or top-tier journals, examining articles from 5, 10, or 20 years ago, when formal university ranking started, to assess the potential impact of papers published there, the percentage of papers that would have had a real or lasting influence is tiny in contrast to the vast number of papers produced annually in those journals.⁴ Universities are places where scientific methodology, objectivity and rigor are supposed to be the rule. However, the ranking process itself often does not follow a scientific approach. The data used in university rankings are often opaque and unavailable for comparisons and potential reproducibility.⁵ Citations and journals' ranks—two major factors commonly used and enhance university rankings⁶—are also among the most biased factors of science metrics.

University rankings have become a more profit-driven business than a useful academic service. The desire to improve university's ranking can create pressure on researchers and professors, who in turn pass on the

pressure to their staff and students, creating a vicious cycle of stress and suffering that ultimately affect everyone involved. It may even result in a kind of academic bullying.⁷ Faculty members are often burdened with overwhelming and time-consuming administrative, research, and teaching responsibilities. Overloading them with ranking-oriented metrics and objectives can be counterproductive and detrimental to their mental and physical health and their social life. Students who strive to attend highly ranked universities may also end up accruing significant debt, which can lead to financial and psychological strain. However, to avoid potential pitfalls in both career and life, it is beneficial to uphold a balanced harmony between work and personal life, commit to ongoing learning throughout one's lifetime, and nurture a positive mindset.⁸

University rankings result in other distorted practices. For instance, universities may attempt to form alliances or consortia to increase their rank by merging their productions into a single, more rankable entity. Authors may also affiliate their publications with multiple institutions simultaneously as a kind of octopus affiliation to boost their rankings and artificial excellence.⁹ This approach can further undermine the credibility of university rankings, creating unfair advantages for those who are engaged in. These practices should prompt universities and institutions to reevaluate the objectives of such actions and adopt contribution statements to enhance accuracy and transparency.¹⁰ The concept of excellence in science is subjective and bears no much sense.⁴ Rather than pursuing short-term gains, universities and academic institutions should prioritize long-term academic services and reliable knowledge that can ultimately benefit both the institution and society at large. Prior to the introduction of business-oriented ranking systems, universities were functioning well, and perhaps even better than now under an oppressing pressure of ranking business. Universities were successful on their core missions in providing education, conducting meaningful research, and serving the needs of their local communities. Without pressing competitions for higher ranks, universities would have the freedom to explore new approaches and ideas without the fear of negatively impacting their rankings.

The best university ranking system in my view would be an internal non-comparative and non-competitive assessment based on how members of the university community look at their institution, and whether they are happy and satisfied with their work conditions. The level of satisfaction and happiness of members of the community involved, including faculty, staff, and students can be a more meaningful indication of success than external rankings, which are often based on subjective, financial considerations and biased metrics. Evaluating the success of a university based on internal anonymous surveys can help to counteract the negative effects of external rankings, which may distort institutional priorities and incentivize universities to focus on superficial metrics rather than

what is truly important for their students and communities. Conducting internal surveys among students and faculty members can identify ethical concerns, weaknesses, and provide valuable insights for enhancing interpersonal relationships and creating improved work environment.

A university that prioritizes these factors and provides students with a quality education and relevant skills will likely have more satisfied and successful communities in the long term. When universities prioritize the well-being and satisfaction of their community members over stressful conditions, it can lead to a positive cycle of continuous improvement, where the university can better support the needs of its students and faculty, and these individuals, in turn, can contribute more effectively to the institution's mission and goals.¹¹

In other words, a university's success should reflect the satisfaction and well-being of its members, as well as its ability to provide students with the education and skills they look for in their careers. For this end, it is important for universities to prioritize their mission and values over rankings, and to focus on providing a quality education and supporting their students, faculties and societies. Still, the rise of low-quality education globally may require the involvement of professional societies and associations through standardization and professional recognition. Within such an ecosystem, universities and ranking organizations can coexist. However, such a coexistence could be a double-edged sword: while the rise of low-quality education necessitates professional societies and standards, the proliferation of such associations introduces financial conflicts of interest and creates a for-profit incentive in higher education, while perpetuating a vicious cycle, wherein financial interests impact university rankings and vice versa.

