



Making Connections

Japan-UK Higher Education Symposium 2009

February 2009, London

Japan-UK Higher Education Symposium 2009

EXECUTIVE SUMMARY

12 - 13 February 2009

Held at the Commonwealth Club, London

Co-hosted by: **British Council,**
Japan Society for the Promotion of Science (JSPS)

Accredited by: **Japan-UK 150**

- 1. Programme** ▶ **Page 1**
- 2. Executive summary** ▶ **Page 5**



Programme

Timing	Session	
Wednesday 11th February 2009 Pre-Event Reception		
18:30	Reception	Prince of Wales Suite, British Council, 10 Spring Gardens London SW1 2BN
	<ul style="list-style-type: none"> ▪ Welcome from Justin Gilbert, Regional Head (Overseas Operations), British Council ▪ Kampai from Professor Motoyuki Ono, President, Japan Society for the Promotion of Science (JSPS) 	
20:30	Reception finishes	Return to hotels
Day One – Thursday 12th February 2009		
The Auditorium, The Commonwealth Club 25 Northumberland Avenue, London WC2N 5AP		
09:30	Registration of delegates The Auditorium, The Commonwealth Club	Chair Day 1 :Japanese chair (09:30-11:30) Professor Junko Hibiya , Vice President for Academic Affairs (International Christian University)
10:00-10:30 [plenary]	Welcome	Introduction from Chair ① Martin Davidson , Chief Executive, British Council ② Rachel Green , Deputy Director, Higher Education Strategy and Implementation Directorate, Department for Innovation, Universities and Skills (DIUS) ③ Professor Motoyuki Ono , President, JSPS ④ Hiroshi Yoshimoto , Director, University Promotion Division, Higher Education Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT)
10:30-11:00 [plenary 1]	Overview of UK HE Policy and Challenges (provisional) - UK Keynote	Professor David Eastwood Chief Executive, Higher Education and Funding Council of England (HEFCE)
11:00-11:30 [plenary 2]	Japanese Challenges for Higher Education Reform in Recent Years - Japanese Keynote	Dr Tsutomu Kimura President, National Institution for Academic Degrees and University Evaluation(NIAD-UE)
11:30-11:50	Coffee	
11:50 (plenary)	Q & A on key note speeches and discussion on issues arising	Chair Day 1 :UK chair Professor Dominic Shellard , Pro Vice-Chancellor, University of Sheffield
12:30 [plenary]	Introductory presentations from leaders of 3 parallel strands ▪ Parallel session 1	Japanese & UK speakers – 10 minutes each Parallel session 1 (Japan chair): Professor Tatsuya Sakamoto ,



	<p>The Contribution of HEIs to Regional Development</p> <ul style="list-style-type: none"> ▪ Parallel session 2 Developing an Appropriate Curriculum for the workplace of the 21st Century ▪ Parallel session 3 The Internationalisation of Research 	<p>Vice President for International Collaboration and Education (Keio University)</p> <p>Parallel session 2 (UK chair): Dr Mary Stiasny, Assistant Director, Learning and Teaching and International Strategy (Institute of Education, University of London)</p> <p>Parallel Session 3 (UK chair): Rama Thirunamachandran, Deputy Vice-Chancellor (Keele University)</p>
13:00-14:00	Lunch Outside of the Auditorium, The Commonwealth Club	
Afternoon	Parallel working groups throughout	
14:00-15:10 (parallel session)	<p>Introduction and case studies 20 minutes each</p> <ol style="list-style-type: none"> 1. The Contribution of Higher Education Institutions (HEIs) to Regional Development <ul style="list-style-type: none"> • How can HEIs contribute to the economic and social revitalisation of their regions? • How do HEIs collaborate with regional governments and the private sector to achieve this? • What role can HEIs play in facilitating cooperation between regions in their respective countries 2. Developing an Appropriate Curriculum for the Workplace of the 21st Century <ul style="list-style-type: none"> • What knowledge and skills should students acquire through Higher education at both undergraduate and postgraduate levels to prepare for the workplace? How can these be defined and measured? • How can doctoral-level students be prepared for wider careers than 	<p>Group 1 – The Thorne Room, The Commonwealth Club</p> <p>Parallel session 1: The Contribution of HEIs to Regional Development Chair - (JPN) Professor Tatsuya Sakamoto, Vice President for International Collaboration and Education (Keio University)</p> <p>Presentation 1 UK: Cardiff University Professor Max Munday, Director, Welsh Economy Research Unit, Cardiff Business School</p> <p>Presentation 2 JPN: Nagoya Institute of Technology, Professor Nobuyuki Matsui, President</p> <p>Presentation 3 JPN: Kobe College, Dr Shinichiro Kawai, President</p> <p>Rapporteur: (JPN) Kyushu University, Professor Sachiyo Suita, Trustee / Vice President</p> <hr/> <p>Group 2 – The Craven Room, The Commonwealth Club</p> <p>Parallel session 2: Developing an appropriate curriculum for the workplace of the 21st Century Chair – (UK) Dr Mary Stiasny, Assistant Director, Learning and Teaching and International Strategy (Institute of Education, University of London)</p> <p>Presentation 1 UK: York St John University, Professor Stuart Billingham, Pro Vice-Chancellor</p> <p>Presentation 2 UK:</p>



	<p>academics?</p> <ul style="list-style-type: none"> • What role can employers play in developing and delivering the curriculum? • What specific skills are needed to prepare students for the global workplace? How can international collaboration facilitate this? <hr/> <p>3. Internationalisation of Research</p> <ul style="list-style-type: none"> • What should be included in an international research strategy? • What are the key success factors? What are the main barriers? (case studies with specific reference to the Japan/UK context welcomed) • What can be done to remove barriers for international research collaboration between the UK and Japan at the policy and practice level? 	<p>Nottingham Trent University, Ann Priest Dean, School of Art and Design Presentation 3 JPN: Ritsumeikan University, Dr Kiyofumi Kawaguchi, President and Chancellor of the Ritsumeikan Trust</p> <p>Rapporteur: (UK) University of Portsmouth, Dr Simon Claridge, Dean, Faculty of Creative and Cultural Industries (JPN) Waseda University, Professor Katsuichi Uchida, Vice President (Promotion of Internationalisation)</p> <hr/> <p>Group 3 – The Auditorium, The Commonwealth Club</p> <p>Parallel session 3: The Internationalisation of Research Chair - (UK) Rama Thirunamachandran, Deputy Vice-Chancellor (Keele University)</p> <p>Presentation 1 UK : University of Edinburgh Professor Igor Goryanin, School of Informatics Presentation 2 JPN: Tokyo Institute of Technology, Professor Ichiro Okura, Executive Vice President for Planning Presentation 3 JPN: Kyoto University, Dr Hiroshi Matsumoto, President</p> <p>Rapporteur: (UK) Aston University, Professor David Bennett, Aston Business School (JPN) University of Tsukuba, Satoshi Tanaka, Vice President</p>
15:10	Q and A	
15:30	Coffee	
16:00 (parallel session)	Impressions of visits to UK universities (response to the set themes provided to Japanese institutions during their visits to the UK universities)	<p>Parallel session 1: Kobe College, Keio University (The Thorne Room, The Commonwealth Club)</p> <p>Parallel session 2: Gifu University, Waseda University, Ritsumeikan University (The Craven Room, The Commonwealth Club)</p> <p>Parallel Session 3: Hitotsubashi University, University of Tsukuba (The Auditorium, The Commonwealth Club)</p> <p>*5 minutes one Japanese speaker per visit to UK university</p>
16:15	Further general discussion I	
(parallel session)	General discussion Key themes and emerging themes for next day	
16:45 (parallel session)	Observations from Day 1 Round-up including observations and key issues	Rapporteurs (5-10 minutes)



17:00	Close of Day 1	
	Transport to the Embassy of Japan in the UK to be arranged	
18:00	Japanese Ambassador & President of JSPS-hosted Reception	
20:00	CLOSE OF RECEPTION	
Day Two – Friday 13th February 2009 (all in plenary)		
The Auditorium, The Commonwealth Club 25 Northumberland Avenue, London WC2N 5AP		
09:30-9:45 [plenary]	Scene Setting for Day Two <ul style="list-style-type: none"> • What we want to achieve • Our agenda for today 	Chair Day 2 (UK): Professor Paul Wellings , Vice-Chancellor, Lancaster University
09:45-10:15	Feedback on key issues emerging from three parallel groups the previous day	3 rapporteurs* *feedback to be provided by either or both rapporteurs, depending on the group
10:15-10:45	Q & A, followed by plenary discussion on three themes	
10:45-11:15	Coffee	
11:15-12:15 [plenary – discussion of how to take forward areas for collaboration	Taking things forward <ul style="list-style-type: none"> ▪ What are the learning points from this event? ▪ Where are the main opportunities for future collaboration Summary of next steps	Chair (UK): Professor Paul Wellings , Vice-Chancellor, Lancaster University
12:15-12:30 [plenary]	Thank you and close	JPN : Dr Hiroshi Matsumoto , President, Kyoto University UK : Pat Killingley , Director Higher Education and Education UK, British Council
12:30 - 14:00	Lunch (Optional) Outside of the Auditorium, The Commonwealth Club	

EXECUTIVE SUMMARY

Welcoming Remarks

Martin Davidson

Chief Executive, British Council

Martin Davidson welcomed all participants and thanked the Japanese delegates for attending this important and critical set of discussions to strengthen links between the UK and Japan. He asked why are such discussions important at this present time? The first reason is the economic downturn. Despite this, young people are continuing to demonstrate a strong commitment to genuine internationalism. Their solutions to global issues are to not be national, closed and protectionist but open, engaged and shared. Through the development of a strong set of international relations their expectations could be met, and their commitment to a building a global network of skills and opportunities supported.

