The Ivory Tower and the Waiting Circle: Why British^{*} and Japanese Universities Have Declined in the 2010 Times Higher Education World University Rankings

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Abstract

The British university system is renowned as the second best in the world. Japanese tertiary education remains something of a backwater for academic research except in the sciences in which it remains globally competitive. Both are now losing ground to the most lucrative and high ranking academic system, that of the United States of America. Why is this? This article considers why both Japan and Great Britain have slipped in the 2010 Times Higher Educational World University Rankings and examines issues of funding, student numbers, globalized faculties, teaching, research and citations.

In this year's Times Higher Education World University Rankings (www.thes.co.uk), one of the world 's most prestigious academic ranking systems, both Japan and the United Kingdom have slipped considerably. America now dominates the chart with 72 universities in the top 200 and Harvard in first place. Britain has 29 universities in the top 200, with Cambridge and Oxford dropping to joint sixth place. Japan has only five Japanese universities in the top 200 this year (as opposed to 11 in 2009) and only Tokyo University is in the top 50, coming in at No. 26. China has overtaken Japan with six universities in the top 200 with Peking University at no. 37. In the country ranking table, the US is at No. 1, the UK at No. 2, China is 8th and Japan is 10th.

"The tables may show the UK remains the second-strongest university system in the world, but the most unmistakeable conclusion is that this position is genuinely under threat". Professor Steve Smith, President of Universities UK (BBC, 15 September 2010)

"Recent cuts in higher education funding, and a new more detailed methodology for the rankings,

^{*} The terms 'British' and 'UK' are used interchangeably in this paper. Northern Ireland currently has no universities in the THES top 200.

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have exposed serious weaknesses in the performance of Japan's leading institutions on a global stage," THES magazine (The Japan Times, 16 September 2010)

Japanese and British universities are facing serious challenges. Why is this? Firstly, it should be noted that the Times methodology for collating and weighting data has been changed this year. In previous years the Times survey was carried out in collaboration with the education and careers network Quacquarelli Symonds and universities were heavily ranked on criteria such as reputation and heritage, with 50 percent of the weighting given to the subjective opinion of academics (40 percent) and employers (10 percent). Such factors benefited traditional universities, in particular Oxford, Cambridge and Tokyo. This year the Times has prepared its survey with Thomson Reuters and has given more weight to objective evidence. Now reputation counts for only 34.5 percent and forms part of the teaching and research categories. The criteria in full are teaching (30 percent), research (30 percent), citations (32.5 percent), an internationalized faculty and student body (5 percent), and industry income (2.5 percent). These changes do not necessarily benefit British or Japanese universities for reasons we will consider below. However the major threat to British and Japanese universities, one which threatens all of the criteria in the survey, is funding.

Funding

"Higher education funding is currently a matter of worldwide debate, and we urge those discussing the issue to remember the importance of a strong university system for excellence in research and teaching..." Ann Mroz, THES editor (Japantoday.com, 16 September 2010)

American universities are funded not by federal government but by their local state and from private sources. They currently have greater autonomy in setting tuition fees and salary rates, which are both generally higher than British and Japanese universities. Harvard tuition and fees for 2010/2011, for example, are \$50,724 (Lauerman, 18 March 2010). American universities also actively lobby for private funding from sources such as alumni donations and corporate grants. In contrast, both Japan and Britain are in the middle of funding crises.

Britain's 115 universities and 37 university colleges, all but one of which (Buckingham) are public institutions, have been warned to expect a 25-35 percent cut in state funding over the next four years (Morgan, 12 August 2010). Universities' only other major source of funding is student tuition fees. At present, undergraduate tuition costs approximately 9,000 pounds per year of which a home student (European including the United Kingdom) is liable for around 3,000 pounds, with the state funding the

rest. Students from outside the European Union pay full fees. However universities currently face strict government controls over how many home students they may accept. Those which accept more or less than their quota face fines of 3,700 pounds per student (Murray, 17 August 2010). This currently limits their ability to raise further revenue from tuition.

