It is a real honour to be here at the University of Sao Paulo. Today I am here to discuss the challenges that university rankings systems present to Latin American and specifically Brazilian institutions.

To do that please allow me to first briefly introduce the publication, what we do in terms of rankings and why, before I get on to the methodology of how we go about compiling them.

In doing so I will tell you about the big change we made a few years ago, and the story of how we went about making those changes which were critical to creating the robust ranking we have now.

Another thing to note it that I am not the Times Higher Education rankings editor, so I am not involved directly in creating the rankings themselves.

But I am a reporter who has covered this extensively both from inside and outside the Times Higher Education and hope to be able to give you some insight on our rankings and answer any questions you have.
SLIDE 2 – PEOPLE READ US

So this is Times Higher Education magazine.

Founded in 1971, we were part of Times of London but left the Murdoch empire in 2005 and dropped the world “supplement” from our name.

Now just Times Higher Education. We produce the print magazine, daily news online with around 200,000 unique visitors a month, and of course, the rankings.

On rankings day last year, around 1.6 million visitors in 24 hours.
SLIDE 3 – WE CARE ABOUT EDUCATION AND RANKINGS

Again, for background, this is our parent company. TSL Education in London.

Our sister paper TES covers school-years education and is 100 years old. ALL of the company’s businesses are in education. We only do education. Nothing else.

Both publications have a long pedigree, and we care very much that the rankings meet those high standards.

So to come to the first criticism we usually receive before it comes up.

As experts in higher education – we know universities are rather too complex, and do too many amazing, intangible things to be easily reduced to a single composite score. So why do we rank at all?
Well. We all know the changes that are upon us. Higher education has always been a global enterprise to some extent. But now it is truly global
Here are a few quotes from a US think tank in May 2009

And rankings are genuinely helping us to understand these changes. They can perform a helpful function.

We don’t want them to be overused or over-interpreted, but they’re clearly filling an important information gap.

Toronto might want to be able to compare itself with Melbourne. Cambridge with Stanford. USP with the University of Vienna (who you beat this year!) Because in an international system you are competing for the same staff and students.
SLIDE 6 – STUDENT CHOICE

And of course these widely publicised rankings help students make choices.

New data from IDP (market research company). When internationally mobile students were asked what factors were important when choosing a university to go to, rankings and reputation of the institution was named by as the single most important aspect - 33 per cent named it as their top priority.

Rankings and reputation also the most popular answer when respondents could give multiple responses: named by 85 per cent.

Incidentally, this IDP research also found that the THE World University Rankings were the most widely recognised and widely used by international students by a long distance.
SLIDE 7 – INFLUENCE
And of course their influence goes far beyond students. Global rankings have become huge – influential beyond their original conception.

The THE World University Rankings are used by faculty to make career decisions, by university leaders to set strategic priorities by industry to influence investment decisions and increasingly by governments to help shape national policy.

As you may well be aware, the Science Without Borders scheme (Ciência sem Fronteiras) here in Brazil says that its extremely valuable scholarships are for students attending the world’s best institutions, according to strict criteria – one of which is that they fall within the THE WUR top 200.

Chile’s higher education minister Harald Beyer told me recently that he will instigate a target to get one or two of the nation’s universities into a top 150 ranking, including ours, and government policy in Russia and India also includes references to the rankings.

But I guess given that you’ve invited me here today to speak, the influence of rankings is clearly something you already realise!
But the reason I am so happy to be here is that we realise that with such influence comes responsibility — to be transparent and accountable about what we do, how we do it and why we do it.
And we just have to be realistic. They are not going away. Rankings like ours are simple presentations of information for the public and people want them. I think the important point here is that we make them as good as possible - “refined and improved”.

Given this, is it essential to get the methodology right, to attempt to look across the goals of a research-intensive university and produce something reliable.