Secondly, the UK and Japan needs to build stronger capability to engage in the international world. There are 375,000 overseas students in the UK, far more than the number of UK students studying abroad. That mismatch is a huge risk to the way in which the UK needs to prosper once it has emerged from the current difficulties. The skills of the UK's overseas students and their ability to participate in a globalised world are crucial to this country's and Japan's long-term prosperity. There are 18 universities from the UK and 16 from Japan represented at the Symposium, together building strong links for the future.

Rachel Green

**Deputy Director, Higher Education Strategy and Implementation Directorate
Department for Innovation, Universities and Skills (DIUS)**

DIUS was set up in June 2007 to bring together policy for research and innovation with higher education institutions. The Department and its predecessor are strong supporters of the UK/Japan HE programme, and remain committed to encouraging UK universities to extend relations as an integral part of the Prime Minister's Initiative for International Education (PMI).

UK institutions have benefited from the huge number of Japanese students choosing to study here. This could encourage more UK students to study outside of the country. There has also been a rich and varied pattern of research collaborations between the UK and Japan, which DIUS will continue to foster, as good practice is shared at the governmental as well as the institutional level.

Ms Green outlined the UK's need to adapt to the changing needs of the economy and changing expectations of an increasingly diverse student population. Debates like today's would hopefully lead to a framework for HE for the next 10-15 years.

Professor Motoyuki Ono

President, Japan Society for the Promotion of Science (JSPS)

Prof Ono expressed his appreciation to the British Council and the Japan Committee of Universities for International Exchange (JACUIE) for their efforts in implementing this Symposium. JSPS funds research

EXECUTIVE SUMMARY

and universities to promote young leadership in Japan and facilitate scientific exchange across the world. The UK is one of its most valued partners, with a history of exchange going back to 1971.

Countries are finding themselves in economic upheaval, because events today reverberate among all nations. Likewise, transcending national borders of scientific innovation is vital to resolving the economic crisis. This event will look at how to deal with changing societal needs. In Japan the internationalisation of education has been widely promoted. A new programme, Global 30, will support Japan's top universities in their efforts to become hubs for internationalisation. JSPS will support the implementation of the programme to create new connections around the world, and expect institutions like it to have a positive influence on wider society.

Hiroshi Yoshimoto

**Director, University Promotion Division, Higher Education Bureau,
Ministry of Education, Culture, Sports, Science and Technology (MEXT)**

Today, universities were tasked with training and character building, but also played an integral role in national development strategies. In Japan, five years ago universities became autonomous and enabled compete in an environment of education and research activities. Japan also introduced a third party system and developed a reform process to boost undergraduate degree programmes. Universities sharing their knowledge and expertise is very beneficial to the enhancement of HE abroad.

Japan could learn a lot from the UK's HE reform, such as the quality assurance system, and use it to face the challenges of rapid globalisation, a decrease in Japan's youth population and a growing economy. With an aim of being more accessible to the world, Japan is moving forward with its plan to boost the number of international students by 2010, encapsulated in the 300k Plan.

UK Keynote:

Higher Education's Contribution to the Knowledge Economy

Professor David Eastwood

Chief Executive, Higher Education and Funding Council of England (HEFCE)

I. Structure of Higher Education in England

1. Funding System

Universities in the UK are autonomous bodies, accountable through funding and regulatory structures. The Department for Innovation, Universities and Skills distributes funding through bodies such as the Higher Education Funding Council for England (HEFCE), research councils, and the Training and Development Agency for Schools. HEFCE will provide just under £8 billion to universities and colleges in 2009-10. Funding is mainly distributed as block grant which universities can spend at their own discretion on teaching, research and related activities.

2. The Dearing Report 1997

For much of the 1990s universities were teaching increasing numbers of students with decreasing funding per student. The Dearing Report, which was published in 1997, addressed the whole question of HE funding; including student support. As a result, investment through HEFCE increased and the Government introduced tuition fees for students and re-introduced capital funding.

3. Demographic Projections

Looking forward, we will see some interesting demographic changes. From 2011 the number of 18-20 year olds will fall before recovering in the 2020s. The HE system will need to respond to this by turning its focus to improving the skills and qualifications of the nation's workforce. In terms of post-graduates, the UK has been successful in increasing the number of taught students but less so as far as research students are concerned.

II. Government Priorities

In 2007 the Government committed to reinvesting in higher education and set out a list of priorities in the Comprehensive Spending Review (CSR). Priorities included supporting excellence in research and innovation; widening participation in higher education; up-skilling adults in the workforce; and expanding HE opportunities geographically.

III. Facing Economic Challenges

A number of changes have taken place to equip universities to face the global economic downturn. The rate of growth has slowed to ensure HE remains affordable and sustainable. HEFCE has set up a £50 million challenge fund to combat the recession and there are employer co-funded programmes to up-skill the workforce. The Government is also bringing forward £250 million in capital expenditure so that universities can help to stimulate the economy through building programmes.

IV. The Contribution of HEIs to Regional Development

HEFCE is involved in several initiatives that focus on higher education on a regional level. For example, the Science City Initiative enables universities to partner with Regional Development Agencies (RDAs) to support scientific research. The New University Challenge programme aims to bring opportunities to parts of the country that have not previously benefited from Higher Education.

V. Internationalisation of Research

The UK is heavily committed to international collaborative research. In the late 1990s, 29% of UK research output was based on international collaboration. This increased to 40% in 2005. The number of permanent academics in the UK, who are not UK nationals, has more than doubled over the last decade and 31% of PhD starters are Non-EU students. These figures reveal the extent to which the English HE system is internationalised.

VI. UK-Japan HE Programme

The UK-Japan Higher Education Collaboration Programme has been running since 2001. A great deal has been learnt from each other's countries, systems and institutions. Dialogue focuses on knowledge transfers and exchange, employer engagement, and ensuring that universities play a full part in the economic and civil life of our countries. We have made real progress.

Japan Keynote: **Japanese Challenges for Higher Education Reform** **In Recent Years**

Dr Tsutomu Kimura

**President, National Institute for Academic Degrees and University Evaluation
(NIAD-UE)**

I. Vision of Higher Education in Japan

The National Council on Educational Reform (1984-1987) was formed following the former Prime Minister's assertion that higher education was a 'weak spot' of the country. The National Council recommended the creation of the University Council (1987-2000) to discuss issues solely for Higher Education. In 2000 this Council was absorbed into the Central Council for Education, which published a major report in 2005 entitled 'Future Vision of Higher Education in Japan'.

The Report recognised the importance of higher education for personal development and raising the international competitiveness of a nation. It pointed to a move from tight regulation to the encouragement of greater competitiveness in the field of Higher Education. It further recommended greater diversity of HEIs and forecast mergers and/ or greater collaboration between universities and for HEIs to be geographically distributed to moderate excessive competition in urban areas.

II. The Fundamental Plan for HE 2008

In 2006, the Fundamental Law of Education was revised for the first time in the country's history. In the revised version, HEIs were given specific roles around provision of support and research. This Law led to the creation of a Fundamental Plan in 2008, which promoted Higher Education and covered a vast array of proposals. On the basis of these proposals, enquiries were made to the Central Council for Education in a Committee meeting in September 2008. The enquiries focused on the decreasing population of 18-year-olds, meeting the diverse needs of society and students, and the globalised world.

As yet, no substantive conclusions have been reached. However, a number of radical changes have been proposed, including allowing universities to develop joint faculties or departments; the necessity to listen to universities; improving the quality of postgraduate courses; and providing career development opportunities and support for adult students. A further recommendation was to internationalise Japanese universities and enhance their international competitiveness. The 300k Plan, proposed by Prime Minister Fukuda's cabinet, looked at how to attract foreign students to Japan. It has set a target year of 2020 and four target areas: North America and Europe; ASEAN and East Asia, the Middle East and Africa, and Oceania.