There is however no cap on non-EU students. Students from countries which set a premium on a Western education, predominantly Asia (mainly China and India), have long been considered revenuegenerating `fillers`, and in 2007/8, 41 percent of overseas, non-EU students came from here (Universities UK website, 2010). Foreign students bring in three billion pounds a year to universities (Mikhailova and Rowley, 22 August 2010), revenue they badly need. This summer the Sunday Times newspaper (Mikhailova and Rowley, 22 August 2010) revealed that several universities were generating income and sidestepping government quotas by refusing places to home students and offering them to non-EU students instead. The government cuts in funding may come with permission for universities to set their own tuition fees and in all likelihood in future, home students will be required to pay a majority if not all their fees. But universities have already begun to cut staff numbers and close departments.

Sixty percent of Japan's 773 universities are private and rely on student tuition fees for 80 percent of their funding. Six years ago, Japan's 86 national universities were made corporate bodies, increasingly autonomous from government control but also increasingly responsible for their own financing. Government grants to national universities have declined 1 percent annually, and the Kan government has called for grants to both national and private universities to be decreased by 8 percent annually for three years (The Japan Times, 21 September 2010). Subjecting universities to market forces was a Thatcherite idea from the 1980's, the idea being that successful institutions would attract the most money in research grants as well as more students. Naturally, what has happened in Britain is that market forces have increasingly come to dictate what and who is taught, with universities becoming feeder institutions for the corporate world. It appears to be going the same way in Japan. As Takamitsu Sawa, President of Shiga University, predicted that "The outcome of the new system is obvious: Only the University of Tokyo will be the winner" (Sawa, 9 June 2010). Higher-ranking universities are being forced lower to their entrance standards and accept a calibre of students they would in the past have turned away. Lower-ranking universities are giving students `free passes` (Shepherd, 15 January 2008) because they need the tuition fees.

In addition to this, the Japanese tertiary education system has an even bigger problem. In 1992 the number of 18-year-olds peaked at 2.05 million. There are 1.3 million today. Consequently there is now a university place for every 18-year-old who wants one. Since just over 40 percent of Japanese 18-year-

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olds choose to attend four-year university this leaves some institutions struggling to find students. According to the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT), about 46 percent of Japan's 595 private universities are missing their recruitment targets, and about 40 percent are in debt (McNeill and Matsumoto, 18 December 2009). Some two-year colleges and smaller, lower-ranking universities have been forced to amalgamate or close altogether. Budget cuts, salary and hiring freezes, course name changes and even, in one instance, changing the name of the university itself, are becoming common in all but the top-ranking universities. This author knows of one case in which every lecturer below the rank of full professor was fired. The private university sector has grown by a third since the late 1980's and the government allowed this to happen by freely issuing education licences. But now the government seems willing to let the weaker universities fail and close. Says Roger Goodman, professor of modern Japanese studies at Oxford University, "The Japanese government is quite happy to let the market decide how the system is 'hollowed out'. It has no intention of baling these universities out" (Shepherd, 15 January 2008). Whilst national universities will close.

The UK too has problems with student numbers. There are more students than there are university places. This is due to a combination of factors. In the unproven belief that an increase in the number of graduates is an investment in greater economic growth, the last Labour government pledged to get 50 percent of young people into university, making it an option for all rather than just an elite. Currently about 43 percent of young people now go on to higher education (Grimstone and Lightfoot, 22 August 2010). Added to this is the cap on student numbers and either grade inflation or an increase in better educated students (depending on who you believe, schools or the examination boards) which has prompted the introduction this year of an extra A-Level grade, the A*. Last year, 130,000 applicants (Murray, 17 August 2010) failed to win a place at university (out of a record 674,339 applicants (Woolcock, 21 August). This year it looks as if 190,000 applicants (Grimstone and Lightfoot, 22 August 2010) have been unsuccessful. This could be called an embarrassment of riches. After all, British universities are now in a position to turn away all but the most promising students. Yes, but government funding cuts and a cap on student numbers limits universities' ability to generate revenue to fund research, pay staff salaries and maintain facilities. Unlike American colleges, British universities have long shunned potentially lucrative links with industry and politics, preferring to remain distanced in their `ivory towers` of learning. Nor does Britain have a tradition of raising funds from alumni donations. A recent YouGov poll revealed that only 2 percent of the British population had ever thought of donating money to universities (Fearn, 9 September 2010). Top academic talent goes where it is valued. In a recent survey conducted by the University and College Union, 35 percent of top researchers said they were considering a move abroad as a result of academic funding changes (Paton, 7 January 2010) Home

students too are increasingly looking overseas for a university education. This year there has been an increase in inquiries by students seeking places at American and Australian universities, as well as on British campuses abroad in countries such as China and Malaysia where student caps do not apply (Woolcock, 21 August 2010). The researchers and students comprising this brain drain take their expertise and their tuition fees with them.

