

# Research in the World's Anglophone Architecture Schools: 2005 Report

---

FINAL RELEASE: December 2006

---

Garry Stevens, PhD  
Key Centre for Architectural Sociology

### Copyright Notice

Copyright © 2006 Garry Stevens. It is not public domain. However, you may copy and distribute this document freely, provided that attribution to the copyright holder is given on each copy, in whatever form copied. Underlying research methodology and data collection is commercial-in-confidence.

# Contents

Copyright Notice.....	2
Introduction .....	5
Next edition: the 2007 report .....	5
Research culture .....	5
The academic counting swindle.....	6
Our test audit.....	6
Our data sources.....	6
The Avery Index.....	7
The RIBA library .....	7
The virtues of these databases.....	7
What we measured.....	9
Who we measured .....	10
Abandoned schools.....	10
Outliers we removed from the counts .....	10
Who got removed .....	11
Schools most dependent on a few stars .....	11
Any questions? .....	13
Think we've got our methodology wrong?.....	13
I can't find my school!.....	13
How the nations compare.....	14
Canadian surprise .....	15
A caveat about Britain.....	15
National notes.....	16
Australian schools .....	16
Schools not counted: Canberra and Charles Darwin.....	16
Is it fair to measure Australian universities with British and American indicators? .....	16
Horrible websites.....	16
British schools.....	17
Schools and people not counted .....	17
Other assessments.....	17
Omitting journalism .....	18
Schools not in the universities .....	18
A good site... sort of .....	19
Horrible websites.....	19
The United States of America's schools.....	20
How reliable are our rankings? .....	20
Schools not in the universities .....	20
The schools' websites.....	21
Spritz over substance .....	22
Just visiting .....	23
Other sources .....	23
Canadian schools .....	23
Difficult sites .....	24
Schools of New Zealand, Eire, Hong Kong and Singapore.....	24

South Africa's schools.....	24
Appendix A. The research stars.....	26
Appendix B. Research intensity of the schools, by research intensity.....	27
Appendix C. Research intensity, by name of institution .....	31

## Introduction

This report contains our study of the research cultures in the architecture schools of the major English-speaking nations. The report documents every school we could obtain data about in these nations:

- United States of America
- United Kingdom
- Canada
- Australia
- New Zealand
- Republic of South Africa
- Eire
- Hong Kong
- Singapore

We examined:

- Over 170 architecture schools
- Over 3,000 architecture academics {professors}

The report was originally published in various stages from 2004 to 2006 at <http://www.archsoc.com/>, the website of Dr Garry's [Key Centre for Architectural Sociology](#). We aggregated and edited the web pages to produce this report in December 2006.

The data for the study was collected in late 2004 and early 2005. The original 2004/2005 data was cleansed in late 2006 by rechecking with the schools' staff {faculty} listings. Rankings shown in this document may therefore differ slightly from previous versions.

Next edition: the 2007 report

The next survey will begin in January 2007, with results expected to be published progressively on [www.archsoc.com](http://www.archsoc.com) through the first quarter of 2007.

## Research culture

There are quite a many people who would argue that research is simply irrelevant to an architecture school (you can read further at [www.archsoc.com](http://www.archsoc.com)). But in the universities the schools are, and as long as they wish to remain there they must follow their dictates. Amongst these is the requirement to produce research. A lot of money and perhaps promotion may well depend on it.

The basic indicator of research excellence is books and articles. Counts of these publications are the only indicator we can measure with any accuracy, and to them we turn. There is a large literature presenting results from many other disciplines. Interested readers should google 'citation studies', 'bibliometrics' or 'scientometrics'.

## The academic counting swindle

There are all sorts of difficulties in assessing any school's research. Who counts and what counts?

Publication counts are often used to rate academics. In every nation they are crucial for employment and promotion. In the United Kingdom and Australia, for example, such counts are also used to determine funding of the public universities. Big problem: they are self-reported. We at the Key Centre would not ask an academic to do the counting. It is in their interests to have more, more, more. Academics will include every birthday card they've sent to great-aunt Agatha as a major treatise: they cannot be trusted to self-report any data that might affect their incomes or tenure.

### Our test audit

We audited the research listings of one of Australia's most eminent architecture schools. By its own account, this school was a veritable Antipodean Harvard. We counted a bountiful 70 items published in 2003. Spend another 60 seconds on their information, though, and you work out that almost every item refers to obscure articles from oddly indeterminate conference proceedings resulting from short hotel stays in lush tropical resorts. You won't find these tomes at Amazon.com.

### Writing versus being read

Academics will entertain you for hours with the codswallop they have written in places that no-one reads. We fondly recall one colleague who has written hundreds of pieces of deathless prose, published in places so obscure and impenetrable that Osama bin Laden hides out in them whenever he wants to spend a few lazy days deodorizing his turban. On this dreary but prolific guff he acquired a lifelong junket in an architecture school for himself, his wife and innumerable assorted relatives.

The academics have no idea if they are being read. They don't really care. Their pay cheques {checks} depend on the former, not the latter.

## Our data sources

Since we have no confidence at all in letting academics count their own research activities, we thought the best thing would be to let other people do the counting. We figured they would be pretty unbiased in their assessments.

We therefore examined the databases at the two largest and most prestigious architecture libraries in the English-speaking world:

- the online catalogue of the library of the Royal Institute of British Architects (hereafter RIBA Lib);
- the catalogue of the Avery Index to Architectural Periodicals at the Avery Architectural and Fine Arts Library, at Columbia University in the USA (hereafter Avery Index).

You don't get better than those guys.

## The Avery Index

We did an author field search at the Avery Index to Architectural Periodicals. The Avery shows how much verbiage people at each school have written in journal articles (not books!).

Magnificent an accomplishment as the Avery index is, it does – of course – have one big problem: you have to pay for it—and pay for it big time. The good people at the Royal Institute of British Architects let any old bloke consult their catalogues for nothing, any time they want.

The librarians at Columbia are as dedicated to the free flow of information as Joseph Stalin on a bad bowel day. They demand very hefty payments: \$USD 200 will get you an application at their antiquated business model. Their target market is wealthy university libraries, and they discourage us riff-raff from even thinking about consulting them.

## The RIBA library

We did an all-fields search at the RIBA library. This found not only articles in periodicals, but also books and book chapters by academics; together with any records which simply mentioned their name. This index covers a lot more ground than the Avery. Bernard Tschumi and Rem Koolhaas, for example, have gigantic scores on this measure, and still would have had they never written a word themselves.