So this was our position at the end of 2009. former editor, Ann Mroz. READ

We had been publishing an annual global ranking since 2004, but as we saw their influence grow we became very conscious of the criticism of our system. Realised who had a very serious responsibility to improve what we were doing.
SLIDE 10 – BIG CHANGES

November 2009 we signed a deal with Thomson Reuters…. One of the world’s leading research data specialists.

Worked with them to build a new database of the world’s leading institutions, to develop a new methodology for a more rigorous and robust university ranking system.

So far it’s been a great partnerships – we know about higher education, they know about data and research evaluation.
In case you’ve been interested in rankings for a while, here were some of the main criticisms of our previous rankings, which we sought to fix.

Three major criticisms: citations, reputation, and over-reliance on staff to student ratios.
Why we were right to change:

“I will not discuss the QS ranking because the methodology is not sufficiently robust to provide data valid as social science.”

Simon Marginson, University of Melbourne

“This ranking is complete rubbish and nobody should place any credence in it. The results are based on an entirely flawed methodology that underweights the quality of research and overweights fluff... The QS is a flawed index and should be ignored.”

David Blanchflower, professor of economics, Dartmouth College

“Whether the QS rankings should be taken seriously by the higher education community is questionable”.

Philip Altbach, Boston College

Sources: University World News, 10 June 2012, New Statesman, 5 September 2011, Change magazine, Jan/Feb 2012

SLIDE 12 – MORE CRITICISM!

If you don’t believe me, here’s a small sample of criticisms – we are nothing if not open!

Very satisfied we did the right thing at the right time
So we knew what was wrong about what we had been doing. But what should we be doing?

We went back to basis and thought about what is it that we are trying to measure.

What is a world class university? There is no correct answer, no consensus.

Universities also have lots of different missions – each can display excellence against their own missions, be they global, national or local.

So for the purposes of a global rankings, we agreed we had to settle on a particular type of institution -- the global research-led institution.

Such institutions want to be compared against global competitors, competing on a global market for the top faculty and students. They publish in global research journals.
SLIDE 14 – the BASICS

On this basis. Easy to settle on the core elements.
Then, we asked the community how they used rankings, what they were looking for.

We then took this information and we engaged in 10 months of open consultation with the community, through our news pages, events, open web forums etc.

We then put our ideas in detail to an expert advisory group of more than 50 leading experts from over 15 countries.
SLIDE 16 - METHODOLOGY

And in a nutshell -- here’s what we came up with.

13 separate performance indicators, reflecting the full range of a university’s mission: research, knowledge transfer, global outlook, and the teaching environment.

A healthy 30 per cent dedicated to the teaching environment: unique to any global ranking.

Despite major improvements to the survey methodology, we’ve significantly reduced the weighting given to subjective reputation indicators. Down from half to a third.

Uses Thomson Reuters Web of Knowledge. Thomson Reuters also data from universities for a variety of indicators, such as staff to student ratios.

Importantly, all measures are scaled so that the size of your university alone can’t influence your position.
SLIDE 17 – TEACHING
So let’s delve into these.

First teaching You can’t measure teaching quality globally. Even nationally is a massive struggle!
But teaching fundamental to any university – we equally cannot ignore it. So we use a series of proxies.

They do not measure quality but they do measure things that we think are important to creating a good teaching environment.

First of all we use a reputation survey, which accounts for half of the teaching indicator.
The survey received 16,600 responses in spring 2012.

These are top scholars, by invitation only, and we only ask them about those in their narrow discipline.

And we specific real world questions, like if you had a great undergraduate
in your subject, where would you recommend they go for their postgraduate studies?

They are distributed in nine languages, including Portuguese, and are balanced for the geography of higher education (from all over the world – eg Western Europe 17%, South America 7%)

Other indicators within teaching –

Staff to Student Ratios: We reduced this greatly from the weighting it had before 2010. Like comparing the number of waiters in a restaurant to customers – it doesn’t tell you anything definitive about the place, but it does tell you that you are more likely to get better service.

We also have taken the view that good teaching is informed by research - this is kind of our call, and you’re welcome to disagree.