Some Japanese universities are actively seeking to attract more foreign students. But not all. Teiji Kariya of St Thomas University said that his institution was choosing to close rather than accept any more students from China. In spite of MEXT's Global 30 Project (a government funded programme designed to attract more foreign students to Japan) he believes that the ministry's "general policy is that Japanese universities should be for Japanese students" (McNeill and Matsumoto, 18 December 2009). An official at Tokyo Fujii University admitted to the Japan Times that "many small private colleges have an unofficial ceiling of students from Asia of 10 percent. Accept more and the reputation of the college declines" (McNeill and Matsumoto, 18 December 2009). In the same article, Martin Weatherby of St Thomas concurs, "The more foreign students you have, the harder it is to get Japanese 18-year-olds to come". Foreign, particularly Asian students, signify to the Japanese that a university is in financial trouble. Ergo, more high ranking, financially successful universities don't need to bother with them. But it should be noted that Chinese students in Japan number 79,082 (Japantoday.com, 25 December 2009). In comparison, in 2008, the US welcomed 98,510 Chinese students whilst the UK in the year 2008/9, and with half the population of Japan, accepted 47,035. Most pay full fees. Turn down foreign students at your financial peril. It is an unfortunate attitude. It is also one of the key criteria which lost Japanese universities ground in the Times ranking.

A Globablized Faculty

The Times ranking allocates 5 percent of its marks to the percentage of international students and the proportion of international faculty. Until this year, it allocated 10 percent – and the QS ranking still does - so Japanese universities should have benefited from this change. But the figures are so appallingly low that they continue to bring their overall scores down. Whilst Harvard scores 72.4 for its international mix, Cambridge 77.7, Oxford 77.2, Tokyo scores just 18.4 percent.

The USA continues to be the number one destination for foreign students, with 671,616 studying there in 2008. The UK is number two with 368,000 (that is, 15 percent of the 2.4 million student body). In 2009, China attracted 240,000 foreign students. Japan currently has only 132,720 (2009 figure), about 4 percent of its total student population (McNeill, 8 September 2010). Why so few?

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The first reason is that the lingua franca of academe is English. It is the language in which most conferences are held and most research papers written. But in an April 2010 report by the Global Human Resource Development Committee Japan rated 55th out of 57 countries and regions surveyed on linguistic ability and international experience (China came 42nd, and South Korea came 34th. Asahi Shimbun, 17-18 July 2010). Japan is an homogenous nation with very few foreign immigrants, and in daily life there is no need for a Japanese person to have a working knowledge of any foreign language. Tertiary education in Japan is conducted overwhelmingly in Japanese, so foreign students who choose to study in Japan must gain a working knowledge of the language. Currently, 92 percent of foreign students are from Asia, with 78 percent from either China, Taiwan or South Korea (Japantoday.com, 25 December 2009), countries with similar languages and writing systems. But students from non-Asian countries other than Asian studies scholars may be disinclined to go to the trouble of learning a language – and a very difficult one at that - when they really want to be concentrating on their particular area of study.

In order to attract more foreign students to Japan, the education ministry's Global 30 Project for Establishing Core Universities for Internationalization is financially supporting 13 universities (it was supposed to be 30 but funding was cut by up to 30 percent after the project began and the other 17 are unlikely to join them) who by 2013 will conduct 130 undergraduate and graduate courses completely in English. The hope is to entice 50,000 foreign students a year to these `global education hubs` and 300,000 in total to Japanese universities nationwide. Global 30 universities, all elite institutions it has been noted critically, have pledged to raise their percentage of foreign students to 20 percent (McNeill, 8 September 2010). Tokyo University, for example, which currently has around 2,000 foreign postgraduate students (Fukue, 4 January 2010) and conducts some of its classes in English, will also be starting an undergraduate programme conducted solely in the English language.