We had a quite a few problems with this database. Sometimes our searches turned up authors with the same names as our academics who were born in the early 1600s. Just goes to show you how comprehensive that database is.

The RIBA library's search facilities are in a way much too comprehensive. Disentangling an academic named 'Henry Richardson' from the architect 'Henry Hobson Richardson' was a real nightmare. The search engine does not allow easy disambiguation of these terms, as well as being quite slow and clumsy: we suggest replacing it with the engine powering the Avery Library. Counts for some individuals may be substantially inflated, although we attempted to prune out the irrelevancies. We regard this as the wobblier of our two measures.

Nonetheless, on an individual level it and the Avery correlate at 91%, a very impressive figure.

## The virtues of these databases

Our two library indices have these advantages:

- **They filter out the crud:** no dimwit conferences. Academics are fond of recording ephemeral and unobtainable conference proceedings from tropical resorts as major works. Time to dispense with these taxpayer-funded holidays and unread pieces of academic junk.
- **They do not rely on self-reporting.** No fudging great-aunt Agatha's birthday card here as a major treatise here, thank you.
- **There are no vested interests.** The two great library catalogues have no interest in boosting the numbers of this or that school. Avery may be housed at Columbia, but

does not seem prejudiced towards its academics. The schools *are* very much interested in doing just that. The RIBA catalogue has an excellent coverage of Commonwealth journals (India, Australia, Canada, New Zealand, etc). The smaller English-speaking nations are therefore not disadvantaged.

- **The indicators measure research important to architects.** There may well be many academics out there publishing like mad in the *Bulgarian Journal of Concrete Cracks*, or the *Transactions of the Bumwad (Montana) Preservation Society*. But really guys, who cares? You are just inflating your publication count to make yourself look better when the promotions committee meets next.

## What we measured

We assigned to each academic a **research score**, which is a simple sum of the references in the two databases, with the RIBA references weighted to reflect the fact that they significantly outnumber the number of references in Avery. Adding these up gives a research score for the whole school.

From this we constructed a **research intensity** for the entire school.

The research intensity is, roughly, the average research score per academic at the school, not counting the significant outliers we discuss below. We rounded the numbers to the nearest whole. Schools scoring less than one are marked as such.

The research intensity has the signal virtue of reproducibility: anyone can carry out exactly the same data collection and calculations and test their ratings against our own. No hocus-pocus here!

Research intensity is a true ratio scale. A value of zero means exactly that, and a school with a score of 12 means that its staff really are twice as productive as those at a school with a score of six.

## Who we measured

We obtained the names of the staff {faculty} at each school from the school's website. For each university, we searched our library databases for these people. We took each site at face value. We used the smallest administrative unit possible, preferably a department of architecture. Several sites could not be bothered to distinguish those teaching architecture from those teaching, say, toilet hydrodynamics. In such cases we used all those listed.

We did not count part-timers, sessionals, visitors, affiliates, honoraries, instructors and those below the rank of lecturer<sup>1</sup>, adjuncts, professors emeritus (emerita!), people known to be clinically dead, and that funny little guy in the basement office who knows all about Adobe Photoshop. In short: all the senior staff and none of the ring-ins: the very people you expect to be scholarly.

We searched for a name without exhaustively checking if it was this John Smith or that John Smith. We did not often encounter problems, but we do have to say that we had no way working out one or two names: if the several David Browns who are employed at numerous schools can contact us, we would be happy to assign their references appropriately. Our search made no attempt to take into account double-counting. So if A, B and C were listed as co-authors of the one book or article, then A, B and C got one count each.

We also checked for misspellings and name variations ('Pani' and 'Panayiata'). You can't get any fairer than that, can you? In short, the searches were both generous and rigorous, and if anything, inflate the overall figures for the RIBA library score (but not so much for the Avery index).

## Abandoned schools

Some schools we simply had to abandon. Either they did not list who did what (janitor or Dean), or how often they were there (visitor or full-time). Some positively refused to list their academics on their website. The British were least forthcoming.

## Outliers we removed from the counts

We did not intend to make a snob's ranking of schools. Our intent was to measure the research *culture* of a school. By culture we mean a general inclination of the school to foster and encourage scholarship.

What should we do with a school of – say – 20 academics, 18 of whom do nothing, and two of whom score very well indeed? The average research intensity for such a school

### What we used the websites for

Some of our dimmer correspondents believe that we used the school's websites *per se* to make our rankings. No: our sole purpose in visiting the sites was to obtain a listing of the academics at that school.

As it happens, our visits provided a rich vein of material for us to comment on.

<sup>1</sup> In the UK and Commonwealth nations, a lecturer or senior lecturer is the rough equivalent of a US assistant professor. We counted these people. In the USA, lecturers are usually at the bottom of the academic totem-pole. We did not count them.

says nothing about its research culture, and everything about the amount of money it can afford to throw at those two performers (Columbia is a good example).

Such concentrations of productivity (or fame, or whatever you want to call it) are not uncommon. In fact, they are a fact of life in the social world. It's the old 80/20 rule: 20% of the producers account for 80% of the productions (20% of the crooks account for 80% of the crime, and so on: you get the drift). You can read a detailed discussion in Dr Garry's *The Favored Circle* (MIT Press).

Many – but certainly not all – architecture schools have one or two of these stars, those who garner vastly more references in our two databases than any of their colleagues. In effect they carry the fame or research load for the whole. Remove these precious individuals from each school and the numbers fall dramatically. The ratings for the home schools of the stars are often very good, but not as stellar as the raw data would suggest. Remove Kenney and Berney from Columbia, Petey from Cooper Union, Tom Fisher (one of our favourite American academics) from Minnesota, the Rem-meister from Harvard, Marc from Berkeley, or Bob from Yale and their schools plummet.

Who got removed

For schools with more than ten senior staff {faculty} we ignored anyone with more than 25% of his or her school's total research score. For schools with ten or fewer senior staff we acknowledged the inherent skew of small numbers, and put our cut-off at 50%. As a result, we did not count about 110 people from our database of over 3,000. We figured such people were wholly unrepresentative of the culture of the school, and may well have been imported precisely to make all the other slackers look better on the averages.