III. Japan Society for the Promotion of Science (JSPS)

The JSPS supports university reform, through the promotion of a number of programmes, including the global COE programme, the world premier international research centre initiative, and the Strategic Fund for Establishing International Headquarters.

IV. Economic Contribution of Universities

The Ministry of Education commissioned research to evaluate the economic impact of one medium-sized university, Hiroshima University, on its neighbouring regions. The total economic impact of the university

and industries' close links was an estimated 66.7 billion yen. This shows how important it is for one region to have a university.

Question and Answer Session

Chaired by Professor Dominic Shellard

Pro Vice Chancellor, University of Sheffield

Prof Eiji Tajika from Hitotsubashi University asked how the voices of universities were heard by Government, and the extent to which HEFCE was independent from the Government. He also asked how a balance was sought between current expenditure for universities and Government's goal of distributing capital investment in regional developments. A further question was on the outcome of devolving the management of HE to different councils.

On the first question, Prof Eastwood said there were a number of bodies, including the influential Universities UK, through which universities could channel their voices. Ministers also sponsored dialogue with universities, for example, by hosting dinner and discussions. He continued that legislation in 1988 and 1992 dictated that Government ministers could not determine the funding of institutions, and a number of checks were in place to ensure this did not happen. On the third question, he explained that monies were allocated on the basis of universities' revenue. Universities also used their own reserves and other income streams such as borrowing and other financial instruments. On the question of devolution, Prof Eastwood explained that Funding Councils were established by statute. There had been a gradual divergence over the past decade in funding and priorities across the UK as a result of devolution.

Prof Glenn Hook from Sheffield University asked whether deregulation remained a top priority in Japan. Dr Kimura believed there would be a process of re-regulation in the near future, citing a recent discussion on the matter at the CHEA (Council for Higher Education Accreditation) Annual Conference Second International Forum.

Prof Jonathan Osmond from Cardiff University enquired about how geographical distribution of Higher Education could be successful in a time when resources may be constrained. Prof Eastwood said that in England all extensions of HE provision were based on rigorous demand analysis. There was no desire to create build duplication or redundancy. Funding Councils were not the sole funder of regional developments; RDAs, local councils and local business communities also provided financial support. On Japan, Dr Kimura cited the example of the Kyoto University of Technology to show how more private universities would become public universities in the future. There would also be an integration of similar universities in local areas.

Prof Paul Wellings, the Vice Chancellor of Lancaster University, asked about the successes of universities being able to define their own mission by selecting a number of key roles activities. Prof Eastwood said that the HE system in England was flexible and universities had been able to change their focus in a number of ways. As funding tightened in the future, universities would identify their comparative advantage and scale back in weak areas. Dr Kimura was keen for the Japanese HE system to follow a trial conducted in the US, where, to deal with reducing student numbers, community and liberal arts colleges were established. However, the Ministry of Education would like to have as many functioning universities as possible in Japan, to pursue world-class research and education and train highly skilled professionals.

Mark Bickerton, the Director of Student Recruitment and International Development at London Metropolitan University, asked whether the UK could collaborate with Japan to spread its knowledge of lifelong learning and career development. He also asked whether there were ways to encourage student mobility outside the EU. In response to the first question, Prof Eastwood explained that, over the previous 15 years, a very different student mix had emerged, including more work-based learning, learning off campus and blended learning. An issue that remained in the UK was support for part-timer workers. He

EXECUTIVE SUMMARY

continued that the second question caused a lot of concern in Government. He did not know whether mobility outside the UK would be a funding priority in the current environment.

Dr Kimura said there were not many adult students in Japan. Traditionally in Japanese society, life-long employment was considered very important. The Ministry of Economy, Trade and Industry (METI) was pushing the Continuous Professional Development (CPD) scheme to further qualify those in the workplace. However, progress was slow and it would probably be another ten years to see a fully diversified student body.

Prof Andrea Nolan, the Vice Principal for Learning & Teaching, and Internationalisation, at Glasgow University asked the speakers whether they thought universities would simply group together to meet economic challenges or collaboration would be directed by policy makers and Government. Prof Eastwood said that collaboration required huge investment, so would be an issue in terms of sustainability if there were a lack of funding. His experience suggested that collaboration merely to sustain provision was not strong; partnership resulting from a robust analysis would be more successful. Dr Kimura said that traditionally all policies came from the Ministry of Education in Japan. However, now a lot of developments, particularly in research, were driven from the bottom up.

Introduction to Parallel Strands

I. The Contribution of HEIs to Regional Development

Professor Tatsuya Sakamoto, Vice President, International Collaboration and Education, Keio University

Japanese universities are pushing hard to accept international students and through them are seeking international interdependency. This session focused on how specific elements such as globalisation in HE are affecting regional development.

II. Developing an Appropriate Curriculum for the 21st-Century Workplace

Dr Mary Stiasny, Assistant Director, Learning and Teaching and International Strategy, Institute of Education, University of London

This session would look to develop an appropriate HE curriculum. As the recession bit, UK graduates feared they might not get their desired job, so this session was also looking at the 21st-century workplace.

III. The Internationalism of Research

Rama Thirunamachandran, Deputy Vice Chancellor, Keele University

One billion people were living on less than £1 a day and 850 million were malnourished. The world was facing significant challenges – of poverty, disease, climate change, energy and global security – which required global solutions. Collaboration and research would be major drivers in resolving them. What research strategies were needed internationally? What were the necessary models for collaboration?

Session One: **Contribution of Higher Education Institutions to Regional Development**

I. Opening Remarks

Professor Tatsuya Sakamoto

Prof Sakamoto opened the session and welcomed the speakers from one UK university and two Japanese universities. The first parallel session focused on three points:

- How HEIs could contribute to the economic and social revitalisation of their regions
- How HEIs collaborated with regional governments and the private sector to achieve this
- What role the HEIs could play in facilitating cooperation between regions in their respective countries.

II. Higher Education Institutions and Regional Economic Development

Professor Max Munday, Director, Welsh Economy Research Unit, Cardiff Business School

1. Context

Focusing on Wales, Prof Munday outlined that universities were economic drivers and played a part in regional development. Universities varied in their outputs, which included knowledge creation, human capital, and technology. These could contribute to regional development through productivity gains, business innovation, and spending impacts.

2. Regional Economic Development in Wales

Wales' gross value added (GVA) per capita had slipped well below the GB average, indicating it was the poorest UK region. Prof Munday listed the contributing factors to low relative GVA per capita as low levels of activity, low productivity, as well as persistently low wages.

There was a resulting need for convergence, in Prof Munday's opinion, as well as European funding and more policy focus. An interesting issue was whether universities exacerbated intra-regional divides.

3. Higher Education Institutes' Understanding

Many universities built regional economic development into their aims, citing technological innovation, links to firms and commercialisation. However, it is difficult to model their overall impacts on a regional economy.

Prof Munday presented information relating to the economic contribution of higher education institutions in Wales. He showed that higher education institutions in Wales employed over 18,000 people, and spent nearly £1bn pa. In total allowing for regional multiplier effects it was estimated that higher education institutions supported over 25,000 jobs in the Welsh economy. He compared this HE contribution to other

EXECUTIVE SUMMARY

sectors for Wales and concluded that the University had a significant economic impact, a strong local purchasing propensity, strong earnings impacts and was an export earner.

A further factor to consider, however, was universities promoting the region as a location. The study had not covered the more subtle economic development role of universities.

4. Continuing Problems

Prof Munday outlined new research into the contribution of the higher education sector being sponsored by the Economic and Social Research Council (ESRC). He questioned how far academics in his regions were rewarded for applied research that created regional benefits; and the strength of incentives for working with local business.

5. Discussion

Prof Masao Homma, Vice Chancellor of the Ritsumeikan Trust, noted the Japanese regional context where a substantial number of universities had hospitals. Prof Munday confirmed this was true of Cardiff. Prof Homma mentioned the value of a university having intelligent, ambitious people. Prof Munday agreed universities served a welfare purpose, a difficult aspect of impact to measure. Prof Jonathan Osmond, Pro Vice Chancellor at Cardiff University, attributed this to UK governments concentrating on economic factors, and developing policy in this respect. Demonstrating universities' important role was key, despite evidence being difficult to obtain. Prof Nick Petford, Pro Vice Chancellor at Bournemouth University, agreed, illustrating a similar study carried out by Bournemouth University revealed the institution's economic impact and found undergraduate student placements hard to quantify, yet important.

Prof Sachiyo Suita, Executive Vice President of Kyushu University, asked what further research was necessary. Prof Munday replied better economic models and frameworks to link university activity to regional growth and convergence were needed. Also, the Welsh Assembly and Higher Education Council for Wales should be encouraged to think about elements other than spending, as the most valuable parts of a university activity were difficult to measure.

