



Interdisciplinary Science Rankings Masterclasses

Q&A Summary

Q: Could you please share the names of your "bibliometric partners"?

A: We will be using either Open Alex or Elsevier for 2024

Q: Can you clarify what you said on the slide on bibliometrics and open alex, did you say that Elsevier made you a larger version of scopus?

A: As partners of Elsevier, we do get access to elements of their research which may not be in the public domain quite yet, part of it is underlying research they've been doing around classification of papers within the Scopus dataset. As we produce new metrics, those will come through into Scopus eventually for evaluation. If anyone is interested in a more detailed approach do reach out.



Q: We recently received a link to THE's Interdisciplinary Science Research Survey. Is this the actual survey that the ranking will be based on? The email said it was "exploring metrics which will help achieve a better understanding of the factors that lead to interdisciplinary research success."

A: The ISR survey was shared via email with institutions registered with THE. We kindly request you to distribute it among your staff involved in science research. It will close on 31 May. More information here:

https://www.timeshighereducation.com/world-university-rankings/survey-first-interdisciplinary-science-rankings-now-open



Q: Thank you for arranging this webinar. It was very helpful. I have a question regarding the following field "Number of job adverts that explicitly mention or are relevant to interdisciplinary research amongst science disciplines". Our system we don't have freedom to make such advertisements given we are a state university and there is a government approved generic job advertisement system. Will we get penalized because of that?

A: The result is that you will score slightly lower if you are not actually completing the question. We are looking into how we deal with situations where universities are unable to provide data. In the World University Rankings, we typically use 2 approaches: for qualitative data, if not provided we tend to score as a zero. For numeric data, such as income data, we tend to assume you cannot source that data, so we will use other values to calculate a low average, therefore you will not be totally disadvantaged.



Q: Ranking is limited to "Science", but it is difficult to differentiate all science types vs "science" that you mention in the definition document. How to avoid this possible misunderstanding among researchers in the survey?

A: We recommend you share the survey with people who are focused on the science. If we have responses from people on the edge (for example, Psychology can be very scientifically focused) a couple of cases will not cause a problem. But it is aimed at staff working on science, and not limited to those doing interdisciplinary work. You can find more information in the ISR guide, available in the data collection portal, or here https://www.timeshighereducation.com/world-university-rankings/survey-first-interdisciplinary-science-rankings-now-open

now-open



Q: What is your theory on why, several wealthier, established countries have low proportions of ISR?

A: There are two different ways of thinking about this. From the UK experience, a lot of our most esteemed institutions for many years had a tradition that contemplated pure science on the one hand, and separately, there was applied science. Certainly, that has changed over the past years, but there is still that background of the classical British universities focus on high thinking and individual disciplines. In the US that should certainly not be the case. The land grant universities, in particular the seed grant universities, were set up explicitly to be the industrial innovators, and yet we do see that the older institutions are often more traditionally focused. It is challenging to change the way people work, and the culture. But it's also the case that when you start from scratch, you have more flexibility to design the system you want.



Q: Averages — could these be sub divided slightly

- * Carnegie classifications
- * Student population size
- * public/private
- Land-grant, HBCU, etc.

A: Some of those are very specific, for example the Carnegie classification is not generally used outside the US, and the historically black colleges and universities, are all a very US focused phenomenon. But absolutely, when it comes to benchmarking, that's the kind of thing that makes a lot of sense. A comparison of like for like. Even the land grant universities are different in nature from one another.



Q: Could you please explain how do you calculate the % of interdisciplinary science research based on openalex.org?

A: The starting point is essentially the vector of research relevance that Open Alex produces, that allows us to calculate using a matrix calculation, a measurement of interdisciplinarity across the science subject for every single publication. If you can imagine all 250 million approx. publications within Open Alex, we can essentially assign a score which is a level of interdisciplinarity. We are not interested in those score 0.01, we identify the top 25% of those as being strongly interdisciplinary. Once we have tagged those papers, we can then run a variety of different bibliometric measures on them.



Q: Regarding teaching ranking, Japan University Rankings has stopped since last year, so now are you trying to replace it with Online Learning Ranking?