But with the project already suffering funding cuts it is not yet clear how successful or otherwise it is going be. In the 13 core universities, the project has already "encountered strong resistance from conservative faculty within the candidate institutions ... To put it simply, the fundamental barrier to worldclass status for Japanese universities is that many faculty members just aren't that enthusiastic about welcoming large numbers of international teaching staff and students as anything more than visitors" says Jay Klaphake, associate professor at Ritsumeikan University (Klaphake, 30 March 2010). Japan, with a current foreign population of less than 2 percent, does not welcome foreigners long-term. In a 2007 survey conducted by the Japan Students Service Organization of privately funded international students attending Japanese universities, 61.3 percent said they would like to get a job in Japan on graduation but only 30.6 percent were able to do so (Aoki, 23 September 2010). In contrast, an Englishlanguage university education from an American or British institution is highly prized because it opens doors to fulfilling careers and migration to English-speaking countries.

The second problem is that only internationalized universities with active research-oriented departments attract foreign students, and this means a vibrant postgraduate network. But postgraduate qualifications have traditionally been viewed as something of a waste of time in Japan. In Japan professional training is generally provided in-house by companies some of whom, such as the Japanese government ministries, will fund promising employees' postgraduate training at universities overseas. This works well for both parties because of the culture of life-long employment. A company can invest in its employees because it expects to keep them until retirement. But in other countries, job-hopping is the norm. Workers must therefore keep themselves employable by continually updating their skills, known as lifelong learning, even while they are working. In 2008/9, the number of full-time postgraduates in UK universities was 268,000 whilst the part-timers numbered 268,815 (Higher Education Statistics Agency). Postgraduate qualifications are viewed as minimum requirements for prestige jobs such as in international organizations, the United Nations for instance where Japan has yet to achieve its allocated staff quota. For professional careers such as law, medicine and engineering they are de rigeur, as is an MBA in business. In answer to this, in 2003 the Japanese government began accrediting professional graduate schools specialising in postgraduate qualifications for law, education, clinical counselling and business. There are currently 130 but, other than law, nearly half have yet to reach their enrolment targets (Tanikawa, 26 September 2010).

In addition, this year the government issued a white paper stating that Japan should increase its number of PhD holders. But since 2004, the number of Japanese students joining doctoral courses has declined by 20 percent (The Japan Times, 21 September 2010) whilst those in other Asian countries has increased. The problem is, states the white paper, that there are few job opportunities for doctoral graduates (see also Sawa, 14 September 2010). According to the Daily Yomiuri (9 September, 2010), only 66 percent of science doctoral graduates were expected to find employment after graduation this spring. This is all the more surprising since science and engineering are two of Japan's strongest and betterfunded areas of research.

Next is the matter of foreign faculty. Only 5,652 (3.5 percent) of Japan's 161,690 full-time, fouryear university teachers are foreign. (A further 11,045 foreign nationals comprise 6.8 percent of Japan's 162,393 part-time teachers. MEXT, 2005 figures). Unfortunately, as foreign teachers are well aware, Japan operates a discriminatory system regarding foreign tertiary employees known as the `revolving door`. Whilst Japanese staff tend to be awarded tenure after some years` service, most foreigners are restricted to limited term contracts, what Ivan Hall calls, "academic apartheid" (see Hall, 1997). Moreover, many universities maintain a cut-off period for foreign staff meaning that after a certain number of years their contracts will no longer be renewed. At Tokyo University for example the limit is five years, at Rikkyo it is four. As John Morris advises on the H-Japan on-line academic discussion network hosted by Michigan State University, (4 February 2010) "If your position [in Japan] gives you teaching experience to put on your resume and is the only alternative to unemployment or delivering pizzas etc, then it should be good, at least for the short/mid-term. However if you stay there for more than four to eight years, then you find that the inbuilt insecurity of your situation (by which he means health insurance, pension, housing etc) is likely to be a major concern". In short, Japanese academe is only attractive to Asian studies scholars or for short-term financial gain, for example to pay off student debts at the beginning of an academic career.

Quite rightly, universities maintain that most foreign lecturers do not qualify for tenure because they are unable to carry out administrative duties which require a high-level of Japanese-language ability. The situation therefore remains problematic for both sides. Bad feeling from foreign lecturers towards Japanese universities is legendary and the ongoing debate can be viewed in the pages of the Japan Times and the website of the activist Debito Arudo who runs a university blacklist (www.debito. org). But equally by excluding foreigners Japanese universities risk diminishing their own global standing. Look at the most vibrant and successful universities. Around one-third of Harvard`s full-time teaching staff are international, at Cambridge that figure is approximately 50 percent (according to the QS ranking. See also Lloyd, 26th September 2010). The University of Hong Kong and the National University of Singapore maintain 50 percent international faculties. In all these institutions, teaching and administration is carried out in English. At Tokyo University, the foreign/Japanese faculty ratio is 1 in 16 (Klaphake, 30 March 2010). Tokyo and the other Project 30 universities have pledged to increase their ratio of foreign lecturers to 10 percent by 2020.