Prof Suita thought the effect would be more remarkable in smaller town economies. Prof Munday replied that an economic impact assessment in London would be a different study entirely, because of the economy's size. Prof Suita mentioned universities merging to have an impact. In Wales, there was an emerging pattern of strategic university mergers, Prof Munday said, but economic impact might not be the prime motivation; rather, survival was.

III. Local Engagement of Universities of Science and Technology in a Global Perspective

Professor Nobuyuki Matsui, President, Nagoya Institute of Technology

1. Reform in Japanese Universities

Japanese national universities had focused on research and education, but 2004 reform introduced a social engagement element. The NIT contribution to local areas encompassed education by supplying high standard graduates, holding public lectures and seminars and local community projects, and research, through collaborative research, technological transfer and industry support, as well as environmental, medical and welfare programmes. Its location, surrounded by heavy industry, aided this collaboration.

2. Effective Engagement

Prof Matsui outlined the changes during Japanese education reform that led to more effective social engagement. Change from the individual to the consortium meant the limited contribution to local areas of the single university was replaced by more powerful collective contributions. Secondly, moving from

EXECUTIVE SUMMARY

domestic to international meant local areas with the same social problems could solve them by international collaboration. Thirdly, one-way contribution moved towards synergy, because coexistence was beneficial for both the University and the local community.

3. Collaboration Programmes

Located in central Japan and surrounded by top industry, NIT reorganised to further enhance activities. The Institute tried to identify similar situations around the world to collaborate.

Prof Matsui presented the example of a ceramics cluster, where the Asian Center of Ceramics Research and Industry was similar to the European Center of Ceramics Research and Industry located at Limoges University. There was strong collaboration between these two institutions, with an exchange programme and an annual joint conference.

Prof Matsui added the examples of an automobile industry research Masters programme where students were encouraged to join Japanese companies, NIT engaging in a public lecture special education programme, where pupils experienced product manufacturing, and the alumni associations were established in Beijing, Seoul and Shanghai.

4. Discussion

Prof Suita asked how many students from the exchange programme stayed and worked locally; she noted many wished to go to Tokyo. NIT had over 300 foreign students, most wanting to join Japanese companies; this trend was recent and increasing. The company a student joined depended on the department where they ended their education and 85% of students at Nagoya stayed locally.

Prof Alistair Fitt of Southampton University remarked that so much funding hung on the results of the RAE that institutions might be tempted to divert effort from regional impact projects to RAE research, and asked if that was the case in Japan. Prof Matsui replied that the research funding system had changed. Previously, only university people received research money from the government; now, consortia of professors, engineers, public institutions and companies received that money, so planning and timescales were more necessary for efficiency. To secure funding, both UK and Japanese governments often needed to know the impact of research.

IV. Women Leaders Contributing to Revitalisation of Local Communities

Dr Shin'ichiro Kawai, President, Professor at the Department of Biosphere Sciences, School of Human Sciences, Kobe College

1. Kobe College

Dr Kawai presented the context of Kobe College in Nishinomiya City. Its status as an environmental city meant several protection and conservation programmes existed, often promoting women leaders contributing to the local community.

2. Community Programmes

An active community worked to solve environment protection, food safety and education issues. At Kobe College, third-year students practised community revitalisation through planning, management and organisation of events; fourth years held seminars to the citizens, eventually leading to women leaders contributing to the community through these life experiences.

Dr Kawai outlined three events planned by women students: parents and children growing vegetables; learning about lifestyle-related disease and prevention by exercise; cooking organic sweet potato.

3. Focus on Food Programmes

a. Purpose

The first programme arose out of Japan having the lowest food self-supply of developed nations and an aging farming population. It promoted local food production in order to increase the chance of agricultural revival.

b. Backgrounds

Prior to the programme, collaboration had taken place, some which Dr Kawai presented: joint research, presentations and a joint study session with community residents and a science seminar for high school students.

c. Events

After this, students made specific event plans, discussing the purpose, planning, considering PR and collaborating with external people. Dr Kawai applied this to a rice-planting event for parents and children for bonding, and a sweet-potato-planting event for school children to understand the importance of food and commercialisation.

He summarised that students contributed to the local community and understood its issues; the community was revitalised in this way. After graduation, students were expected to integrate into the local community.

4. Discussion

Prof Suita asked for elaboration on graduates' future in the local community. Dr Kawai expected funding of the project to continue in the next five to ten years, and for graduates to move into jobs in the food and banking industries. He continued that these programmes were largely run by undergraduates.

Prof Kazuhide Nabae of Kobe College thought there was likely to be a shift in emphasis away from economic benefits to human effects in his institute, and for students to extend their specialities beyond the regional level. Prof Sakamoto added he had been struck by agricultural activity at Kobe College, as it was considered highly sophisticated and developed.

V. Questions and Answers

Prof Sakamoto invited discussion on the sessions after highlighting the main points of each presentation.

Prof Fitt suggested a main point was that, in UK and Japan, funding came largely through three sources only: namely teaching, research and enterprise, with few apparent reasons for engaging regionally or resource spending. Mr Trevor Newsom from Queen's University Belfast disagreed; in Northern Ireland, where there was no funding council, the budget was decided by the Local Assembly, and universities would not gain money if irrelevant. There had to be a closer relationship between universities and government.

Mr Newsom believed small communities in devolved administrations looked to universities for leadership and to drive public policy. He stressed universities often acted on intuition, because of the lack of research; where university management was making decisions on sustainability of resources, it had to think about how it aligned regionally, nationally and internationally. Prof Munday added that academic promotion and staff reward might not encourage working regionally.

Prof Osmond noted some elements of Prof Munday's analysis related to the effects of an institution with high numbers of students and staff; the broader question was engagement, not only with devolved administrations, but local business. This contrasted with the Japanese case of NIT, situated in an area of manufacture, research and development. He questioned whether universities could attract business to an area, for which funding was key. Prof Osmond asked if NIT had played a part in the development of Nagoya industry. While the situation was now positive, Prof Matsui said previously the area had not been so

EXECUTIVE SUMMARY

industrial, most students leaving for Tokyo and Osaka. The industrial landscape in Japan had changed; many graduates could easily find a job in Nagoya, not only as a result of the NIT effort, but because it was a trend in Japan.

The regional contribution of NIT was difficult, because most research and education money was supplied by government, not regionally, and from companies. Company funding was for application-orientated research, not professors' interests, so research money was more useful from the government. Prof Munday noted the regional context was different for Nagoya, Kobe, Northern Ireland and Wales, and this impacted the universities' interaction with local firms.

Prof Homma said it was difficult to compare the missions of private and national universities in Japan, because of funding and student composition. University of Tokyo and Kyoto University were supposed to conduct research and train first-class professionals, whereas Muroran Institute of Technology, NIT, or Kitami Institute of Technology were created to cater to local industrial needs.

VI. Impressions of UK Universities

1. Kobe College Visiting Nottingham Trent University

Prof Sakamoto resumed the session to hear the Japanese delegates' impressions of UK universities. Prof Nabae reported that, with Dr Kawai, he had been welcomed by faculty members from social sciences, humanities and science, learning about the University, academic activities and its relation to regional development. NTU worked in partnership with business, government and the higher education sector to nurture talent and promote entrepreneurial drive among students. Prof Nabae found the work with regional development agencies impressive, where NTU had strived to open new channels of communication and innovation. The student flux was also striking, with graduates trained to play an active role.

Prof Nabae was concerned about the difficulty of producing money benefits, where regional development centred on economic impact. He considered there to be an urgent need to redefine regional development to reflect the shift to non-profit academic fields, as the Ministry of Education supported Kobe College.

2. Keio University Visiting University of Southampton

Prof Sakamoto described his visit with Hideko Sumita, also of Keio University, to the University of Southampton. He considered that Keio University, which has extensive collaboration with other British universities, could benefit from more diversity in its partner UK universities, not only in research and education, but geographically. During the university tour, he visited Student Services and the Library, and had high-level talks about the state of HE in each country and issues facing both universities. Further collaboration would be explored.

At Southampton, Mrs Sumita noted that UK student diversity had encouraged universities to invest in student amenities. Centralising student services, including those for international students, is particularly important for integration of foreign students into a globalised campus. Prof Sakamoto was also impressed by Southampton's achievements because Keio University is trying to consolidate academic and student support services.

Keio University would like to pursue further collaboration with Southampton, particularly where the universities had similar strengths in research activities.

Prof Suita suggested a longer visit than four hours to improve the knowledge gained at the universities.

VII. Observations from Day One

Prof Suita summarised the session's messages:

- Despite attempts by Cardiff University to link to regional development, further research was necessary;

EXECUTIVE SUMMARY

- Japanese universities emphasized social relationships as their purpose, which used to be only education and research, demonstrated by NIT engaging locally.
- Kobe College's approach to local communities had been unique and interesting, the results yet to be seen.