Technically, the result is that **the research intensity is equal to the first trimmed mean of the research scores of the academics at each school.**

## Schools most dependent on a few stars

We could have used some fancy statistical measures (such as the Gini coefficient or Thiel's T) to work out those schools most reliant on just a few bright bulbs. Rather than blinding you with science, the table below shows those schools most dependent on just one or two people, the stars we defined above. The number you see is the percentage of a school's total research score that is accounted for by the very top scorer(s) in the school. We have listed those schools whose stars account for more than two-thirds of the school's total score (66%) (recall that our cut-off is 25%).

For example, Columbia has two staggering performers: Messrs Frampton and Tschumi. Which is why Columbia wants them, of course. They account for 70% of Columbia's entire research score. The other Columbians think can rest on their backsides, letting these two stars carry their school along. Not in our rankings, Columbia!

School	Stars' Research Score as % of Total	Nation
Howard University	100	USA
NewSchool of Design	100	USA
Tshwane University of Technology	100	RSA
Prairie View A&M University	90	USA
Durban Institute of Technology	86	RSA
Florida Atlantic University	83	USA
Lawrence Technological University	83	USA
University of Oklahoma	81	USA
University of Minnesota	78	USA
Hampton University	76	USA
California State Polytechnic University, Pomona	76	USA
Southern University and A&M College	75	USA
University of Southern California	75	USA
University of Tasmania	74	Aus
University of Calgary	73	Can
Wentworth Institute of Technology	72	USA
Andrews University	72	USA
City College of New York, CUNY	72	USA
University of Dundee	71	UK
Columbia University	70	USA
North Dakota State university	68	USA
University of Massachusetts Amherst	67	USA
Rensselaer Polytechnic Institute	67	USA

Percentage of a school's total raw research score accounted for by one or two star academics.

## Any questions?

We are always more than happy to answer questions. If you feel that our calculations are seriously in error we would like to hear from you.

Just send us your own calculations using the same methodology discussed here (sorry, but no — we will not send you our data: that is commercial-in-confidence). We shall compare your calculations with our own, and if we have bungled the data we shall gladly publish a revised ranking for your school, together with a correction notice and apology. How fair is that?

## Think we've got our methodology wrong?

Frankly, we don't care. Our methodology is our own. No offence, but we have no interest in hearing how our rankings should have been done this way or that way.

Our major competitor in the rankings game, DesignIntelligence ([www.di.net](http://www.di.net)), has exactly the same attitude. But they demand that you pay them money before they ignore you. We ignore you for free! How good is that?

And we especially do not want to hear from academics. You work in a university, right? A place meant to conduct research, right? So why not actually earn the money that the taxpayers and your students are paying you, get off your well-paid backside, and do some research of your very own? Stop whingeing and whining about how ill your school has fared, and produce your own international rating system.

## I can't find my school!

There are two possibilities:

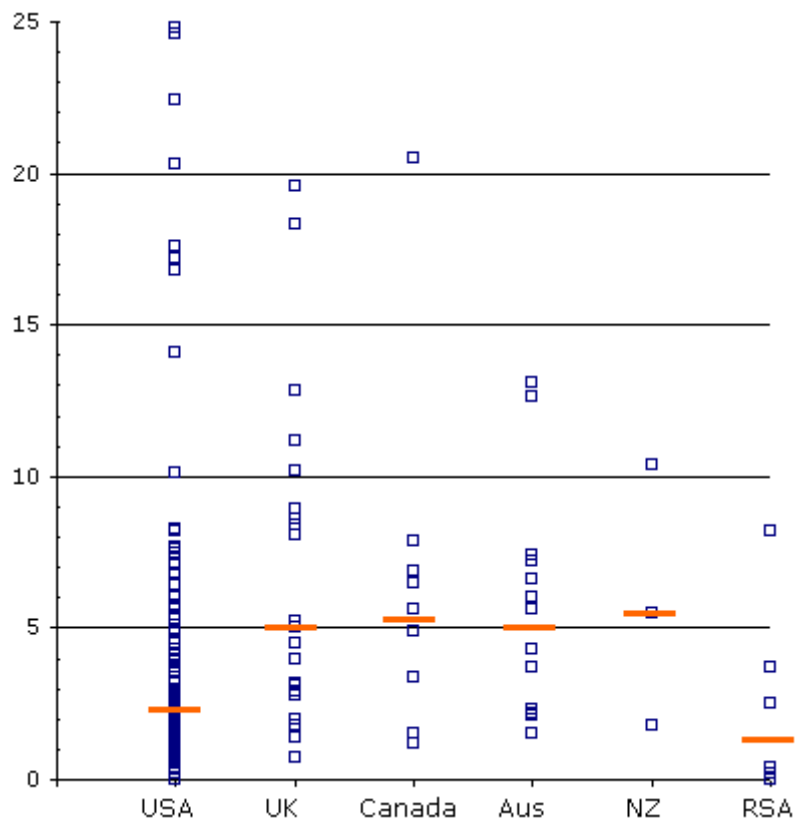
- Your school's website provided too little information for us. All we needed was a list of professors and what they did! If they are too poor or too incompetent to provide the basic information that everyone else could, you might wish to reconsider your educational choice.
- Some of our correspondents don't seem to know the name of their own school. We were meticulous in using the correct nomenclature, just as the school provided it. If you really do not know the names behind abbreviations and acronyms such as UCLA, BAC, SCI-Arc, SCAD, RISD or SUNY; you should be put out of your misery now.

## How the nations compare

The chart shown here plots the schools' research intensities by nation (we omitted Eire, Singapore and Hong Kong because of their few schools). That confused bit at the bottom of the United States' column represents an awful lot of schools that our graph cannot display: in fact that portion below the orange bar contains one-half of the American schools.

We said elsewhere that:

‘We have a great admiration for the North American tertiary education systems. But – it must be admitted – that in North America the tremendous diversity of tertiary systems means that while that region has probably the finest universities on earth, it also has a large collection of duds. One of the virtues and vices of the Australian academic system is that there are no truly bad universities, but also no truly great ones.’



Research intensities of the schools. Orange bar indicates the median intensity for each nation.

The rankings here confirm that impression. None of the other nations can match the best that the United States has to offer. If you can afford to study at the most expensive universities in the world, then without a doubt you should be doing your graduate research at the top-ranking American schools.

But if you are thinking of studying overseas, with only the vaguest notion of which school, then you should probably place your bets elsewhere. Consider: were you to choose an American school out of a hat, it would most likely have a research score of 2.5. Repeat this for a school from Canada, the UK, Australia and New Zealand and you most likely draw a school with 5.2 – more than double the score.