China, which overtook Japan in the Times ranking this year, is ambitiously determined to climb the academic rankings ladder. It is actively recruiting world-class researchers to its "Thousand Talents Program" with high salaries and tax incentives. Says the President of Jeio Tong University, "We want to be within the world's top 100 universities by 2020 ... To achieve it, a world-class faculty is essential". (Kobayashi and Takahashi, 16-17 January 2010). In the past two years, Jeio Tong has recruited 144 researchers including 30 professors from abroad.

With funding cuts, few postgraduate job opportunities and a corporate disinclination to hire postdoctoral candidates, Japanese academics too are attracted by the salaries and research opportunities

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offered abroad. Says oncologist Yoshiaki Ito, who moved with his research team from Kyoto University to the National University of Singapore, "Seen from abroad, Japan is a closed country; it`s a waste of abilities" (Kobayashi and Takahashi, 16-17 January 2010).

Teaching, Research and Citations

We are discussing the world's top-ranking universities so they must be doing something right. In the Times ranking, the majority of points are allocated to teaching, research and citations. Harvard is awarded 99.7 percent for teaching, 98.7 for research and 98.8 for citations. Cambridge has 90.5 for teaching, 94.1 for research and 94 for citations. Oxford: 88.2 for teaching, 93.9 for research and 95.1 for citations. Tokyo has 87.7 for teaching, 91.9 for research but only 58.1 percent for citations. Why is this?

One reason is that the quality of research in UK universities is measured by the Research Assessment Exercise (soon to be renamed the Research Excellence Framework), a survey carried out by higher education funding councils every five years. Departments or subject areas within universities are ranked accorded to their research productivity, with the more highly ranked receiving greater funding and consequently more student applications. The highest rating, 4* is given to departments which produce "quality that is world leading". These include papers published in academic journals, conference proceedings and published books, but only by full-time staff not by those on fixed term or part-time contracts. The exercise highlights the importance of international publication in accredited journals. Many universities now hire staff on either teaching or research contracts. Those on teaching contracts teach up to five classes per week and are not included in the RAE. (According to HESA in 2007/8 academic staff was employed at UK higher education institutions as follows: teaching-only contacts: 45,825, teaching and research contracts: 92,135, research-only contracts: 39,915). Those on research contracts may teach one class or none at all but are contractually obliged to produce published work of an international standard. Consequently, with 1 percent of the world's population, the UK's tertiary education system produces 9 percent of the world's scientific papers, and 13 percent of the most highly cited. It wins 10 percent of the world's internationally recognised research prizes and has produced 63 Nobel Prize winners in the last 50 years. UK research productivity is superior to that of the US: in the UK academics produce 16 research papers for every £1 million invested compared to 10 in the US and 4 in Japan (Universities UK website, 2010). In other words, they do more with less money. They have to, government funding is tied to RAE assessment. The exercise has been loudly criticised by both universities and students. Universities are forced to chase funds by encouraging its staff to churn out publications. Students complain that they are never taught by the best academics because they are too busy producing

papers and going to conferences. An increasing number of classes are being left to postgraduate teaching assistants, and the staff to student ratio (SSR) has deteriorated so much that a website (williseemytutor.com) was briefly created to warn students of this fact, until the Higher Education Statistics Agency refused to sell the site the information it needed to calculate the SSR figures (Rawstone, 21 February 2008).

Japanese scholars are more likely to publish in Japanese-language journals which are not globally ranked for citations. Lacking an English voice, noted Motohisa Kaneko of Tokyo University (Fukue, 4 January 2010), their research papers are seldom cited and they are excluded from global academic networks. Japanese academics also tend to carry a heavier teaching and administrative burden than British academics, giving them less time for research and publishing. But at least they are teaching. I do not know of any full-time Japanese academic who has a course load of less than five classes per week.