Prof Fitt added his conclusions:

- Measurement of regional impact was difficult, as was gaining funding;
- Regional engagement in Japan was shown to be more effective in consortia and successful regional projects could extend internationally;
- Projects should involve students and be relevant to communities;
- Universities had obligations to provide a great deal, but only had limited resources, so regional engagement depended to a large degree on funding.

VIII. General Discussion

Prof Munday concurred that impact measurement was difficult and not everything could be maximised. The group discussed devolution in the UK and its relation to university funding, Wales having an HE funding council and access to UK research funds and Northern Ireland's funding coming through the UK government. On Japanese university funding, Prof Suita asked if communities provided financial support. Some events at Kobe College were financed locally, but most by government.

Prof Matsui added his concerns about relying on the automobile industry. He observed the future lying in aerospace industry, which suited mass production, and thought the NIT had responsibility to produce a new type of engineer for the sector, at regional and international level.

Prof Suita stressed the attitude of education should overcome the economic crisis. While there were funding considerations, the importance of education should always be borne in mind. Prof Fitt mentioned that economic downturn could be good for universities, because of the retraining aspect. Prof Sakamoto noted the difficulty for adults to return to university programmes and limitations of correspondence courses. He continued that the elitist mindset of the Japanese system contrasted to the social focus of the UK. Prof Nick Foskett from the University of Southampton mentioned the UK having courses for general education or leisure purposes. The demand for these had diminished, because despite social engagement obligations, sustaining them was difficult.

Session 2: **Developing an Appropriate Curriculum for the workplace of the** **21st Century**

I. Case Study: York St John University

Professor Stuart Billingham, Pro Vice Chancellor and Professor of Lifelong Learning, York St John University

1. Introduction

The university was described as a relatively small institution with approximately 6,000 students. It was founded as a teacher training college and remained committed to applied academic study and research

2. A Thinking Workforce

Considering HE as 'providing a thinking workforce working intelligently' acted as an antidote to instrumental thinking about the role of HE in relation to the workforce. Businesses always valued intellectual skills; problem solving, team working and lateral thinking were required skills and they needed to be built into education.

This insight was informing development of the university curriculum and had led to its learning and teaching strategy centering on enquiry-based learning. Research and enquiry was built into all undergraduate programmes. At the University, students were considered collaborators in the production of knowledge in an attempt to move from passive to proactive learning.

3. Global Citizens

Global citizenship was encouraged through international student exchange programmes. Study abroad programmes could be "pass/fail" to encourage students to take advantage of the opportunities. The future workforce would need global citizens. The university had introduced a validation process into the designing of courses, which required reflection on the internationalisation aspects of the course. There was also a corresponding staff development strategy working with the same ideas.

4. The Role of Employers

Universities were asking themselves what they could do for employers. York St John was encouraging a partnership between employers and HE. All programmes had panels with external representation; these representatives advised staff on the relation between the course and the wider world of the relevant profession, economic or social sector as appropriate. All undergraduate courses included an experiential, work-based learning experience, normally arranged by the student. All undergraduate programmes employed supported open learning, which was primarily web-based. This typically involved staff producing learning materials that students then worked through collaboratively and/or individually.

II. Case Study: Nottingham Trent University

Ann Priest, Dean of School of Art and Design, Nottingham Trent

1. Curricula

Room was required for thought about the curriculum. Nottingham Trent was described as an art and design school, with some more traditional courses that aimed for a balance between craft and intellectual skills. It had employed work-shadowing to examine the versatilities needed to succeed, so as to build them into particular courses. It also offered work experience placements and encouraged work simulations in order to develop entrepreneurial approaches.

2. Assessment of Curricula

Curricula were described as living entities, which required constant and repeated assessment. Consultation with alumni, students, and employers enabled a successful programme to become an even greater success.

3. The HIVE

The HIVE was an enterprise development centre that was attached to the University, which functioned as a business support unit, allowing graduates to incubate small businesses. The HIVE also worked with Nottingham Trent in curricula and skill development. Enterprise did not have to wait until after the course. Students in their placement year were allowed to set up a small business in the HIVE via the SPEED programme.

4. Multidisciplinary Masters

The first part was multidisciplinary, multi-ethnic and involved team working, with an issues-based curriculum. Students were then placed with people from outside the course, including scientists, business students, and engineers to encourage project teamwork. There was a superfluity of projects and a large level of interest in the scheme from businesses.

III. Case Study: The Japanese Situation and Ritsumeikan University

Dr Kiyofumi Kawaguchi, Chancellor, the Ritsumeikan Trust, and President, Ritsumeikan University

1. History

Changing economic models, among other factors, had led to employers turning to HE for a supply of employees for their central offices. The Japanese Government and labour groups had reacted to this by issuing lists outlining skills that HE institutes were required to teach. Specialised skills were still developed within companies, but HE had begun to train students in fundamental skills.

2. Skills Focus

At Ritsumeikan University skills development was not limited to specific courses, but was considered as part of the entire curriculum, including extracurricular and voluntary student activity. Courses had been initiated to develop abilities and skills.

3. The Freshman Seminar

The Freshman Seminar at Ritsumeikan was cited as an example. This involved sub-groups of seven or eight working on research, analysis, presentations, discussions and report writings. The programme aimed to develop communication, literacy, logical thinking, teamwork, problem identification and problem solving skills. Senior students participated in each class as teaching assistants, which was rare in Japan.

4. Employability

The employment rate for graduates was 90%. While Japanese companies operated lifetime employment systems, the reality was that 50% of employees would leave any particular role within five years. As such, HE aimed to encourage lifetime, rather than particular, skills.

5. Work Placement Internship

Most Japanese students came to university without any employment experience. Ritsumeikan had developed a workplace internship. This programme involved a faculty-led training period, an internship at a designated company and post-training analysis of the experience. There were specialised internships for particular interest groups, such as a School Internship for prospective teachers.

6. Co-op Education

This had led to co-op education, which involved mixed groups of undergraduates and graduates, working on projects set by companies.

7. Conclusions

The curricula of universities needed to be examined in order to consider the types of people that it would foster. Universities should aim to increase the links between university study and employment.

IV. Discussion

1. Interaction with Employers

Prof John Maher, of the International Christian University, Tokyo, was impressed by York St John's attempts to interact with employers. He asked how the approach remained worthwhile when dealing with subjects that were not readily transferable to the non-academic world, making reference to theology. Prof Billingham answered with reference to Theology and noted that Theology was one of York St John's most outgoing programmes, with participants developing skills in the community as assistant practitioners. Ms Priest made reference to the value of voluntary and community work, citing attempts that Nottingham Trent had made to evaluate and accredit such work. Dr Kawaguchi added that Ritsumeikan's internships were open to students from all disciplines and indicated that students from non-transferable disciplines would, in any case, have to find a profession after their degree.

2. Extracurricular Activities

Mr Mark Bickerton from London Metropolitan University stated that employers were more concerned with extracurricular activities than with the shape of the curriculum on an undergraduate course. Ms Priest agreed that voluntary extracurricular activity was important and indicated that this underlay Nottingham Trent's wish to accredit such activity. At York St John, Prof Billingham said, they had been thinking about student engagement with the whole learning experience at university, both inside and outside the classroom. While accepting the importance of voluntary work, Dr Kawaguchi warned that universities should not lose sight of their role as universities and had to continue to teach traditional skills.

3. External Accreditation

Dr Simon Claridge from the University of Portsmouth asked for the panel's comments on the relationship between the strict formulas set by external accreditation agencies and the freedom discussed during the panel's speeches. Ms Priest admitted external agencies were prescriptive, adding that the strength of a course lay in what it could encourage the student to do in addition. Tutors would have to learn to accredit different aspects of work as well. Mr Bickerton warned that universities would have to stop considering those experiences that happened around the curricula as add-ons. It needed to be recognised that extracurricular activities would become as important, if not more, than standard academic activity. Dr Claridge spoke of the double bind regarding the wish for external recognition and the wish to maintain freedom in course design. Mr Bickerton added that the views of external agencies sometimes differed from those held by the groups the agencies were supposedly representing. He went on to speak about the limited crossover between degree disciplines and careers and felt that this showed the limited relevance of the academic curriculum itself.

4. Articulation of Skills

Prof Andrea Nolan, of the University of Glasgow noted that universities did not always clearly articulate to students the attributes that were being systematically developed during their period of learning in Higher Education. As a consequence she noted that students' capacities for articulating their skills, knowledge and understanding to employers were not necessarily well developed and could be improved. Universities needed to work with students to identify their particular skills. Mr Bickerton felt that universities needed to better understand their own image and to work harder in promoting themselves.

5. Industry and HE

Prof Petford felt that employers should, themselves, learn more about university education. Prof Jean-Claude Hollerich from Sophia University agreed and made reference to job hunting beginning in the third, as opposed to the fourth, year of Japanese HE. Due to the limited timeframe, it had become difficult to promote exchange studentships; the short-term interests of industry were being placed ahead of the long-term interests of the University. Prof Petford felt that employers often wanted soft skills and that these were difficult to teach. Ms Priest felt that universities should ensure that students could articulate their skills and allow the student to demonstrate how these skills resonated with the ethos of a particular company.