## Canadian surprise

Perhaps the biggest surprise is Canada's lacklustre showing in the elite areas. McGill University indeed scores superbly on our score: one of the very best. But where are the other Canadian schools? With only three-quarters of Canada's population between them, Australia and New Zealand have three schools in the best-of list to Canada's one.

## A caveat about Britain

We were unable to obtain data for about one-third of Britain's schools: an astonishing abrogation of their duty. We strongly suspect that these are duds not only in terms of website design, but also in research. The true British median figure is therefore rather lower than that suggested in our chart.

## National notes

### Australian schools

The Australian Federal government began gathering data on university publications counts more than a decade ago, intending to use the data as a key performance indicator. After a few years it contracted some heavyweight accounting firms to audit the data. The Feds figured that if they were paying for most of the cost of Aussie universities, they should have some say in their returns.

Good heavens above! The auditors discovered rorts and frauds aplenty: hack textbooks counted as original research; work dredged up from years ago counted in the current count; authors who seemed to have no relation to the claiming university. After this audit, one of Australia's largest and most prestigious universities was forced into a humiliating admission that's its academics had conducted a systematic fraud and deception against the Australian government. My goodness us!

Schools not counted: Canberra and Charles Darwin

We had few problems locating the staff at the Australian schools. Compare this to the UK and American systems, with rather poorer rates.

Only two universities were too coy to provide sufficient information to complete our initial survey in 2004: University of Canberra and Charles Darwin University. They are omitted.

We've periodically checked back at the architecture school at the University of Canberra, in the vain hope they may provide us with just a clue as to who works there. No luck. We suggest that you avoid this school as you would Avian influenza.

Is it fair to measure Australian universities with British and American indicators? Yes. We see no point in being world-famous in Australia. This is a global market. In fact, the best Australian schools do very well in our international rankings.

Horrible websites

The University of NSW (UNSW) has always favoured quantity over quality. Its one-size-fits-all Faculty of the Built Environment teaches everything from urban development to origami. The website made no attempt to distinguish those with some connection to architecture from the others, hoping to dazzle by the sheer number of their staff. We had to pass them over in our audit.

When we browsed it, the University of Newcastle was in the process of rebuilding its entire website. Fair enough. But here is a clue guys: a website is not like a construction site. You can construct a totally new site while you keep the old one active. You only swap over at the last moment. You do not try to hash the new and the old into one idiots' melange. Dear oh dear!

## British schools

### Schools and people not counted

We could not find sufficient information to complete our task from an astonishing 11 schools, one-third the total. Perhaps Britons are simply ashamed at working in an architecture school, and prefer their names to be unknown.

So if your university does not appear, it is because either we could not find your school, faculty or department of architecture at all; your university refuses to divulge who works there; or because we simply lost patience trying to navigate an impenetrable website looking for staff {faculty}.

We had some difficulty with one Mr Brian Hatton, an excellent researcher. He is claimed by both the Architectural Association and Liverpool John Moores University. Until he writes and tells us to whom he wants his counts assigned to, we have omitted him.

### Other assessments

The United Kingdom has conducted research audits of its universities since 1992, through HERO. You should check out their results at the Research Assessment Exercise 2001 (RAE 2001) homepage. We understand the next assessment is not until 2008.

The *Guardian University Guide* ranks schools in terms of teaching. We have included their 2004 scores in our ranking table below for your edification. We have also included the *Times Good Universities Guide* scores for 2005.

Britain's first student assessment of teaching, the Teaching Quality Information, will be conducted in 2005. Australia has been doing it for more than a decade. Why are the Brits so slow? In lieu of this, the *Guardian Education* supplement has published its own satisfaction rankings.

School	Guardian Teaching Score (2004)	Times Good Universities Guide Score (2005)
University of Cambridge	91	98
University of Bath	72	97
University of Westminster	—	88
Edinburgh College of Art	70	—
University College London	85	95
University of Edinburgh	—	94
University of Sheffield	77	98
Cardiff University	79	100
University of Liverpool	65	92
Architectural Association	—	—
London South Bank University	60	—
Oxford Brookes University	?	?
University of Newcastle	71	95
University of Greenwich	71	—
Royal College of Art	—	—
University of the West of England	65	—
Leeds Metropolitan University	71	—
University of Strathclyde	60	88
Queen's University of Belfast	60	87
University of Dundee	61	90
Robert Gordon University	62	88
Glasgow School of Art	—	—
University of Nottingham	77	97
University of Plymouth	72	83
University of Central England Birmingham	—	—
Liverpool John Moores University	—	—
Manchester Metropolitan University	61	93
Lincoln University	62	—

### Omitting journalism

The United Kingdom has an august tradition of architectural journalism, unique in the English-speaking world, thanks to its weeklies *Architects' Journal* and *Building Design*. Excellent publications that they are, they do not really measure research, and their frequency of publication skews the counts significantly. We remedy this in our international comparisons.

### Schools not in the universities

The United Kingdom has several venerable architecture schools outside the university system: the Edinburgh School of Art, the Glasgow School of Art, the Royal College of Art, and the Architectural Association (AA), the very first formal school in the English-speaking world.

In North America, it was established long ago that architecture was only a matter for universities. The very few non-tertiary schools have always had a tough time of it, with one or two notable philanthropic exceptions.

The UK has always been more accepting of such educational experiments. None of these schools outside the universities claim to be great researchers (a university is supposed to do that), and we include them here only for reference.

A good site... sort of

To its great credit, the Edinburgh College of Art includes a text-only version of its site, apart from the Flash version. On the other hand, the fact that its main portal is through Flash says it is more interested in spritz over substance. And we could not find anyone who actually worked there.

Horrible websites

Some schools gave us so much trouble we had to discount them. London Metropolitan University gave us the distinct impression that they had precisely three staff {faculty} manning the lecterns. The university's site map refers to the school as the Department of Architecture and Spacial Design (sic). A small error, but a telling one. If no one at the department has noticed the booboo, what else couldn't they be bothered to get right – teaching and research?

The entire school at Robert Gordon University did its best to be invisible, but after a few weeks we managed to smoke it out. Every time we clicked on a staff member at London South Bank University (LSBU), we were chastised by a nasty javascript error. Perhaps they should pay their web designers just a few more pounds to actually get it right, as opposed to utterly wrong. LSBU has also invented the office of Executive Dean, a puffery unknown to any other architecture school in the English-speaking world.