A: No, the new Online Learning Ranking (OLR) will not replace the Japan University Rankings (JUR), these are two independent rankings. For more information about JUR, please contact japanrankings@timeshighereducation.com. For information about OLR, please email onlinelearningrankings@timeshighereducation.com

Q: Should the survey go to all academics, or just the ones that are doing interdisciplinary research?

A: We would like you to send the survey out to all science academics, not just those working in interdisciplinary science because they will still have perspectives for example on whether or not they were feeling encouraged to do interdisciplinary science, even if they've chosen not to do it themselves.



Q: Is there any guidance as to what is defined as 'Science'? Does this include, for example, Psychology?

A: For the purpose of this ranking, we consider science disciplines as those classified under Physical Sciences, Life Sciences, Engineering and Computer Science according to our subject mapping (available in the data collection portal). Please do refer to that list, and the portal user guide, for more details.



Q: Appreciate the initial bibliometric challenges in understanding the interdisciplinarity between Humanities and Social Science (HAS) disciplines and HAS-Science subjects. However, it's important to overcome this challenge reasonably quickly (in the next few years or so), and perhaps reward this more to recognize universities which are making bold moves to bridge HAS with STEM, rather than entrenching Science-based interdisciplinarity and STEM supremacy.

Any plan in the mid- to longer term?

A: The Ranking focuses on STEM disciplines for two main reasons, the first is the focus of the sponsors on interdisciplinary science, and the second is the challenge of integrating disparate bibliometrics. We will be revising this for upcoming cycles.



Q: What if data (specifically research funding ISR and number of job adverts) was unavailable? How would an incomplete data submission influence eligibility and comparability? Thank you.

A: If there are too many missing data for an individual institution, it would not be fair or reasonable to that institution to score it because it would be at a disadvantage. Our two approaches are: choose to take a zero-based approach (typically done for qualitative data). For example, if you don't provide evidence on a policy that supports interdisciplinary science during the tenure process, it's reasonable for us to assume that you don't have that policy. For numeric data, we tend to follow the approach used in WUR, where we replace the value with a low estimate, by taking an average of your existing data and then use a low value average based on the distribution of your other answers. That gives you some score but means that you are not totally disadvantaged as you would be if we set that to zero.



Q: Thanks for sharing. Understand that the ranking focuses on interdisciplinary science at the moment. What happens if an academic in social sciences field answers the survey? Or an academic with background in both science and social sciences fields (i.e. computer science and social policy) answers the survey? Will their responses be excluded?

A: Once the survey closes, we will subject the results to a QA process, during which we will be able to identify any discrepancies or inconsistencies in the responses

Q: When will the first edition of ISR be available to the public?

A: We will launch the first full ISR ranking in autumn 2024.



Q: When will the methodology be send out?

A: The user guide with a list of definitions and instructions is already available in 12 languages in our data collection portal. The final methodology will be available later on this year, once we have determined which fields we can use in the rankings and therefore the percentages that are available for other metrics. Our goal is to have a balanced methodology, we do not want to have the situation where the ranking is dominated by a single measure, we want to look across the three areas of input, process and output reasonably evenly.

Q: Can the data collection timeline be extended?

A: Yes, we are able to extend the data collection for individual institutions upon request, for a limited time because we do need to bring our QA process into play. Please reach out to interdisciplinary@timeshighereducation.com



Q: Would you identify the science disciplines by what data an institution provides or would you glean these from their publication ASJC subjects?

A: For the purpose of this ranking, we consider science disciplines as those classified under Physical Sciences, Life Sciences, Engineering and Computer Science according to THE's subject mapping. In order to be considered interdisciplinary, research can be done within the same broad subject (THE's 11 subjects) as long as it involves two different subjects in our narrow mapping (THE's 31 subject mapping). THE's subject mapping, as well as region-specific mappings and their equivalence with THE's subject mapping, are available in the data collection portal.



Q: Could you explain in details of ISR metrics?