V. Impressions of UK Universities

1. Gifu University visiting Cardiff University

Prof Shuji Dohi, Vice President of Gifu University, commented upon Cardiff's attempts to create a 21st Century workspace and mentioned the contribution the University made to the surrounding region. He remarked upon the need for Gifu to make a similar contribution to its environment in a changing economic climate. He considered Cardiff to be a beacon of inspiration to its teaching staff, students and the city alike and felt that Gifu should be working to achieve similar results.

2. Waseda University visiting the Institute of Education, University of London

Prof Katsuichi Uchida, Vice President and Professor of the Faculty of International Liberal Studies at Waseda University, had visited the Institute of Education, the London Centre for Leadership and Learning, and the London Knowledge Laboratory. He spoke of Waseda's wish to globalise its Faculty of Education. He had spoken with the Institute of Education in order to arrange future collaboration. This would take the form of mapping research interests and would lead into short seminars on topics of common interest.

3. Ritsumeikan University visiting Bournemouth University

Prof Yukihiro Hirose, Vice Head of The Centre, Career Education Centre, Institute for General Education at Ritsumeikan University, commented upon the importance the University assigned to graduate employability. Its teaching strategy was focused on enhancing this quality in its students and employable skills were integrated into the course assessments. Prof Hirose commented upon the tools the University made available to allow students to understand what and how they were learning.

VI. General Discussion

1. Changing HE Environment

Prof Maher felt that one could no longer divide universities between scholastic academic institutions and 'making and doing' schools. Making, doing and participating were now the fundamental principles of HE. A new model was needed that recognised this. Dr Claridge indicated that engagement with employers was not a new topic; it was, however, something that was now happening proactively. After working with employers, Ms Priest added, the challenge was to create a new market for those students who were in work, but wished to engage with part-time study. Government was asking universities to persuade employees and employers to allow this to happen. Dr Hiroaki Hatayama of J.F. Oberlin University said universities in Japan were being told to educate students for the world of work, while faculties wanted to maintain the standard disciplines.

2. Entrepreneurship and Creative Thinking

Prof Petford wanted to produce entrepreneurs. However, this was difficult in a formal teaching environment; many entrepreneurs, for instance, had not been to university. Ms Priest said that one should focus on the conditions for thinking creatively and for being resourceful.

3. UK Historical HE Model

With regard to the Victorian HE model, Prof Billingham felt that it falsified the history of HE in the UK. In addition to established academic institutions, there had been polytechnics which focused on vocational courses. This diversity remained, albeit in different forms, in the HE sector, and he encouraged thought about the nature of differentiation and desirable diversity in HE in both the UK and Japan.

4. Japanese and UK HE Sector: Similarities and Differences

Prof Hollerich reminded the group of the social differences between the UK and Japan; where the British spoke about creativity, the Japanese emphasised imitation. While there were differences between the countries, and differences between institutions within Japan, Prof Maher felt that British and Japanese universities shared problems: graduate unemployment, the directions of graduate schools, declining numbers, issues with collaborative research, and issues with exchange studentships. The two cultures were not different realities; this would be the outmoded view. Ms Priest said that it was important that staff shared the students' international perspectives. She wanted colleagues with other cultural perspectives to challenge her work. Prof Hollerich referred to the mapping that needed to be done to pave the way for collaboration.

VII. Observations from Day One

Dr Simon Claridge

The identification of attributes desirable to employees concerned both Japanese and UK institutions. The discussions had focused on the 'graduateness' expected of those leaving HE institutions. There were issues relating to the self-articulation of universities, regarding the types of graduates they produced and the

need for universities to communicate clearly with students, parents, and employers alike. However, a balance needed to be struck between providing employees for the workplace and continuing the University's duty, as a university, towards the development of students as students.

Session 3: **The Internationalisation of Research**

I. Introduction

Rama Thirunamachandran

International collaboration was fundamental to research. Participants were asked to consider strategic collaborations between institutions and address the following questions:

- What should be included in an international research strategy?
- What were the key factors and main barriers?
- What could be done to remove these barriers for international research collaboration between the UK and Japan at policy and practical levels?

II. Biology Research: Edinburgh/Japan Collaboration

Professor Igor Goryanin, School of Informatics, University of Edinburgh

1. Strategy

Prof Goryanin delivered his strategy to work on the same goals, promote collaboration, involve industry and identify areas of mutual interest in, for example, standard development, energy and climate change, and personalised medicine.

2. Systems Biology Graphical Notation (SBGN)

Any scientific journal contained many diagrams mapping different biochemical and cellular processes. The challenge was to standardise this graphical notation and share it across journals, the web and other publications across the globe. This was crucial for more efficient and accurate transmission of biological knowledge. Prof Goryanin reviewed the many organisations in support of this programme in Europe, Japan and the USA.

3. Microbial Fuel Cell (MFC)

This MFC project addressed the shortage of renewable energy and water. MFC generated electricity and purified water, with large-scale industrial applications and small- to medium-scale sewage applications. It could be applied to best use in India and Africa, where there was a real shortage of water and electricity. Prof Goryanin gave an overview of the scientific process that was developed with RIKEN, and relayed his expectation for more partners to join as the project extended to other countries.

4. Breast Cancer

Major drug companies were working intensively on drugs to inhibit the epidermal growth factor and related signalling networks to combat breast cancer. Working together with RIKEN, there was a need to accurately identify patients who would respond to therapy, and prevent over-treatment, side effects and unnecessary expenditure. This was a challenge not just to the UK and Japan, but also across the world. A model had been created from the cell to the organism, with a common platform for data exchange.

5. The Road to Success

Key success factors were joint publications, patents and new funding. The main barriers were a lack of joint funding and the time difference between the UK and Japan. Video conferencing, Skype and 24-hour research were being used to address the latter, but a new joint research programme was also needed to provide greater support.

III. International Research Strategy

Professor Ichiro Okura, Executive Vice President for Planning, Tokyo Institute of Technology

1. Strategic Plan

The strategic plan was to develop an international high-level research centre on emerging science and technology issues in Asia – specifically, to establish a network of leading universities to act as a hub for innovation in realising a sustainable world.

2. Key Success Factors

- A good environment to promote research.
- Administrative and funding support from government and the University.
- Mutual understanding and friendship with partners.

3. Collaboration

A Bio-support Centre had been set up, as an evolutionary flexible system based on social needs. The aim of the International Training Program was to strengthen overseas research and education opportunities for young researchers in Japanese universities. It had four overseas partner institutes, and was supported by the JSPS. The Asia-Europe International Training Program for Young Investigators in Eco-Bio Technology provided education and research with the ambition of establishing global networks to foster young researchers.

Some examples were presented of collaborative projects: hydrogen and oxygen evolution by water cleavage; optical oxygen sensing with porphyrins; and the development of photosensitisers for photodynamic therapy.

A possible obstacle for collaboration was the lack of infrastructure and support to promote internationally networked research. This could be addressed by establishing a strong strategy; through fundraising and the effective distribution of budgets and researchers; with solid and continuous cooperation between partners; and by making a coordinated organisation responsible for researchers and administrative support.

IV. Case Study: Kyoto University

Dr Hiroshi Matsumoto, President, Kyoto University

1. Background

Kyoto University's mission was to sustain and develop its historical commitment to academic freedom and to pursue harmonious coexistence within the human and ecological community on this planet. Dr Matsumoto noted its history and some of its achievements; principal among them were its many affiliated Nobel laureates. The success of this institution was related to its international collaborations. A recent breakthrough was Prof Shinya Yamanaka's proof that stem cells did not need to come from human embryos; adult skin cells could be reprogrammed to act like them.

2. Kyoto and the UK

There were currently 83 general academic memoranda and 33 Kyoto University research stations around the world. Many of the memoranda were between Kyoto and the UK, but some had been forgotten. However, long-term research was being carried out. The University had partnerships with seven UK universities, and nine at the graduate school level, as well as 50 cooperative research projects. However, only 13 regular students were exchanged between the UK and Kyoto in 2008.

3. Global Threats

Without international collaboration countries could not face crises such as global warming, environmental degradation and resource depletions. Some resources could run out in less than 60 years if research collaboration opportunities were not grasped now. The focus on sustainability would change to survivability; the need to develop a new and durable culture to ensure the rights of the future human and ecological community; wise control of global economies and population growth aided by innovative technology; and the utilisation of interplanetary space.

V. Questions and Answers

1. Cross-border Education

Heather Leggate from London Metropolitan University asked what could be done to ensure the speakers' goals were met. Prof Goryanin answered on PhD programmes, where the ideal solution was for joint, cross-border awards. Dr Matsumoto knew of such a programme between Japanese universities. The Tokyo Institute of Technology supported a joint Masters with Tsinghua University in Beijing. Dr Tsutomu Kimura mentioned a joint degree programme involving 35 French and 13 Japanese universities.