We could not find anyone at the University of Brighton, and were discouraged to read that the data on the school's webpage had last been updated in February 2000, five years before our visit! Nice to see a school so up with the times.

No one at home at De Montfort, either. But some of those disconsolate at De Montfort's non-appearance in our ratings may find other reasons for a leisurely postgraduate stay. The same Faculty of Art and Design that succours the architects also teaches 'Contour Fashion – the only course in the world to specialise in lingerie, bodywear, structured eveningwear, bridalwear and performance sportwear'. Dr Garry has already sent in his application.

Nor could we find anyone at East London, Huddersfield, and Portsmouth or the University College for the Creative Arts (formerly the Kent Institute of Art and Design), either. If these schools have neither the wit nor the money to get a website right, what hope for the massive endeavours of teaching and research? Personally, we think that the Royal Institute of British Architects, and the regulatory poodle that it keeps on a very tight leash – the British Architects Registration Board – are falling down on the job in this respect. We have popped them a note in the email.

## The United States of America's schools

Many American architecture academics are completely invisible to our indices. About one-third are unknown to either of our great libraries. Considering that the RIBA Index also includes people who are talked about as opposed to those who write, this is quite an achievement. The typical (median) American professor has 0 (zero) references in the Avery index and 1 (one) in the RIBA Index.

Since the median is so low, it does not take much to be a scholarly American architecture academic: had you obtained a mere three references in Avery, you would be in the top 20%; a rather more productive eight would put you in the top 10%; and a strenuous 15 would put you in the very top 5% of all architectural professors (Dr Garry counts 16 – and he is neither an academic nor an American, for goodness sake!).

We have over 2,000 American architecture academics in our database. A tiny 82 (count'em, eighty-two) of these account for a staggering 36% of our American research score.

How reliable are our rankings?

Does that mean that our ratings are as ephemeral as a Brittany Spears marriage? One year Princeton is on top, but the next it might be Anthrax U; in Sciatica, Montana, depending on who moves where?

No! For reasons we are not sure of, the top players do not often change upholstery. Bernard Tschumi, for example, parked his Deaconal backside at Columbia for fifteen years. Bob Stern has been at Yale since Moses was in short pants. The most mobile academics are the vast mass who score between zero and two on our research score. Move as they will, their perambulations barely affect our rankings.

Schools not in the universities

The United Kingdom has an august tradition of non-university architecture schools, dating back more than 150 years. Indeed, the first formal school in the English-speaking world, the Architectural Association, had no association with any university, and continues to this day as architecture's equivalent of a Swiss finishing school: erudite, elite, elegant, and expensive. The United States has always been less interested in such experiments, but they do exist: BAC, SCI-Arc, the NewSchool.

No one expects those schools outside the university system to conduct what that system regards as research. The non-university schools have other objectives. Moreover, they rely on large numbers of part-timers {affiliates} whose roles cannot be readily mapped to the conventional academic hierarchies. We acknowledge all that.

We have received endless complaints as to these schools absence' from our rankings. We gave in. We listed them. If the good people from the Boston Architectural College, the NewSchool, SCI-Arc and several others would prefer not to appear here, we can only suggest that they request their many, many supporters to cease haranguing us to do precisely the opposite.

## The schools' websites

We viewed (or attempted to view) the website of every NAAB accredited and candidate school of architecture in the United States. There aren't many people who can say that, and most of those who can are in asylums.

The faculty at the University of Texas at Arlington had the sexiest pictures. Admittedly, nothing to do with our study, but we thought it worth a mention. If there is such a thing as architectural erotica, this is it.

After a chastening message from the designers of Yale's website we decided to revisit. They were right: it's a model that other schools would do well to look at. Ok, it doesn't work so well in Firefox, but that's nothing compared to the horrors that most American schools put out there.

We really liked the site at the University of Idaho. The site was clear and easy to use. The photos were friendly and folksy, and clear (memo to other schools: do not – do not – expand a thumbnail gif into a portrait. It just makes you look silly). We could readily identify everyone's position, and the precise courses they taught. As a bonus, we got to see them in action. Plaudits to Idaho!

We were unable to obtain data on about 15 schools; simply because their websites were as friendly, open, and accessible as a North Korean nerve-gas factory.

We used the sites of Iowa State, Arkansas and the University of Virginia as our borderline. We ignored any architecture school website more annoying and impenetrable than those. If you can't find your school here, that's why.

We did not count a school if we could not identify faculty members as meeting our inclusion criteria.

Some schools (such as Michigan, Penn State, Syracuse, Roger Williams, Polytechnic University of Puerto Rico, SCAD, Parsons and Southern Polytechnic) run very zippy sites that are keen to list everyone under the sun who work for them, while being rather coy as to their actual duties.

At Carnegie Mellon and the University of Washington, for example, we had to spend an eternity clicking through vast numbers of part-timers {adjuncts, instructors} and professors emeritus on life-support systems to reach the very few people who actually seem to spend a decent amount of their time there.

The University of Washington is fond of awarding its faculty numerous confusing titles: we found some people who were adjuncts, associates, affiliates, executives and emeritus all at once. Their business cards must be large enough to double as beach towels. We figured the longer and more demented the title, the less likely they were to do anything actually useful: we ignored them.

A few other schools (such as the SCI-Arc, RISD, Tulane, and the University of South Florida) were coy beyond belief. Their professors are too shy to have their names revealed on their websites. Should we applaud such self-effacement or discourage it?

Consider: We had no trouble discovering SCI-Arc's CNC milling assistant (all the best, Dan!). We spent another month digging up its teaching staff, and when we did stumble on this treasure trove, SCI-Arc told us nothing about whether they spent their every waking moment there, or merely a passing hour each semester.

Drury said that its faculty listing was coming soon. Right. The site at the University of Nevada, Las Vegas was under construction. Not a good look, guys! That at the University of North Carolina- Charlotte was simply unfindable. The University of Arizona is so underfunded that it cannot even get itself placed first in a search engine. We spent several minutes fighting past sister institutions to get to this terminal university. We suggest they keep the oxygen masks in place until Dr Kevorkian can put the college out of its misery.

At our first visit to the University of Hawaii's catastrophe we thought we had arrived at a splatter-movie tribute site. We were about to give up on their vomits of blood until we noted that almost everyone listed on their staff list was visiting, or an adjunct. They also seem to have invented a term of (in)distinction, the affiliate professor. What should we expect from the twits who proposed the idiotic DArch as a terminal degree? In our quest for Most Pompous Underachiever, Hawaii is a leading contender.

