



**Asia-Pacific
Economic Cooperation**

**Promoting Regional Education
Services Integration:
APEC University Associations
Cross-Border Education
Cooperation Workshop**

Workshop Report

Kuala Lumpur, Malaysia, 20 – 22 May 2014

Human Resources Development Working Group

June 2014



APEC Project: HRD 02 2013

Produced by
Australian Council for Educational Research
Private Bag 55
Camberwell, Victoria, Australia 3124
Tel: (61) 3 9277 5555
Fax: (61) 3 9277 5500
Website: <http://acer.edu.au/>

For
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Singapore 119616
Tel: (65) 68919 600
Fax: (65) 68919 690
Email: info@apec.org
Website: www.apec.org

© 2014 APEC Secretariat

APEC#214-HR-01.3

TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
INTRODUCTION.....	7
BACKGROUND.....	8
WORKSHOP DISCUSSION AND OUTCOMES.....	10
Enhancing the mobility of students	10
Barriers to student mobility.....	11
Best practice in student mobility.....	12
Opportunities for collaboration to enhance student mobility	14
Enhancing the mobility of researchers	16
Barriers to researcher mobility.....	16
Best practice in researcher mobility.....	17
Opportunities for collaboration to enhance researcher mobility	18
Enhancing the mobility of education providers.....	20
Barriers to provider mobility.....	20
Best practice in provider mobility.....	21
Opportunities for collaboration to enhance provider mobility	23
Enhancing virtual mobility	24
Barriers to virtual mobility.....	24
Best practice in virtual mobility	25
Opportunities for collaboration to enhance virtual mobility	26
WORKSHOP FINDINGS	27
ENDNOTES.....	29

TABLE OF FIGURES

Figure 1: Workshop Presentations - Student Mobility	10
Figure 2: Good Practice Example - The University of Malaya.....	12
Figure 3: Good Practice Example - The CAMPUS programme.....	13
Figure 4: Good Practice Example - The ASEAN Credit Transfer System.....	14
Figure 5: Good Practice Example - Project Atlas.....	14
Figure 6: Workshop Presentations - Researcher Mobility	16
Figure 7: Good Practice Example - Association of Pacific Rim Universities	17
Figure 8: Good Practice Example - ASEAN Research Clusters.....	18
Figure 9: Good Practice Example - Scheme Program for Academic Mobility and Exchange.....	18
Figure 10: Workshop Presentations - Provider Mobility	20
Figure 11: Good Practice Example - Japan International Cooperation Agency	21
Figure 12: Good Practice Example - Hong Kong Council for Accreditation	21
Figure 13: Good Practice Example - Hong Kong Qualifications Framework.....	22
Figure 14: Good Practice Example - Quality Network of the ASEAN University Network.....	22
Figure 15: Good Practice Example - Malaysia Campus of the University of Nottingham.....	22
Figure 16: Workshop Presentation - Virtual Mobility.....	24
Figure 17: Good Practice Example - Commonwealth of Nations.....	25
Figure 18: Good Practice Example - OER Universitas	25
Figure 19: Good Practice Example - Thailand Cyber University.....	25

This page is intentionally left blank.

EXECUTIVE SUMMARY

This report has been prepared to summarise discussions at the APEC University Associations Cross-Border Education Cooperation Workshop. The workshop was held in Kuala Lumpur, Malaysia between 20 and 22 May 2014 and was attended by delegates from Australia; Canada; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Papua New Guinea; The Philippines; Singapore; Thailand; Viet Nam; and the United States.

The workshop brought together representatives from university associations, universities and governments to support, pursue and work towards the achievement of the priorities outlined by APEC Economic Leaders. The workshop focused on four key themes within cross-border education cooperation – student mobility, researcher mobility, provider mobility and virtual mobility.

For each theme, presenters used their expertise in the subject matter to raise key challenges, highlight examples of good practice and consider opportunities for university associations to work together. A panel discussion on each theme enabled a broad range of experiences and perspectives to be shared. For each theme workshop delegates focused on the identification of barriers to cross-border education cooperation, good practice in cross-border education cooperation and opportunities for collaboration in cross-border education cooperation.

Student mobility

- **Barriers** – Important barriers to student mobility include: cost; inequitable access; a lack of credit mobility; concerns about brain drain; resistance from teaching staff; and gaps in data.
- **Best practice** – Examples of good practice which facilitates student mobility include those provided by: the University of Malaya; the Government of Viet Nam; the Collective Action for Mobility Program of University Students in Asia; Universities Australia; the ASEAN credit transfer system; and Project Atlas.
- **Opportunities for collaboration** – There are opportunities for APEC economies to collaborate to enhance student mobility through: recognising, disseminating and building on existing good practice; establishing joint scholarship funds; expanding cost-sharing agreements and reciprocal arrangements; focusing on joint training programmes and short term exchanges; credit sharing processes; the nomination of programmes; and data enhancement.