2. Research Funding

David Gough, the Director of the Social Science Research Unit, reported that it was much easier to secure funding for international meetings and visits than for research. Prof Okura thought a research map a highly important goal of any future conferences formed to disseminate information and promote efficient collaboration. The JSPS was working with counterpart countries to set up special bottom-up funding programmes, strongly supported by the Japanese government. The British Council backed this initiative, too. Mr Thirunamachandran indicated a single assessment process should be employed to resolve this problem of double jeopardy or the need to apply for funding both nationally and internationally. Prof Kevin O'Grady from York University described a standard IP system used to process funding requests in the EU.

3. Political Perspectives

Individual scientists and institutions aside, Prof Paul Wellings, Vice Chancellor of Lancaster University, believed there were grander challenges to heed: intergovernmental balance could be unresponsive and the accepted collaborative model was out of date. Dr Matsumoto agreed intergovernmental decision-making could be slow. However, scientists had learned to cultivate research first, expanding from individual work to regional discussion to university-led collaboration. He thought there needed to be more experience of international IP agreements. This was why Kyoto University had opened an office in London, covering all European countries. Prof Goryanin encouraged the development of open IP as a free research resource.

VI. Impressions of Visits to UK Universities

1. The University of Tsukuba Visiting the University of Edinburgh

Professor Akira Ukawa described a two day visit to Edinburgh University. The Universities of Tsukuba and Edinburgh share similar in many respects including the points of emphasis in research and education, both had strong research bases in humanities and medicine. They similarly covered a broad spectrum of academic fields, with an emphasis on interdisciplinary and international research and education, both with a significant number of overseas students. The two aimed to strengthen their ties by focusing on their strengths, and backing up their efforts through a comprehensive university-level agreement.

The visit had proven useful to learn and explore future strategies, in preparation for assembling a concrete collaboration plan. Tsukuba had existing ties with Sheffield and Manchester, which they hoped to enhance. The University very much appreciated the support of the British Council and JSPS.

2. Hitotsubashi University Visiting the University of Glasgow

Layers of exchange between the Universities of Hitotsubashi and Glasgow started from social science, and looked at how research was spread spontaneously. Now the Japanese university had a large research grant, was targeting corporations, had invited Glasgow PhD students to join research programmes and would disseminate details of their activities around Japan and Scotland. Prof Eiji Tajika from Hitotsubashi University described how Japanese HE should be more policy-focused, and needed to offer incentives for students and buyers.

After expansion of the postgraduate programme, more emphasis should be given to undergraduate students; they were the breeding ground for the next generation of business leaders. It was therefore important to make undergraduate programmes more interesting. The group discussed the future for exchange at this level. One idea was for a benefit programme, giving students more exposure to business activities. In this way, schools for economics and business would act as gateways into other studies. Mr Thirunamachandran reported a similar arrangement to target businesses through a partnership between Kyushu and Shanghai Universities.

VII. General Discussion

The aim of the following discussion was to formulate a clear set of success criteria, key barriers and suggested ways to promote Anglo-Japanese collaboration. Prof O'Grady returned to the difficulty of charging a single panel with reviewing funding proposals, when individual requests were so specialised. Perhaps instead each year could be devoted to different and specific themes for research collaborations.

Another participant supported the idea of more formal relationships between institutions in different countries. Prof David Bennett, the Head of International Liaison at Aston University, raised questions on mobility and cost, especially for social science and business research where interviews were involved and data needed to be collected from companies. He had found scientific research easier in Japan, but fluctuations in exchange rates could impact both sides of an agreement. Physical distance could also be an issue between the two nations. Others called for more grassroots collaboration coupled with high-level champions.

EXECUTIVE SUMMARY

The value of global networks was discussed. They were considered more useful for strategic thinking than to develop collaborative research, as projects had to be clearly focused on their goals. It was felt that specific projects had to build from the bottom up, through the engagement of researchers and students. Universities then had to embed their resources to ensure they were sustainable.

VIII. Observations from Day One

1. Key Success Factors

- A well designed research map.
- Flexible schemes.
- Formal memoranda and individual links between institutions.
- An administrative infrastructure to enable institutions to support individuals.
- Interdisciplinary research.
- Virtual working and face-to-face networking.

2. Barriers

- Different regulations across education systems.
- Relationships with industry.
- Publication issues related to joint articles and targeting international/national journals.

3. Other Outcomes

Mr Thirunamachandran stressed that collaboration had to grow from individual to individual, before it could go from group to group, and then perhaps to industry. Prof Helen Higson from Aston University agreed social sciences ought to be mentioned – particularly knowledge transfer across international industries and the public sector.

Discussion moved to a more strategic approach to funding. There should be a formula for block grants, where quality was assessed objectively. Funding awards were usually based on student numbers, but completion rates were also an important factor. For research, assessment exercises were an additional driver. It was also important to note that some interactions could not be measured by money alone.

Scene-Setting for Day Two

Professor Paul Wellings
Vice Chancellor, Lancaster University

Prof Wellings explained that Universities UK was an umbrella body of 140 universities across the UK. He noted that its international activities were crucial to UK universities and that it was vital to shape the sector so as to allow staff and students to be involved in that international agenda. The challenge was to move from individual interactions as researchers to institutional arrangements.

Feedback from Rapporteurs

I. The Contribution of Higher Education Institutions to Regional Development

Prof Suita noted that some research had been completed in Cardiff on the economic impact of higher education institutions on regional economic development, though this research failed to show any substantial link between input and output. This was disappointing, though further research might be required.

Other studies in Japan looked at ways of effective engagement of science and technology globally. Three patterns were considered:

- Individual to consortium
- Domestic to international
- One-way contributions to synergies

The most effective, according to the studies, were consortia of universities and the expansion from regional to national or international status. Some studies had only just been started, though, and things might change in the future.

Finally, Prof Suita described collaboration between students and farmers at one Japanese university, in which knowledge and experience was exchanged. The government supported this recent project and it was hoped that it would be successful in the future.

Since 2004, universities in Japan had been forced to move their efforts to contribute to regional development. The missions were all important in their own way, and funding was crucial to developing these plans.

II. Developing an Appropriate Curriculum for the Workplace of the 21st Century

Dr Claridge noted that the UK delegation comprised of a like-minded group of 'new' universities, which tended to focus on the employability of graduates. He noted some of the questions that emerged:

- Do universities listen to employers?
- Do employers listen to universities?

EXECUTIVE SUMMARY

- Do employers know what universities do?
- Do universities know what employers want?
- Do universities use a language that employers understand?

The workforce needed to work intelligently and creatively by having enquiry-based learning and by incorporating notions of global citizenship and collaborative learning. Dr Claridge noted the importance of innovation and diversity, and a curriculum that was not static but a living thing: curricula needed to be relevant and appropriate, incorporating real-life experience and entrepreneurship.

A Japanese contributor had identified three key requirements for employers: action, thinking and teamwork. These were those soft-skills that could be difficult to incorporate into the curriculum, with the result that development of these skills sometimes had to take place separately.

Additionally, many initiatives existed to integrate students into the workplace, such as internships, overseas study, careers advice, workshops, placements, on-the-job training, personal development plans, volunteering, entrepreneurship and enterprise. But this had led to concerns that universities were losing control of the curriculum. Balancing employers' expectations with universities' missions was said to be the biggest challenge.

III. The Internationalisation of Research

Prof Helen Higson said that broad conclusions had been reached from the presented case-studies, though several questions had also emerged. Often, memoranda of agreement were not enough; rather links between individuals should be developed. However these individual links might not produce the depth of collaboration required for substantial development. Prof Higson also noted that although virtual working was important, in some cases, it was no substitute for meeting in person.

Prof Higson described the relationship with industry as vital; if links and policies were to be established, industry must play a role. The three case studies demonstrated the strength of interdisciplinary research. One key theme was that big issues, such as health or the economy, needed to be targeted to promote internationalisation of research.

Satoshi Tanaka of the University of Tsukuba spoke of a lack of stable funding for international collaboration. One of the obstacles was the 'double jeopardy' of two different funding systems, each with its own decision-making process and limited budget. One solution could be to find common criteria for funding, using a framework established by JSPS and the British Council. Alternatively, a target-oriented approach aimed at global issues might supply greater sums of money, depending on particular government initiatives. Collaboration must include participation from champions on each side to share joint successes, as well as providing attractive and understandable goals for decision makers.

Questions and Answers

Prof Stephen Hillier from University of Edinburgh asked to what extent Research Council UK had a role in realising the internationalising priorities. The Research Council had initiatives in specific regions, and was working well in focussing this internationalisation. The problem of 'double jeopardy' could be overcome with collaboration between research councils and universities. Prof Wellings suggested that this was a crucial consideration and that it was important to ensure that the correct bodies, which included the British Council, Universities UK and other networks, worked with the Research Councils and the Japanese equivalents.