On the back of that we say that a high density of research students is a sign of a research-led teaching environment, and that’s something to be valued.

A high proportion of doctoral awards, scaled for the size of the institution, also suggests supervision at the highest academic level.

Finally we look at income, adjusted for purchasing power parity - so you’re measuring what you can actually buy with that money. Most people agree that whether you spend $10,000 per student or $20,000 matters.
Teaching – the learning environment

“I welcome the way Times Higher Education is also trying to measure teaching and is recognising that that’s a crucial part of the university experience.”

David Willetts, UK universities and science minister

SLIDE 18 – WILLETTS

We’ve had some good feedback on this.
SLIDE 19 – INTERNATIONAL OUTLOOK

It’s clear to us that the ability of an institution to compete in a highly competitive global market for the best staff and best students from all around the world is crucial.

So we measure the proportion of international students and of international staff.

This is another controversial indicator, as geography comes into play (ie you’re much more likely to be international Switzerland than America e) so it is not over-weighted. Half the amount given compared to our old system 2004-2009.

Also, new for 2011-12 is international co-authorship of research papers.

Ideas know no national borders and best researchers seek out the best in their field, from whatever country.

We believe it is a fair proxy for excellent research, and shows an institution
operating at the global level.
We also feel it is essential to recognise the so-called “third mission” of a university, after teaching and research. Working with industry in today’s knowledge economy, is a crucial element of a modern university.

So we include a measure of research income from industry per academic staff.
This indicator is still something of a work in progress. We would like to include industrial co-authorship of research papers in future to enhance it.

For now, given a low weighting.
On to the meaty indicators.

With universities at the heart of national knowledge and innovation economises, in any serious global ranking of global universities, research is the dominant issue.

In this indicator, we look at a university’s reputation – this accounts for 18 per cent of the overall ranking.

We look at an institution’s reputation for research excellence amongst informed and experienced peers within each discipline – based on the 17,500 responses to our reputation survey.

Reputation is based on what the scholars I mentioned before read of research outputs, who they hear at conferences, what the community in a particular subject is saying.

On top of this, we look at a university’s ability to attract research funding, in what in most countries is a competitive environment.

A crucial factor here is that we normalise the research income data to reflect global averages by discipline – a grant for nuclear physics, of course, will be
bigger than one for a piece of social science.

We also believe there is a need for an indicator of research productivity. Here we simply look at the volume of papers published in the leading academic journals indexed by Thomson Reuters, scaled for a university’s size.

Again that last point is important to note – just being a big university pulling in a lot of money is not enough.
The “research influence” indicator is the flagship.

It is the single biggest – worth 30 per cent alone. We put it at the heart of the rankings.

It looks at the role of universities in spreading new knowledge and ideas. They tell us simply which research has stood out, has been picked up and build upon by other scholars, and most importantly, has been shared around the global scholarly community.

The aim is to tell us which research has been the most influential in its field -- whether that be deepening our understanding of the human condition in the arts and humanities or taking forward the fight against cancer in the life sciences.

To do this we use Thomson Reuters’ Web of Science. It indexes some 13,000 journals. The data are drawn from more than 50 million citations to more than 6 million articles, published between 2006 and 2010. We also collect citations to these papers made in the six years from 2006 to 2011.

It’s also important to know that although most journals in the database are in English, there are many journals covered in Web of Science that publish articles with bibliographic information in English and full text in another language data.

So this is obviously an excellent resource. But it is not just the size and depth of the citations database, that counts, it’s the expertise that is available to properly understand and interpret the data that really matters.
So in this regard, subject normalisation crucial.

We fully normalise all our data - comparing the citations for each paper with the average number of citations received by all papers published in the same field and year.

It is essential to properly reflect the very different publication behaviour, and citation volumes, between different disciplines.