It is worth noting that many public universities in Latin America and the Middle East continue to offer education free of charge, irrespective of students' socio-economic backgrounds. Some of these universities also publish diamond open-access journals without charging article processing fees. However, despite these commendable efforts, the trend toward capitalisms and commercializing higher education is gaining momentum almost everywhere, highlighting the ongoing tension between public and private education models.

Finally, while university rankings can provide some useful information for prospective students and researchers, the obsession with rankings have multiple negative and unintended consequences that can be summarized as follows:

- Distraction from educational goals: Universities may focus on actions that boost their ranking at the expense of other educational goals, such as providing high-quality education, teaching, and community engagement.
- Influence on university choices: Students may rely too worryingly on rankings to make decisions

about where to apply or attend, without considering other factors such as location, specialty, cost, and student life. As a result, students may face financial and psychological pressures that negatively impact their mental and physical health. As highly ranked universities with high enrollment fees may only be accessible to wealthy students, university rankings are becoming a factor in social exclusion.¹² When highly ranked universities have exorbitant fees, it can limit access to those who come from wealthier backgrounds, potentially leaving out talented students who may not have the financial means to attend. Students from top-tier medical schools are notably more represented in high-ranking residency programs than their counterparts from lower-tier medical schools.¹³

- Metric fixation: Rankings rely heavily on biased metrics and indicators, which can incentivize universities to manipulate the data in order to improve their ranking, rather than focusing on the quality of the education and services they provide. The metrics utilized in rankings may fail to accurately gauge the intended concepts, highlighting the inherent ambiguity in quantifying university performance through rankings.¹⁴
- Inequality and bias against certain types of institutions, sizes or regions: University rankings frequently exhibit a bias toward research-focused institutions,¹⁵ overlooking the value of those dedicated to teaching and undergraduate education. This bias is one of the absurdities within university rankings because it's the quality of education and support that ultimately drive innovation and research. Without a strong educational foundation, the basis for significant research diminishes. Thus, the emphasis on research-focused universities can seem illogical when the broader educational context is considered. Rankings can also exacerbate existing inequalities between national and international universities, particularly between those in rich and poor countries. Ranking is a form of silencing universities of the global south.¹⁶ University ranking does not take into account the cultural and contextual factors that may affect the performance of universities. University rankings could amplify the disparity between a select few advantaged institutions, backed by both governmental and private endeavors, and other institutions that might transform into mere educational facilities catering to local communities.¹⁷
- Lack of transparency and methodological issues: The methodologies and data used to rank universities are not always available or transparent, making it difficult for universities to understand how they are evaluated or to compare rankings across different systems, which use different criteria (see Table 1) that lead to inconsistent or even contradictory results.
- Gaming the system: The obsession with ranking and its multifaceted rewards could potentially encourage unethical conduct and inappropriate behaviors. Some universities may try to manipulate their ranking position by focusing on certain criteria that are weighted heavily in the ranking system, rather than focusing on broader institutional goals. This can lead to a lack of balance in university priorities and negatively impact the student experience. Some universities may also attempt to manipulate rankings by financially enticing authors to co-affiliate their publications in exchange for monetary rewards. Implementing and adhering to national policies that address misconduct can result in a favorable connection with the ranking and level of funding for research and development.¹⁸
- Unfair comparisons: University rankings often compare incomparable institutions that differ in everything from vastly different contexts, such as large universities and small colleges, or institutions from different countries with different educational systems.¹ This can make it difficult to draw meaningful comparisons between institutions, and may lead to unfair or inaccurate rankings.
- Negative impact on schools and universities: Rankings can have negative consequences for schools and universities that do not rank highly, including decreased funding, lower enrollment, and reduced reputation. This can lead to a decline in the quality of education and research as resources are diverted away from these priorities.
- Overemphasis on competition: Rankings can foster a culture of misconduct and rough competition among schools and universities, where the focus is on outperforming other institutions rather than on improving the quality of education and research. This can lead to a race for prestige and resources, which may divert attention from more important priorities, such as serving the needs of students and communities, while neglecting codes of good conduct.
- Self-fulfilling cycle: High-ranking universities may receive more funding and attract more students and faculty, which can further boost their ranking, creating a self-fulfilling cycle that reinforces the dominance of already highly ranked universities where the rich get richer and the poor get poorer. Established universities with a long history of academic "excellence" tend to have strong reputations, robust faculty, and extensive research programs over time. These factors contribute to their consistent performance in university rankings. Also, they often have substantial endowments and resources, allowing them to attract top faculty and students, invest in cutting-edge research facilities,

Research Highlights

What is the current knowledge?