Herein lies the real difference in the cultural roles of tertiary education between the two countries. Based on religious learning and the teaching of monastic orders, British universities have traditionally been ivory towers, dedicated to a process of intellectual engagement, learning for its own sake, removed from and above both business and politics. Traditionally there has been a reluctance to seek corporate funding or to adapt courses with future student employment in mind. And the focus is more global with universities seeking to attract the best minds from around the world. In Japan `Western-style' tertiary education began in 1877 with the founding of the University of Tokyo (originally called Imperial University), with the express goal of catching up with the West. Japanese universities have always been more vocational, supplying a body of educated workers to corporate Japan for further specialized training. Their focus is more insular, with academics forming closed networks for disseminating research and allocating academic positions, the so-called 'waiting circle'.

Conclusion

There are probably as many higher education ranking lists as there are institutions. Different criteria produce different results. Only the week before the publication of the Times ranking, the Quacquarelli Symonds ranking (www.topuniversities.com) placed Cambridge University at No. 1, Harvard at No. 2, Oxford at No. 6 and Tokyo at 24. Anyway, most students do not make global choices about higher education at least at undergraduate level. They choose the best university in their home country. Consequently global ranking lists are more useful for future employers than they are for students. Yet the outcry over this latest ranking list does highlight the current problems in higher education. Funding produces results. It attracts the brightest and it finances research programmes. As Ann Mroz, the editor of the THES states, their results "clearly show that investment in higher education does produce world class universities" (Vasagar, 16 September 2010).

Postscript

Since the submission of this article the Nobel Prize winners for 2010 have been announced. This year Japanese-born academics Akira Suzuki and Ei-ichi Negishi were co-winners with American Richard Heck for the Chemistry prize. It should be noted however that Negishi's Nobel Prize will be attributed to the USA since he is an academic at the University of Perdue. Negishi has been extremely critical of the Japanese academic system saying that Japanese universities have "fallen into a rut due to the seniority system, and this blocks them from promoting research through free and fierce competition between them" (Japantoday.com, 8 October 2010). Similarly, Osamu Shimomura was awarded the Chemistry Prize in 2008 for his work at the University of Boston, and Yoichiro Nambu, the 2008 winner of the Nobel Prize for Physics, for his work at the University of Chicago. Japan has 18 Japan-born prize winners, three of whom were awarded for their work at American institutions. No foreign-born academic has won a Nobel Prize for their work at a Japanese institution.

This year the United Kingdom has two Nobel Prize winners, Andre Geim and Konstantin Novoselov, both Russian-born physicists at the University of Manchester. The United Kingdom has 115 Nobel Laureates in total, 27 of whom were born overseas. The United States has 326 (including Negishi, Shimomura and Nambu). China has 11 (including Negishi who was in fact born in Jilin, China when it was the capital city of Japanese-controlled Manchukuo).

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Since this article went to print, the Japanese government on 18 November 2010 voted to abolish and "restructure" the Global 30 project.

References

- Aoki, M, 2010, The Japan Times, 23 September, *Universities looking to go global*. Online at: http://search.japantimes.co.jp/cgi-bin/nn20100923f1.html
- The Asahi Shimbun, 2010, 17-18 July, Curriculums embrace corporate needs, pp22.
- BBC website, 15 September 2010, *University rankings dominated by US, with Harvard top*. Online at: http://www.bbc.co.uk/news/education-11317176.

- The Daily Yomiuri, 2010, 9 September, *NPO advises Ph.D holders on alternative career pursuits*. Online at: http://www.yomiuri.co.jp/dy/national/T100908005018.htm
- Fearn, H, 2010, The Times Higher Educational, 9-15 September, *Why don't the British have the urge to give? It's a matter of education*, pp11.
- Fukue, N, 2010, The Japan Times, 4 January, *Universities must look abroad to reverse Japan's brain drain*. Online at: http://search.japantimes.co.jp/cgi-bin/nn20100104f1.html
- Grimstone, J, and Lightfoot, L, 2010, The Sunday Times, 22 August, *Why admissions are soaring at the university of life*, pp16.
- Hall, I, 1997, Cartels of the Mind: Japan's Intellectual Closed Shop, New York, W.W.Norton & Co.
- Higher Education Statistic Agency. www.hesa.ac.ok
- H-Japan, 2010, 4 February. H-Japan is an international electronic network for scholars, graduate students and professionals to discuss Japanese issues. It is based at Michigan State University and can be found online at: http://www.h-net.org/~japan/
- The Japan Times, 2010, 16 September, *Japan falls in global university rankings*. Online at: http://search. japantimes.co.jp/cgi-bin/nn2010916x2.html
- The Japan Times, 2010, 21 September, *Universities feel the squeeze*. Online at: http://search.japantimes. co.jp/cgi-bin/ed20100921a1.html
- Japantoday.com, 2009, 25 December, *No. of foreign students reaches record 132,720*. Online at: http:// www.japantoday.com/category/national/view/no-of-foreign-students-reaches-record-132720
- Japantoday.com, 2010, 16 September, *Japan slips in global university rankings, overtaken by China*. Online at: http://www.japantoday.com/category/national/view/japan-slips-in-global-university-rankings-overtaken-by-china
- Japantoday.com, 2010, 8 October, *Seniority System blocks Scientific research in Japan*. Online at: http:// www.japantoday.com/catcgory/commentory/view/seniority-system-blocks-seientific-reseach-in-Japan