This table is from a five year period used for the 2010-11 rankings. Maths vs Molecular Biology have very similar number of papers, but dramatically different citations.
Reactions to the World University Rankings methodology

“Times Higher Education rankings – now increasingly seen as the gold standard.”

Ferdinand Von Prondzynski, Vice Chancellor, Robert Gordon University

“The new methodology employed by Times Higher Education is less heavily weighted towards subjective assessments of reputation and uses more robust citation measures. This bolsters confidence in the evaluation method.”

Steve Smith, Vice Chancellor, Exeter University

“I congratulate THE for reviewing their methodology to produce this new picture of the best in higher education.”

David Willetts, UK minister for universities

SLIDE 24 - REACTION

I’m happy to say we got a good reaction to the new rankings!
SLIDE 25 – RESULTS – US DOMINATION

So after this huge undertaking, here are the 2012-13 World University Ranking, published a few weeks ago, on 3 October.

Looking at these briefly, we can see that as often the case, it’s dominated by the US, with the UK taking three places.

It’s all about the US!! UK takes three places.

Interesting this year that Harvard has dropped to 4th. But very, very tight at the top. Just 0.1 point separates second and fourth.

Oxford rose because it diversified and increased its research income – won more competitive research funding from the European Union in particular.
SLIDE 26 – BY REGION
Here’s the top universities by region/country. USP is the top university in Latin America.

12 ETH Zurich
27 University of Tokyo
28 University of Melbourne
113 University of Cape Town
137 Hebrew University of Jerusalem
158 University of Sao Paulo
We don’t officially rank under the top 200 as the differences get smaller – we instead group them together into bands – but for your eyes here are the rankings of the other institutions in Latin America, which did not make the top 200.

And although we only produce a top 400, we always have our eyes out for potential new entries. Thomson Reuters takes note of those institutions which, based on reputation survey results, citation data and other general factors, are future potential. So you are being watched!

Here though it is important to point out one crucial factor about the rankings – as I mentioned before, we use citation data, the reputation survey and key information which universities provide themselves.

To even be measured in the rankings – to become part of Thomson Reuters’ “Global Institutional Profiles Project” – even if not in the top 400 yet, universities to take provide this.

TR invited a total of 57 Latin American universities in 2012, and received 14 responses. Six more universities responded after the deadline had passed and will be included next year. But that’s still only 20.
SLIDE 28 – INDIVIDUAL SCORES

A quick look at some individual scores for Brazilian institutions – two stand out by a mile – USP and Unicamp. Both are generously funded and with good autonomy. It’s starting to pay off.

USP obviously also did extremely well - jumped 20 places to 158 and in the Life Sciences was in the world top 50.

There was pretty even improvements across every score.

Unicamp cam in at 262, up from 276-300 group last year. It made big improvements in research and citation indicators.

You can see here that both suffer from below average international outlook scores. This was even worse for Unicamp. This is only a small part of the overall total, but still could be something to address.
The results 2012-13. Country by country

Here is a broad overview of how many top 200 institutions are in each country, but I won’t dwell to long here.
This map shows pretty well the distribution of the top 400 institutions. The top 200 in red, and members of our “best of the rest” list of those ranked between 200 and 400, in blue.

Here you’ll see the clear dominance in terms of numbers of the West – Europe and North America. A smattering in Asia and Australasia, far too few in South America and Africa.
SLIDE 31 – FROM WEST TO EAST

But now look again. Something very important is changing. This looks at the numbers of top 200 representatives, but also average change in rank position.

It shows a very different picture.

Look at the countries falling down the rankings – average US top 200 institution fell an average of 6.5 places. Indeed, of the US’s 76 representatives in the top 200, 51 fell.

UK – average fall of almost 8 places. Canada falling. Big hit for Switzerland. Not looking good for France. Netherlands a bit of a freak (data improvement) and Germany, bolstered by Excellence initiative.

But look at the Asia Pacific. Wonderful result for Australia. Superb result for Korea. Strong result for Hong Kong.