A: Please refer to the ISR guide, available in the portal in 12 languages, for a full list of definitions and examples. The exact metrics will be part of the final ISR methodology, which will be available later this year, once we have determined which fields we can use in the rankings and therefore the percentages that are available for other metrics.

Q: There is another survey - general. is it part of THE academic survey?

A: The data used for this ranking will be data from the ISR survey (which measures encouragement, enablement and reward of interdisciplinary research amongst science, as well as reputation), data provided by the institutions, and bibliometric data.



Q: Do we need to entry to join ISR?

A: If you have registered at least one data provider for our rankings, then you do not need to re-register for ISR. ISR submission is part of the WUR submission. Please go to the collection portal, select "World University Rankings 2024", tab "data", and you will find ISR questions at the end of that section. ISR also uses information gathered for WUR, which is why we require institutions to submit for WUR as well.

If you would like to submit for ISR but not for WUR, please email us at

interdisciplinary@timeshighereducation.com and we will guide you through the process.

We will also require you to distribute the ISR survey (the link was shared with all data providers and approvers) among the institution's research staff working in science disciplines.

If your institution has not participated in THE's rankings before, you can register your interest here:

https://www.timeshighereducation.com/content/interdisciplinary-science-rankings-participation?utm_source=thewebsite&utm_medium=referral&utm_campaign=interdisciplinary-science-rankings24



Q: The definitions of ISR seems quite broad and one could interpret in more than one way. Any advice?

A: Terminology like 'interdisciplinary' are not especially well-defined. Interdisciplinarity to our mind is when two subjects come together, and it is that gap between them that allows new techniques and insights to be developed. However, we have deliberately tried to avoid coming up with a too precise definition because in our experience, if we do that, we start ruling out universities who should otherwise be included. Interdisciplinarity is a word like paradigm, writing a precise definition of it is very difficult and yet we all have a fairly good idea of what it means in practice. We encourage you to use a definition and approach that makes sense in your academic environment and heritage.



Q: How to catch you for all THE talks? recording such as.

A: The recording for this session will be shared by email with participants. Invites for upcoming events will be sent to institutions registered with THE.

Q: Can we include data from interdisciplinary research between our university and other universities in Greece and abroad?

A: Research is by nature collaborative; therefore, you should include it. For example, if you are collaborating with another university and sharing resources, include your share of those resources (e.g., income, staff numbers, etc.)



Q: Hi, I want to know your data collection parameters for interdisciplinary research, also the date range and threshold, if any.

A: The date range is the same as for WUR as they share the same data collection. This year we request data from 2022. The data collection portal for WUR/ISR is open until 30 March. Please check the portal guide, available in the portal in 12 languages, for a full list of definitions.

Q: Could you please give us example answers for each of the 6 interdisciplinary research questions?

A: Please refer to the ISR guide, available in the data collection portal in 12 languages, for a full list of definitions and details about the information required. Should you have any further questions do not hesitate to contact us at interdisciplinary@timeshighereducation.com



Q: Don't you think that surveys to academic introduce an arbitrary and discretional factor into the rankings?

A: We do not believe it introduces an arbitrary factor. It does introduce a more subjective one. All data is subjective. When we decide what to measure, that is a subjective decision as well. But the input from academics has value, it does reflect a ground truth to people in your institutions, and so it has a place within an assessment. It also gives important insights to universities, if for example you think you are not doing a particularly strong job of interdisciplinarity, but your academics think otherwise, that's useful knowledge to have.



Q: Some of the data requested are particularly challenging to provide such as "Research income allocated to interdisciplinary research". Researchers have fed back that we simply don't have this data and they imagine this will be a challenge for many UK universities and that figures provided aren't likely to be very accurate. Do you have any recommendations for gathering this data? Thank you.

A: We recognize that interdisciplinary research finance is quite difficult to measure. What a number of universities have been doing is they've essentially identified the inbound funding, i.e., when grants are associated with interdisciplinary research, they are able to identify it at the grant level or the income stream level. If you are unable to provide data, we will understand that, and we will be looking at how we deal with missing data values. If too many universities are unable to provide data for a particular metric, we may not be able to use it. In the case that an individual university is unable to provide data, then we want to be able to use an approach similar to the ones we use in WUR, to ensure that we can give you some value there and that it won't totally disadvantage you.