- ✓ University rankings attract attention from faculty, students, policymakers, and media.
- ✓ Organizations such as QS World University Rankings, Times Higher Education World University Rankings, and the Academic Ranking of World Universities (ARWU) release annual university rankings based on various criteria.
- ✓ University rankings have widespread effects, influencing budgets, funding, recruitment, enrollment, and reputation.
- ✓ Rankings oversimplify education and fail to capture institutional diversity, perpetuating inequalities among universities.

What is new here?

- ✓ Enhanced transparency, refined methodologies, and equitable factors are essential for rankings.
- ✓ Universities functioned effectively before the frenzy of ranking.
- ✓ Obtaining a university degree takes longer than ranking timelines.
- ✓ A new, non-competitive internal assessment to measure member satisfaction is proposed.
- ✓ Suggested ranking criteria: emphasize community engagement, ethics, equity, and inclusion.

and maintain high-quality educational programs. Furthermore, these universities often have strong networks with industry and government, leading to opportunities for collaborative research and funding. As a result, they can sustain their positions in the rankings even with minor fluctuations in scores or methodology changes.

- Business oriented service: university ranking has become too commercialized, with some organizations charging universities for inclusion on their lists or offering paid consulting services to improve their ranking, creating an implicit conflict of interest and raising questions about the objectivity and validity of the rankings.

In contrast to these limitations, a good way to probe a university success is once again by looking at how its members, including students, faculty, and staff, feel about their experience and perception. This means taking into account factors such as student satisfaction, teaching quality, availability of resources, employment opportunities and equity. There might be highly ranked institutions, but their members may experience difficulties or challenges. A university's success should be based on whether students are able to achieve their educational goals and whether the university is able to fulfill its mission to provide a high-quality education. University members who know the universities from the inside are what can help universities improve their conditions and levels much more than external rankers that do not necessarily know

the universities. If faculty and students are satisfied with their universities, it should not matter much how external ranking agencies rank them.

That being said, the dominance of capitalism in every aspect of modern life would most likely sustain university rankings and rankings more generally in all the domains. However, universities should not rely solely on the criteria suggested by ranking organizations. Instead, they should develop strategic plans, typically updated every a few years, in which university staff and students could be involved to provide input on potential changes and effective means for internal assessment and improvement to prioritize societal impact, equity and inclusion. These can include:

1. Community engagement: Measuring the university's involvement in community service, outreach programs that address local social, economic, and environmental needs.
2. Equitable academic opportunities: Examining the university's commitment to providing equal academic opportunities for all students and applicants, regardless of background, including access to research opportunities, internships, and academic support services.
3. Diversity and inclusion Initiatives: Assessing the university's efforts to promote diversity and inclusion among its student body, faculty, and staff through programs, policies, and initiatives. And, evaluating the university's accessibility to students from diverse socioeconomic backgrounds, including affordability of tuition, financial aid availability, and support services for low-income students.
4. Ethical leadership and governance: Assessing the university's governance structure, transparency, and ethical practices, including accountability mechanisms and adherence to ethical and equitable standards in employment and decision-making processes.
5. Accessibility for persons with disabilities: Evaluating the university's accessibility measures for persons with disabilities, including physical accessibility of campus facilities, accommodations for students with disabilities, and inclusive programming and facilities.
6. Health and well-being support: Assessing the university's support for the health and well-being of its community members, and initiatives to promote a healthy and inclusive campus environment.

Incorporating such criteria into university rankings could help prioritize societal impact, diversity, and inclusion, thus fostering a more inclusive and equitable higher education environment.

Conclusion

While university rankings can highlight areas for improvement, relying solely on them to measure academic quality or success is misguided. Universities should

prioritize promoting academic services and knowledge, supporting students' educational needs, and addressing societal challenges. Similar to the recognition that ranking journals based on their impact factor was flawed, it should not take decades to realize the detrimental effects of university rankings. It's time to end the damage caused by university rankings before it's too late. At the very least, rankings should include more equitable and less stressful criteria to foster a healthier work environment, rather than incentivizing competition and fostering a capitalistic mindset.

Competing Interests

There is none to be declared.

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