We tried to locate the University of Hartford's department of architecture. After a few clicks we felt that the CIA was looking over our shoulder. At the University of Arkansas we could view any number of photos from their Photoshop seniors class. Only a concerted effort laid bare who worked there.

The University of Buffalo figured that almost-white on white was a grand colour scheme, perhaps an allusion to their climate. Most pages at Tuskegee University were under construction, a rather sad indictment. The University of Colorado at Denver should have had a grand site. The time we tried to visit them, alas, they hadn't paid their web hoster or designer: no money, no page, no site. We gave up on them, too.

Spritz over substance

Most schools have very impressive sites. Quite a few were rather too impressive, betraying a preoccupation with spritz over substance. Rice University and Syracuse University almost gave us epilepsy with the Flash graphics. We are not in a mood to chase moving targets across a screen to gain information, and suggest that their web designers be shot out of hand.

RISD (Rhode Island School of Design) did give us epilepsy, and only our great sense of public duty and dedication led us to their well-hidden faculty listings. We thought that a British school would take out the award for Self-Important Pretentious Wankery. Nup, RISD does. Congratulations.

Columbia University has recently given large sums of money to a firm apparently run by high-school crack addicts to design a new site; one that provides maximum frisson and minimal information. With Bernie's Deaconal salary no longer a drain on the coffers, they must have no where else to spend the money. Frankly, we resent an architecture school pissing on our screen, and shall not be visiting it again.

We reserve a very special place in hell for UCLA's website. We thought RISD, Rice and Syracuse should be indicted under the Patriot Act. We were wrong. UCLA's site is a one-man Osama-bomb: arrogant and disdainful to the vision-impaired.

### Just visiting

One of the many vortts our methodology is intended to guard against is the old Just Visiting trick. This consists of a school of architecture claiming as its very own all those who pass but a few weeks or even days treading its hallowed corridors: the elusive 'visiting professor'.

Princeton and Pratt are past masters at this (the rest of the Ivy League not far behind). Like so many others, on their home page they claim everyone from Filippo Brunelleschi to Frank Lloyd Wright as on-staff, and only some diligent searching reveals that most of these are transient drop-ins (or dead half a millennium).

No doubt about it, Zaha Hadid is the most claimed staff {faculty} member in the United States. Without our Just Visiting rule, Ms Hadid would have counted as on-staff in half the architecture schools in the United States. Sorry, but a lingering waft of Issey Miyake does not an academic make.

### Other sources

For the past few years *DesignIntelligence* has been publishing *America's Best Architecture and Design Schools* (for a hefty price). This ranks a few architecture schools on the supposed employability of their graduates.

We suggest you check them out, if only to discover the paucity of their coverage. They tabulate fewer than 20 schools. Our American database alone has five times that number.

## Canadian schools

We omitted Université Laval as outside our survey bounds of the English-speaking world. No offence guys and we hope you understand.

To the Aussie Dr Garry, the Canadian school structure and rankings are somewhat of a puzzlement. Australia likes to think of Canada as its first-cousin. We share a judicial system, spelling and a sovereign, but not an accent. We would have expected similar structures of education, but this is not the case.

Our Australian rankings tabulate nigh on 15 schools, from a nation of 20 million. We could find good data on only nine Canadian schools in a nation of 32 million. Our database includes just over 300 Australian academics but only about 120 Canadians. Either Australia is grossly over-serviced, or Canada is the opposite.

With the stellar exception of McGill University, we were also surprised to find in our international rankings that the other Canadian school rates do not rate that highly. We don't know why.

## Difficult sites

The University of Toronto and Carleton University had odious Flash sites – presumably directed at children with attention-deficit disorder – demanding we spend bandwidth and time for very little return.

McGill seemed to think that every single pixel had to be crammed with eensy-weensy text. The next time we visit, we suspect we'll have to come armed with a new prescription for our glasses, or possibly an electron microscope.

## Schools of New Zealand, Eire, Hong Kong and Singapore

We had no problem with any of the schools save these.

Otago Polytechnic. Any attempt to view this architecture school resulted in a Page Not Found Error. Very poor show. But then this university also has a School of Adventure and a School of Hairdressing. Not that we wish to disparage either adventure or hairdressing as objects of the deepest scholarship, but we do wonder...

The Dublin Institute of Technology's architecture program is, apparently, 'delivered by 24 full-time staff backed up by a cohort of 35 part-time teachers and visiting lecturers'. All too shy to reveal their names on their website. Are they all avoiding a kneecapping by their anonymity?

The University College Dublin is an exemplar of the pitfalls our methodology guards against. A mere two of its senior staff account for more than one half of its raw score. Is this a school that encourages research? No. It is a school with two flash academics. Dropping these outliers produces the score given below.

Unitec was also rather coy as to its accreditation. We gave them the benefit of the doubt.

If you are looking for a superb research culture, there is only one place to go in New Zealand: the University of Auckland. This school can stand on its own terms with any architecture school in the English-speaking world.

The Victoria University of Wellington is better than most Australian architecture schools, and would be worth considering if you are debating which Antipodean nation to emigrate to. The rest is drebbidge.

## South Africa's schools

We examined each university and technikon (technical university) in the Republic of South Africa offering any sort of course in architecture. We were surprised and disappointed to discover that most of these institutions had poor and amateurish websites, seemingly designed by Uncle Fred one lazy Sunday afternoon; well below the standard of the other nations.

Cape Technikon, the University of Pretoria and Technikon Witwatersrand gave us nothing about their staff. Peninsula Technikon bothered to do so, but gave us no information as to who did what. The two schools that now constitute Nelson Mandela Metropolitan University (Port Elizabeth Technikon and the University of Port Elizabeth)

showed us many a happy picture of their first year students {freshman} having fun on a beach, but not a word about their staff.

## Appendix A. The research stars

We present this table of individual achievement with some trepidation, given the uncertainties of misidentification in our methodology. Unlike our other tables, we present this only for entertainment value: don't take it too seriously. That said, this table lists the international top performing individuals in the Anglophone world's architecture schools, those individuals with phenomenal references on our research score.

Passing over our earlier strictures, we thought it only fair to include architectural academics whose main contribution has been in distinguished architectural journalism. We therefore include those who have written extensively for the excellent British weeklies *Building Design* and *Architects's Journal*.