Klaphake, J, 2010, The Japan Times, 30 March, A foreigner-friendly field of dreams?. Online at:

http://search.japantimes.co.jp/cgi-bin/fl20100330zg.html

Kobayashi, T, and Takahashi, M, 2010, The Asahi Shimbun, 16-17 January, *Japan lags behind as Asian nations vie for world*'s top minds.

Lauerman, J, 2010, Businessweek, 18 March, *Harvard College Boosts 2010-2011 costs 3.8 percent*. Online at: www.businessweek.com.

- Lloyd, T, 2010, Japantoday.com, 26 September, Who wants to work abroad? Almost no-one.
- Online at: http://www.japantoday.com/category/commentary/view/who-wants-to-work-abroad-almostno-one
- McCrostie, J, and Spiri, J, 2008, The Japan Times, 30 December, *Foreign University faculty face annual round of `musical jobs*`. Online at: http://search.japantimes.co.jp/cgi-bin/fl20081230zg.html

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- McNeill, D, and Matsumoto, C, 2009, The Japan Times, 18 December, *Demographic crisis leaves universities in financial bind*. Online at: http://search.japantimes.co.jp/cgi-bin/nn20091218f1.html
- McNeill D, 2010, The Chronicle of Higher Education, 8 September, *Japan's Globalization Project Stalls* as Some Criticize Focus on Elite Universities. Online at: http://chronicle.com/article/A-Slow-Startfor-Japans/124346/
- Mikhailova, A, and Rowley, T, 2010, The Sunday Times, 22 August, *University places saved for foreigners*, pp4.
- Morgan, J, 2010, The Times Higher Education, 12 August, *The heat is on: official hints that cuts could rise to 35%*, pp6-7.
- Murray, J, 2010, The Guardian, 17 August, On their mettle in the clearing race, pp3.
- Paton, G, 2010, The Daily Telegraph, 7 January, *Warning over academic `brain drain`*. Online at: http://www.telegraph.co.uk/education/6943360/Warning-over-academic-brain-drain.html
- Rawstone, T, 2008, The Daily Mail, 21 February, A Degree of Betrayal, pp28-29.
- Sawa, T, 2010, The Japan Times, 9 June, *Universities*`*risky business*. Online at: http://search.japantimes. co.jp/cgi-bin/eo20100609ts.html
- Sawa, T, 2010, The Japan Times, 14 September, *Higher Education is worse since policy switch in 1991*. Online at: http://search.japantimes.co.jp/cgi-bin/eo20100914ts.html
- Shepherd, J, 2008, The Guardian, 15 January, *Desperately seeking students*. Online at: http://www.guardian.co.uk/education/2008/jan/15/internationaleducationnews.highereducation
- Tanikawa, M, 2010, The New York Times, *Students Scarce for Japan's New Graduate Schools*. Online at: http://www.nytimes.com/2010/09/27/education/27iht-educLede27.html
- Universities UK, 2010, *Higher education in facts and figures, summer*, pp10. Online at: http://www.universitiesuk.ac.uk/Publications/Documents/HigherEducationInFactsAndFiguresSummer2010.pdf
- Vasagar, J, 2010, The Guardian, 16 September, *Top 100 universities: British institutions perform badly in league*. Online at: http://www.guardian.co.uk/education/2010/sep/16/british-sink-in-top-100-universities-league
- Woolcock, N, 2010, The Times, 21 August Full-up signs at home universities mean many more may study abroad, pp6.

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