Q: Don't you think that the pre-conceptions of the "best universities" might influence or bias the answers of the "best interdisciplinary universities"?

A: Although there may be some influence, our experience is that academics are good at providing specific insight.

Q: What kind of evidence is needed to show recruitment of ISR researchers?

A: We are looking at a measure of what proportion of your job ads in science explicitly mentions interdisciplinarity. It can be challenging to measure unless you have a measurement process in place, but for example a sampling approach is valid here. If you take for example the job ads you have created in November, and look to those that explicitly mention interdisciplinary science, that would give a sufficiently solid background for that metric. Measuring this is important as it gives a clear indicator to early career researchers that interdisciplinarity is something that will be rewarded and will give them a viable career in the future



Q: Does the metric on "amount of research funding from industry" refers to industry income on ISRO only? It seems to be a new metric not included in the methodology.

A: In our round tables income from industry was consistently cited as being focused (mostly) around practical problems. These tend to be interdisciplinary in nature. As this is a metric that we use in both the World University Rankings and the Impact Rankings we believe it is a useful addition to the ranking.



Q: Is there a strict line between inter- and multidisciplinary in light of the ranking?

A: We consider interdisciplinary research when an individual scientist or team has deep knowledge of two or more disciplines, including research practices, broad technical skills, and discipline-specific language, and then has the ability to bring together features of those disciplines to tackle a single research question. The idea is that single discipline research would typically look at a problem from within a single perspective, usually bound within the expectations and norms of that subject.

Multidisciplinary research might look at the same problem from more than one perspective, but true interdisciplinary research requires these perspectives to be integrated, either by a single researcher or a team.

We are trying to understand the extent to which universities are deliberately and explicitly creating the environments and opportunities for this kind of interdisciplinary research.



Q: So the evaluation is based on Qualitative data, submitted in the portal + Survey data and bibliometric indicators. Where do you get data about research produced by institutions?

A: Bibliometric data will be supplied by OpenAlex or Elsevier which gives us an insight into the world of academic outputs. It offers insights into the quality of publication that we produced using measurements such as citation. It is not perfect, but the good news is that science tends to be better recognized in institutional research databases than arts and humanities. Elsevier's Scopus is a curated data set, therefore there is a quality threshold for publications and journals to be included in it. This is expanding every year as Elsevier do more and more work on it, and institutions do have a guaranteed quality threshold of the research that you are evaluating.



Q: Our University merged another institution in October 2018. These 2 institutions have two different ID's in Scopus. How can we ask Scopus to "merge" the 2 ID's when collecting bibliometric data?

A: If your institution is going through a merger process or any other major institutional changes, please contact profilerankings@timeshighereducation.com as soon as possible



Q: Even though we might be interested in the idea of participating in the ranking, we are not very keen on spamming our researchers, what could be the consequences if we don't send the survey to our researchers?

A: If you don't send researchers the survey and we do not have the information from them then we won't have the data for the rankings. If we won't have this, and if we do not get sufficient responses from academics, then we would need to consider whether we use those elements within the ranking itself. Another reason to participate is that the actual survey results will be very valuable to individual institution. We understand that there are concerns of data protection issues sometimes. Please be assured that this is an anonymous survey. We don't know who your academics are, so we are unable to and won't be holding any personal data on your academics, we will simply be looking at the answers for your institution.



Q: Another comment is related to extra credits to be given to public evidence. As some evidence (e.g., criteria for staff promotion) is relevant to internal staff only, the evidence is not publicly available. We have concerns if universities are "penalized" if the evidence is not public.

A: Institutions will score slightly lower if the evidence is not public. We do believe that these kind of processes and procedures do not contain confidential information, and they do give a clear signal and indicator to academics about the value you are putting on interdisciplinarity. While we understand if there are some instances where you might want to hold these things privately, in practice in most circumstances we don't believe that it would be to your detriment if they were public.



Q: Are my data such as budget, number of jobs... weighted? Depending on the size of the university?