Do remember that one component of our score, the RIBA Library index, measures not only writings, but being written *about*.

To put these figures in perspective, the typical – that is, median – architectural academic in our database has a research score of 1.7.

Academic	Research Score	Nation
Remment Koolhaas	649	USA
Kenneth Frampton	581	USA
Kester Rattenbury	526	UK
Peter Eisenman	431	USA
Jeremy Melvin	416	UK
Peter Cook	368	UK
Bernard Tschumi	361	USA
Thomas Fisher	353	USA
Peter Blundell Jones	307	UK
Robert Stern	302	USA
Alan Powers	286	UK
Brian Edwards	262	UK
Michael Sorkin	237	USA
Anthony Vidler	175	USA
Brian Hatton	156	UK
Marc Treib	149	USA
Andrew Saint	134	UK
Robert Maxwell	121	UK
Charles Correa	117	USA
Stephen Fox	102	USA

## Appendix B. Research intensity of the schools, by research intensity

University	Nation	Research Intensity
Princeton University	USA	29
Cooper Union	USA	26
Columbia University	USA	25
McGill University	Can	21
Yale University	USA	20
University of Cambridge	UK	20
University of Bath	UK	18
University of California, Los Angeles	USA	18
University of Pennsylvania	USA	17
Harvard University	USA	15
Massachusetts Institute of Technology	USA	15
University of Queensland	Aus	13
University of Melbourne	Aus	13
Edinburgh College of Art	UK	12
University of Westminster	UK	12
University of Auckland	NZ	11
University of Notre Dame	USA	11
University College London	UK	10
Rice University	USA	10
University of Edinburgh	UK	9
University of Sheffield	UK	9
Cardiff University	UK	9
University of Maryland	USA	9
University of Cape Town	RSA	8
London South Bank University	UK	8
Architectural Association	UK	8
University of Toronto	Can	8
University of California, Berkeley	USA	8
New Jersey Institute of Technology	USA	8
RMIT University	Aus	8
University of Liverpool	UK	7
University of Illinois at Urbana-Champaign	USA	7
University at Buffalo, SUNY	USA	7
University of New South Wales	Aus	7
University of Texas at Austin	USA	7
Université de Montréal	Can	7
University of Western Australia	Aus	7
University of British Columbia	Can	7
University of Virginia	USA	7
University of Michigan	USA	6
University of Minnesota	USA	6
University of Newcastle	Aus	6

University	Nation	Research Intensity
Arizona State University	USA	6
Oxford Brookes University	UK	6
Queensland University of Technology	Aus	6
Southern California Institute of Architecture	USA	6
University of Waterloo	Can	6
University of Wisconsin Milwaukee	USA	6
Victoria University of Wellington	NZ	6
Northeastern University	USA	5
University of Washington	USA	5
University of Newcastle	UK	5
University of Greenwich	UK	5
Royal College of Art	UK	5
University of Cincinnati	USA	5
Dalhousie University	Can	5
Georgia Institute of Technology	USA	5
University of Illinois at Chicago	USA	5
University of Miami	USA	5
Cornell University	USA	5
Rhode Island School of Design	USA	5
University of Kansas	USA	5
University of the West of England	UK	5
City College of New York, CUNY	USA	5
Pratt Institute	USA	4
University of Sydney	Aus	4
Leeds Metropolitan University	UK	4
University of Strathclyde	UK	4
University of Oregon	USA	4
University of Southern California	USA	4
Texas A&M University	USA	4
University College Dublin	Eire	4
University of New Mexico	USA	4
University of Tasmania	Aus	4
University of the Witwatersrand	RSA	4
Woodbury University	USA	4
Miami University	USA	4
University of Florida	USA	4
Washington University in St Louis	USA	4
University of Manitoba	Can	4
Syracuse University	USA	4
Queen's University of Belfast	UK	3
University of Dundee	UK	3
University of Texas at Arlington	USA	3
Ohio State University	USA	3
Robert Gordon University	UK	3
University of Tennessee, Knoxville	USA	3
Kansas State University	USA	3
Glasgow School of Art	UK	3

University	Nation	Research Intensity
University of Nottingham	UK	3
Texas Tech University	USA	3
North Carolina State University	USA	3
Roger Williams University	USA	3
University of KwaZulu Natal	RSA	3
University of Houston	USA	3
Virginia Polytechnic Institute and State University	USA	3
Rensselaer Polytechnic Institute	USA	2
Iowa State University	USA	2
Louisiana State University	USA	2
University of South Australia	Aus	2
University of Technology, Sydney	Aus	2
California College of the Arts	USA	2
Carnegie Mellon University	USA	2
Norwich University	USA	2
University of Massachusetts Amherst	USA	2
Curtin University	Aus	2
Illinois Institute of Technology	USA	2
University of Adelaide	Aus	2
University of Utah	USA	2
University of Texas at San Antonio	USA	2
Ball State University	USA	2
Clemson University	USA	2
Liverpool John Moores University	UK	2
National University of Singapore	Singapore	2
University of Plymouth	UK	2
Florida International University	USA	2
Kent State University	USA	2
University of Central England Birmingham	UK	2
Unitec	NZ	2
California Polytechnic State University, San Luis Obispo	USA	2
Catholic University of America	USA	2
University of Hawaii at Manoa	USA	2
Carleton University	Can	2
Deakin University	Aus	2
Morgan State University	USA	2
New York Institute of Technology	USA	2
University of Kentucky	USA	2
University of Nebraska - Lincoln	USA	2
Florida A&M University	USA	1
Manchester Metropolitan University	UK	1
Pennsylvania State University	USA	1
University of Hong Kong	HK	1
University of Arizona	USA	1
Montana State University	USA	1
University of Calgary	Can	1
California State Polytechnic University, Pomona	USA	1

University	Nation	Research Intensity
Lawrence Technological University	USA	1
Oklahoma State University	USA	1
Florida Atlantic University	USA	1
Temple University	USA	1
University of Arkansas	USA	1
Washington State University	USA	1
Auburn University	USA	<1
Boston Architectural Center	USA	<1
Judson College	USA	<1
Mississippi State University	USA	<1
University of Lincoln	UK	<1
University of Hartford	USA	<1
Wentworth Institute of Technology	USA	<1
University of Idaho	USA	<1
University of Louisiana at Lafayette	USA	<1
University of Detroit Mercy	USA	<1
North Dakota State university	USA	<1
University of the Free State	RSA	<1
Hampton University	USA	<1
Philadelphia University	USA	<1
Prairie View A&M University	USA	<1
Southern University and A&M College	USA	<1
University of Oklahoma	USA	<1
Andrews University	USA	<1
Durban Institute of Technology	RSA	<1
Louisiana Tech University	USA	<1
Howard University	USA	<1
NewSchool of Design	USA	<1
Tshwane University of Technology	RSA	<1