Prof Glenn Hook from the University of Sheffield asked about the extent to which the present symposium related to the Prime Minister's initiative. Lesley Hayman, of the British Council, said that the symposium was funded by that initiative, and the British Council's aim was to foster the environment in which links could develop. Similar activities for other countries were taking place. She said that there were two streams of money allocated: one was for collaborative projects and joint programme development, and the second was

EXECUTIVE SUMMARY

small amounts of money to encourage student mobility. Pat Killingley, also of the British Council, noted that the initiatives were to develop actual collaboration, rather than just marketing. Prof Ono noted that lack of funding made international collaboration difficult, though in 2010, a new programme was being introduced for 30 Japanese top universities to collaborate internationally.

Prof Wellings said that in the UK, there had been asymmetry in the way that resources were distributed across regions: the North had generally benefitted more than, for example, the Southeast. Prof Suita suggested that some universities, particularly in the cities, did not engage with the local people. Prof Wellings observed that many universities were one of the largest employers in their local areas.

Prof Homma noted that his university had two campuses: one established campus in Kyoto and another, new campus in the Oita prefecture. Local engagement with the university in Kyoto started in the 19th century as an evening college, though the importance of the campus there was diluted by the presence of many other universities in the city. In Oita, a small and quiet area, it was thought that the new campus would be unsuccessful, though with support of local government, the campus had become settled and had encouraged the influx of a large international population. Prof Wellings noted that in the UK, two new universities in Cumbria and Cornwall had been similarly created to promote development of those regions and economies. This was quite an interventionist approach, particularly for higher education institutions. Prof Noreen Burrows, of Glasgow University, noted that her university had an experimental campus in Dumfries. This had required collaboration with other universities to provide higher education in an area previously without such provision. However, it was not possible simply to transplant what had been done at the old university to the new institution in the countryside: the focus needed to be on training and education specifically for that local community.

Prof Higson from Aston University noted that her university was in the centre of Birmingham, and had a diverse population; many residents would not contemplate going to university. In an attempt to change peoples' expectations, Aston University had encouraged student involvement in volunteer activities. Outreach combined with raising expectations was seen as very important. Another problem faced by Aston University was that many graduates left the region and in collaboration with other local universities a portal had been developed with SMEs, called Graduate Advantage, to establish placements for graduates within the region.

Prof Sir David Watson, from the Institute of Education at the University of London, noted that widening participation was important: both Japan and the UK had learned that social mobility could be improved as the higher education system expanded, though the pressure of the credit crunch could mean that the diversity of students was reduced: traditional students might be taken instead of non-traditional students. In Japan, unlike the UK, a strong private sector could provide opportunities that did not exist in the public sector.

Ms Priest noted that it was important that higher education developed curricula for the 21st Century, rather than developing curricula based on what employers wanted now. Prof Wellings agreed that lifelong learning considerations were important, though the business community did not, perhaps, understand this.

Dr Claridge said that universities were eager to get professional accreditation, though this entailed filling the curriculum with specific things. This meant that there was little time to develop other skills, which were also demanded by employers.

Mr Yoshimoto referred to business in Tokyo, which demanded skills in graduates. The economic situation meant that employers limited employment of new graduates.

One delegate from Japan also referred to employers' expectations. He suggested that Japanese businesses were growing abroad. Many Japanese graduates would travel abroad, which meant that employers wanted Japanese universities to think globally. Additionally, employers did not care about the nationality of graduates; rather, they wanted graduates with strong skills. The delegate also suggested that post-graduates competed with undergraduates in the job market, and universities should ensure that post-graduate students had even stronger skills.

Prof Homma said that in considering the requirements of the business community in developing curricula, it was often difficult to guarantee that such curricula were coherent. It was important to co-ordinate within faculties and in particular focus on the content of courses.

Taking Things Forward

Professor Paul Wellings

I. The Range of Emerging Issues

Before summarising some of the issues considered during the symposium, Prof Wellings reflected on the degree of momentum for a second symposium event in 2010 in Japan and to build an agenda for that. The challenge was to begin that process and look at the main opportunities for further collaboration. Several ideas had been suggested, that were potentially important for future collaboration. Prof Wellings detailed his personal perspective of ideas, suggestions and issues raised throughout the symposium:

- How to deal with funding and research councils, so as to promote greater collaboration and overcome the 'double jeopardy' problem.
- Sharing in best-practice, by way of twinning arrangements between institutions.
- The relevance of collaboration during an economic downturn and the opportunities this presented, such as mitigating social problems and developing mid- to long-term solutions. The Japanese Ambassador had suggested that collaboration should give emphasis to finding solutions to these big social problems.
- Japan and the UK were experiencing flat growth in the number of research and taught postgraduates. Academic populations were ageing and, moving towards a post-industrialist era, demand was growing for a whole range of new types of post-graduate students.
- Could PhD students take advantage of exchange opportunities between the UK and Japanese economies? If not, how could such exchange be enhanced? There was a need for continued development of post-graduate studies, including further funding opportunities.
- The additional skill-sets required by modern PhD students.
- How to move beyond describing Japanese and UK systems to translating understanding of those systems into action.

Two major questions arose from this eclectic set of issues: firstly, who were the actors and innovators who would be responsible for solving the issues? Secondly, who defined the priority needs from those sorts of issues?

II. Group Feedback

Prof Wellings asked delegates to discuss and then feedback on two key points:

- A specific action from the symposium.
- Two themes that should be considered in light of a potential second symposium in 2010.

EXECUTIVE SUMMARY

1. Table 1

a. Themes

- PhD programmes presented many common opportunities, though one difficulty identified by Japanese institutions was the employability of PhD graduates. One possible consideration for the future would be the potential for PhD exchanges.
- Greater discussion of the outputs of symposia such as the present event, and what such events added to the process.

b. Specific Action

- Developing individual institutional links, which would necessarily vary depending on the nature of those links

2. Table 2

a. Themes

- Because of language difficulties, it was much easier for UK institutions to accept Japanese students than Japanese universities to accept UK students. Such students often needed language assistance, or even courses in English.
- One method of promoting internationalisation was by way of faculty exchange, though it was important to acknowledge the cultural issues.

b. Specific Action

- Developing a common vocabulary about key definitions to ensure that issues might be discussed with greater ease.

3. Table 3

a. Themes

- PhD collaboration was important, and the collaboration between France and Japan could provide a useful model.
- How the learning experience of students should be enhanced, considering the needs of both employers and students.

b. Specific Action

- Both countries were willing to fund research into key areas like the environment, the economy and health. Universities should look at funding cross-disciplinary activities in a flexible way and prioritise such important issues.

4. Table 4

a. Themes

- Exchange programmes were missing from the present plan, though the linguistic obstacle was a challenge.
- Promotion of the idea that Japanese universities were good places to go for British students.

b. Specific Action

- Collectively, Japanese and UK universities should make a collective statement of their readiness to accept each other's students.

5. Table 5

a. Themes

- Identifying at what level the efforts of collaborators should be aimed to secure funding: intergovernmental level, funding council level or individual level. The highest level would be a worthwhile challenge.
- Continued collaboration between universities.

b. Specific Action

- Making networking a theme for the next symposia, to include not only students and teachers but also support staff.

6. Table 6

a. Themes

- Necessity for emphasis on lifelong learning and skills.
- Openness to new realities, and engaging faculties with those realities.

b. Specific Action

- The British Council and JSPS establishing a joint programme to steer faculty and student exchange between universities.

7. Table 7

a. Themes

- The effect of the economic downturn, and the contribution higher education could make in overcoming the credit crunch.
- Post-graduate education, at both doctoral and master's level.

b. Specific Action

- Big global issues should be linked to higher education collaboration.

III. Conclusion

Prof Wellings summarised the contributions of each table, and noted that collectively, those contributions demonstrated a variety of common causes and interests for the future, and in particular the meeting in Japan in 2010. The discussions that had taken place would be used to inform the creation of the programme for the next symposium.

Close of Symposium

Dr Hiroshi Matsumoto
President, Kyoto University

Dr Matsumoto thanked all involved in the symposium. A recent joint survey by the BBC World Service and The Yomiuri Shimbun survey considered which countries made a positive contribution to the international community; Japan and the UK were amongst the most highly regarded. He concluded that in both countries, there had been a long tradition of education, and the discussions would promote collaboration in the future.

Pat Killingley
Director, Higher Education and Education UK, British Council

Ms Killingley also thanked all those involved in the symposium. She noted that in a global credit crunch, there was a tendency to become insular; the British Council, however, was dedicated to supporting continued collaboration between universities and academics and providing opportunities for exchange. The task would now be to move on from describing each other's educational systems to actual collaboration, and the job of the British Council was to support that.