A: We do normalize these measures to take account of the size difference. We work hard to avoid a situation where a very large university has an inbuilt advantage.



Q: In the THE World University Rankings 2024 you included a column on interdisciplinarity (% interdisciplinary research) (last column). Are the percentages given based on data collected via the data portal last year?

A: The World University Rankings table shares metrics that come out of the WUR itself, for instance teaching research, quality, a research environment, industry links and also internationalization. But we also present some data which isn't associated with the WUR, such as the number of students at the university and the proportion of female academics. And alongside that, this year we also provide some bibliometric data (i.e. data exclusively about publications, not institutional data shared by institutions via the data collection portal) related to interdisciplinarity (i.e. the proportion of research publications which were interdisciplinary in nature). We wanted to show different insights into universities. It is not part of WUR, but we hope you found it is interesting.



Q: Is the data for this ranking collected from the WUR data submission as I don't see a separate place to submit this data?

A: Yes, ISR data is submitted via the World University Rankings (WUR) data collection portal. Both rankings share the same data collection, however ISR will not feed into WUR.

Q: In terms of the survey, how many responses are needed from the universities in order to consider them for the purposes of the IS Rankings?

A: We need a minimum of 50 responses per institution



Q: Research income allocated to interdisciplinary research

A: For this, we request institutions the income your institution has received in 2022 specifically for interdisciplinary research purposes amongst science disciplines (in the currency specifically identified by that of your institution) Please provide monetary data in whole numbers.

Q: Will it be part of the WUR?

A: ISR data will not feed into the World University Rankings



Q: I couldn't see GBR on either of the box and whisker charts. Did I miss it or is it not there and if it is not there could you please explain why? Thank you.

A: The charts showed countries sorted by their median values. Unfortunately, the median value for the UK was not in the top 22 universities for either chart.

Q: Thanks for the informative presentation, Duncan. I couldn't find the field for the number of science researchers in the portal. Can you please provide more details on where to find it?

A: You will be able to submit information for ISR via the World University Rankings data collection portal. Please go to the collection named "World University Rankings 2024", tab "data", and scroll down until the last section named "Interdisciplinary Science Rankings". Should you have any issues finding this please email us at interdisciplinary@timeshighereducation.com and we will be happy to assist further.



Q: Why isn't the academic survey combined with your other academic survey?

A: We are trying to keep the surveys as short as possible. We will, however, review this for the future.

Q: I have a question about the amount of research funding from industry metric. Which of the indicators is planned to be used? The total amount of the university or the amount amongst four science disciplines?

A: This will be in the four science disciplines.



Q: What would be considered as success indicator of interdisciplinary projects? Is there global standards that you will be using? or would this be according to the criteria set by each university?

A: Here we are looking to see if universities have their own measures of success that directly explore interdisciplinary success amongst science disciplines. These could be (for example) around successful project funding bids that involve interdisciplinary teams.



Q: Can you explain the academic survey element again.? Is the survey in addition to the academic survey in Dec/Jan?

A: The survey that was shared from Oct 2023-Jan 2024 is the Global Academic Reputation Survey, used to create the World Reputation Rankings, as well as calculating WUR and all WUR subsidiary rankings. The survey used as input for ISR is a different one, open from February until May 2024, and it requests academic their views about their own research and their institutions' interdisciplinary research in science subjects. The ISR survey was shared via email with institutions registered with THE. We kindly request you to distribute it among your staff involved in science research. It will close on 31 May. More information here https://www.timeshighereducation.com/world-university-rankings/survey-first-interdisciplinary-science-rankings-materials.

https://www.timeshighereducation.com/world-university-rankings/survey-first-interdisciplinary-science-rankings-now-open



Q: Due to the funding environment in the country our university is based there is a large portion of research funding coming directly from the government funded institutional budget. Will this affect how we record ISR funding?

A: It shouldn't affect it directly - we are interested in the amount of funding available for interdisciplinary science.



Contact Us

Interdisciplinary Science
Rankings
Powered by



If you want to know more about Interdisciplinary Science Rankings, please contact interdisciplinary@timeshighereducation.com