## Appendix C. Research intensity, by name of institution

University	Nation	Research Intensity
Andrews University	USA	<1
Architectural Association	UK	8
Arizona State University	USA	6
Auburn University	USA	<1
Ball State University	USA	2
Boston Architectural Center	USA	<1
California College of the Arts	USA	2
California Polytechnic State University, San Luis Obispo	USA	2
California State Polytechnic University, Pomona	USA	1
Cardiff University	UK	9
Carleton University	Can	2
Carnegie Mellon University	USA	2
Catholic University of America	USA	2
City College of New York, CUNY	USA	5
Clemson University	USA	2
Columbia University	USA	25
Cooper Union	USA	26
Cornell University	USA	5
Curtin University	Aus	2
Dalhousie University	Can	5
Deakin University	Aus	2
Durban Institute of Technology	RSA	<1
Edinburgh College of Art	UK	12
Florida A&M University	USA	1
Florida Atlantic University	USA	1
Florida International University	USA	2
Georgia Institute of Technology	USA	5
Glasgow School of Art	UK	3
Hampton University	USA	<1
Harvard University	USA	15
Howard University	USA	<1
Illinois Institute of Technology	USA	2
Iowa State University	USA	2
Judson College	USA	<1
Kansas State University	USA	3
Kent State University	USA	2
Lawrence Technological University	USA	1
Leeds Metropolitan University	UK	4
Liverpool John Moores University	UK	2
London South Bank University	UK	8
Louisiana State University	USA	2
Louisiana Tech University	USA	<1

University	Nation	Research Intensity
Manchester Metropolitan University	UK	1
Massachusetts Institute of Technology	USA	15
McGill University	Can	21
Miami University	USA	4
Mississippi State University	USA	<1
Montana State University	USA	1
Morgan State University	USA	2
National University of Singapore	Singapore	2
New Jersey Institute of Technology	USA	8
New York Institute of Technology	USA	2
NewSchool of Design	USA	<1
North Carolina State University	USA	3
North Dakota State university	USA	<1
Northeastern University	USA	5
Norwich University	USA	2
Ohio State University	USA	3
Oklahoma State University	USA	1
Oxford Brookes University	UK	6
Pennsylvania State University	USA	1
Philadelphia University	USA	<1
Prairie View A&M University	USA	<1
Pratt Institute	USA	4
Princeton University	USA	29
Queen's University of Belfast	UK	3
Queensland University of Technology	Aus	6
Rensselaer Polytechnic Institute	USA	2
Rhode Island School of Design	USA	5
Rice University	USA	10
RMIT University	Aus	8
Robert Gordon University	UK	3
Roger Williams University	USA	3
Royal College of Art	UK	5
Southern California Institute of Architecture	USA	6
Southern University and A&M College	USA	<1
Syracuse University	USA	4
Temple University	USA	1
Texas A&M University	USA	4
Texas Tech University	USA	3
Tshwane University of Technology	RSA	<1
Unitec	NZ	2
Université de Montréal	Can	7
University at Buffalo, SUNY	USA	7
University College Dublin	Eire	4
University College London	UK	10
University of Adelaide	Aus	2
University of Arizona	USA	1
University of Arkansas	USA	1

University	Nation	Research Intensity
University of Auckland	NZ	11
University of Bath	UK	18
University of British Columbia	Can	7
University of Calgary	Can	1
University of California, Berkeley	USA	8
University of California, Los Angeles	USA	18
University of Cambridge	UK	20
University of Cape Town	RSA	8
University of Central England Birmingham	UK	2
University of Cincinnati	USA	5
University of Detroit Mercy	USA	<1
University of Dundee	UK	3
University of Edinburgh	UK	9
University of Florida	USA	4
University of Greenwich	UK	5
University of Hartford	USA	<1
University of Hawaii at Manoa	USA	2
University of Hong Kong	HK	1
University of Houston	USA	3
University of Idaho	USA	<1
University of Illinois at Chicago	USA	5
University of Illinois at Urbana-Champaign	USA	7
University of Kansas	USA	5
University of Kentucky	USA	2
University of KwaZulu Natal	RSA	3
University of Lincoln	UK	<1
University of Liverpool	UK	7
University of Louisiana at Lafayette	USA	<1
University of Manitoba	Can	4
University of Maryland	USA	9
University of Massachusetts Amherst	USA	2
University of Melbourne	Aus	13
University of Miami	USA	5
University of Michigan	USA	6
University of Minnesota	USA	6
University of Nebraska - Lincoln	USA	2
University of New Mexico	USA	4
University of New South Wales	Aus	7
University of Newcastle	Aus	6
University of Newcastle	UK	5
University of Notre Dame	USA	11
University of Nottingham	UK	3
University of Oklahoma	USA	<1
University of Oregon	USA	4
University of Pennsylvania	USA	17
University of Plymouth	UK	2
University of Queensland	Aus	13

University	Nation	Research Intensity
University of Sheffield	UK	9
University of South Australia	Aus	2
University of Southern California	USA	4
University of Strathclyde	UK	4
University of Sydney	Aus	4
University of Tasmania	Aus	4
University of Technology, Sydney	Aus	2
University of Tennessee, Knoxville	USA	3
University of Texas at Arlington	USA	3
University of Texas at Austin	USA	7
University of Texas at San Antonio	USA	2
University of the Free State	RSA	<1
University of the West of England	UK	5
University of the Witwatersrand	RSA	4
University of Toronto	Can	8
University of Utah	USA	2
University of Virginia	USA	7
University of Washington	USA	5
University of Waterloo	Can	6
University of Western Australia	Aus	7
University of Westminster	UK	12
University of Wisconsin Milwaukee	USA	6
Victoria University of Wellington	NZ	6
Virginia Polytechnic Institute and State University	USA	3
Washington State University	USA	1
Washington University in St Louis	USA	4
Wentworth Institute of Technology	USA	<1
Woodbury University	USA	4
Yale University	USA	20