Doesn’t show up here, because we only included countries with three top 200 institutions, but China is on the rise. Taiwan too and Singapore.
In general, although Western universities are perhaps not getting any worse, even improving, the great drive in these regions is paying off with a power shift from West to East, which was I think, the story of the 2012-13 World University Rankings.
SLIDE 32 – AVERAGE CHANGE

Here’s another way of looking at the average changes.

Overall although the rise of Latin America is much more muted, what this does show is that within our rankings there is no room for complacency - we look at impact and outcomes as well inputs, so you can’t rely on reputation and heritage.

There is room for this power shift to take place.

The top 200 is not impenetrable to non-US, UK institutions.
Finally on the results, I should say that you can see more on line where each university has a profile page.

And you can get even deeper into the results with our IPhone App. FREE!!

Important because allows you to choose what is important to you. The app allows the user to filter the results against cost of living and tuition fees and other criteria, and it includes data on 400 institutions. You can also manipulate our weightings to what matters to you.

I think it is a crucial part of the rankers role to be as transparent and accountable as possible, so we want to give the user as much power as possible.
How to do better in the rankings

You can’t...
- Improve ranking position without improving performance in a range of areas – there are no quick wins

You can...
- Improve worldwide awareness about things you are already doing well
- Make the system more international
- Get on the rankings radar

SLIDE 34 - CHALLENGES FOR LATIN AMERICAN UNIVERSITIES

We have a wide range of indicators and there’s really little you can do for a quick win – which is good, because we don’t think that’s what they’re for!

We don’t want to change behaviour to pursue a ranking (other rankings may do this…)

For a start, you can’t even just churn out more publications, but it’s much more about the impact of the research, citations.

What you can do is increase visibility, shout about your work. International collaboration and awareness – it’s not enough to collaborate with the US, it has to be the world.

Don’t quote me on this, but the reputation survey no institutions in China mentioned a Brazilian university – that has to change if you’re a global player.

If it’s right for your university, make it more international - draw in more international staff and students. The reason we have it as an indicator is that these are often seen as very beneficial for both sides!

Some of this you are already doing, eg Science Without Borders – which has gathered the world’s attention. Each PhD student who travels abroad will develop their own networks and bring back contacts.

One other thing that you might have picked up before – I hate to say it, but publishing in English will have an impact.

Unfortunately, international journals usually mean in English.
Research is global and English is the common language of scholarship, for good or ill. If you want your research to have a global impact and be shared around the world, you may have to publish in English.

If you’re a researcher publishing world-class research on, say, Brazilian Literature, it’s true that it might not register in the rankings.

But we can only work with the databases that exist – there are only two which are big enough and credible enough to use, TR and Scopus. [We use TR because we have a great relationship with them and they have great people.]

Finally, get on the Thomson Reuters database if you aren’t already, by answering their survey. Although your institution might not be in the top 400 yet, you will be on their radar.

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I know that much of today will be devoted to talking about open access. And there are I’m sure many people here who know more about this than me.

From what I understand, the potential impact of open access on rankings remains unclear at the moment. I don’t know of any study which compares an institution (or country’s) performance in rankings with their take up of open access.

Some studies have suggested that with increased open access comes increased citations. If this is the case, there’s no reason it wouldn’t be picked up in the rankings.

Open Access journals are in the Web of Science database – several hundred out of the 12,500 total.

More could well be added, TR evaluates and does this all the time. They don’t care if they are open access or not as long as they are good journals! Quality is the only (very tight) criteria.

Publishing open access also has the potential to influence the reputation scores, even if not citations, because reputation is about visibility.

As a consequence of that it can help build international relations and generally increase participation in worldwide/class research – which is what rankings are about.
But to make sure we’re as accountable as it is possible to be, we need constant criticism and input.

Only with the engagement of the higher education sector will we achieve a tool that is as rigorous and as transparent and as useful as the sector needs and deserves.

So please use the sites and tools above to make sure you have your say and tell us what you think.

Thank you. Obrigada.