Researcher mobility

- **Barriers** – Important barriers to researcher mobility include: cost; variations in infrastructure and human resources; visas; a lack of encouragement from supervisors; language barriers; the lack of recognition of non-English publications in citation databases; and complexities about access to and ownership of data.
- **Best practice** – Examples of good practice which facilitates researcher mobility include those provided by: the Government of Indonesia; the Association of Pacific Rim Universities; the SUSTAIN EU-ASEAN initiative; ASEAN research clusters; and the Indonesian Scheme Program for Academic Mobility and Exchange.
- **Opportunities for collaboration** – There are opportunities for APEC economies to collaborate to enhance researcher mobility through: stimulating joint research collaborations across APEC economies; creating a pool of shared resources to fund joint research; expanding the ASEAN

research cluster; encouraging the development of an APEC Researcher Travel Card; holding a workshop on researcher mobility that includes industry partners and research organisations; providing specific support for the mobility of female researchers; and measuring the scale and impact of researcher mobility.

Provider mobility

- **Barriers** – Important barriers to provider mobility include: regulations; quality assurance mechanisms; accreditation policies; taxation and employment rules; degree awarding powers; the recognition of qualifications; impediments to credit transfer; and clashes of priorities within providers.
- **Best practice** – Examples of good practice which facilitates provider mobility include those provided by: the Japan International Cooperation Agency; the Hong Kong Council for Accreditation of Academic and Vocational Qualifications; the Thailand credit transfer structure with the European Union; the Hong Kong Qualifications Framework; the Quality Network of the ASEAN University Network; and the Malaysia Campus of the University of Nottingham.
- **Opportunities for collaboration** – There are opportunities for APEC economies to collaborate to enhance provider mobility through: recognising and building on good practice; removing the reference to branch campuses; developing an APEC qualifications framework; and encouraging foreign providers to make a long term commitment to host economies.

Virtual mobility

- **Barriers** – Important barriers to virtual mobility include: restrictive publishing practices; a lack of recognition of qualifications gained from MOOCs; and the early evolution of online assessment practices.
- **Best practice** – Examples of good practice which facilitates virtual mobility include: the Commonwealth of Nations; OER Universitas; Universitas Terbuka and the Thailand Cyber University.
- **Opportunities for collaboration** – There are opportunities for APEC economies to collaborate to enhance virtual mobility through: recognising the need to meet the unmet demand for university education; sharing learning resources and research outputs through Creative Commons licences; and harnessing technology to exchange information.

INTRODUCTION

Cross-Border Education Cooperation (CBE) is a topic of considerable importance to APEC economies. It directly contributes to APEC's goal of supporting sustainable economic growth and prosperity in the Asia Pacific region. The 2012 APEC Economic Leaders' Declaration on Promoting Cross-Border Education Cooperation instructs Ministers and officials to take forward priorities on cross-border student, researcher and education provider mobility to develop cross-border education cooperation in the APEC region while taking into consideration the circumstances of individual economies. As Annex D of the Declaration states:

Facilitating the flow of students, researchers and education providers ... provides opportunities for a significant expansion of cross border education services to the benefit of all economies ... Increasing cross-border student flows will strengthen regional ties, build people to people exchanges, and promote economic development through knowledge and skills transfer.¹

In May 2013 representatives and experts from university associations, universities and governments of thirteen APEC economies attended a workshop in Kuala Lumpur entitled *Promoting Regional Education Services Integration: APEC University Associations Cross-Border Education Cooperation*. Representatives came from: Australia; Canada; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Papua New Guinea; The Philippines; Singapore; Thailand; Viet Nam; and the United States.

The workshop was funded by APEC with support from the Australian Government Department of Education. It was introduced by Mr Niclas Jönsson, Director, Multilateral Section, Department of Education, Australia, who was the Project Overseer for the workshop. The workshop was facilitated by Professor Kent Anderson, Pro-Vice Chancellor (International) at the University of Adelaide, Australia.

The purpose of the workshop was to support, pursue and work towards the achievement of the priorities outlined by APEC Economic Leaders. The workshop did so by allowing participants to share their unique experiences of CBE, by recognising best practice in CBE, by identifying existing barriers to CBE and by examining ways to progress the priority areas identified. The workshop also considered the elements of ethics and equity in relation to all forms of mobility.

This report provides a summary of the workshop. It draws on notes of the discussions and presentations which took place during the workshop and on the workshop paper which was distributed prior to the workshop.

BACKGROUND

The importance of collaboration between countries in stimulating Cross-Border Education Cooperation (CBE) is increasingly recognised around the world. In 2012 APEC Economic Leaders underscored the need to improve the mobility of students, researchers and education providers, and to improve the existing network of bi-lateral agreements around cross-border education cooperation.²

APEC Economic Leaders explicitly recognise the role of CBE in “creating more and higher quality jobs and bolstering productivity growth”. APEC Economic Leaders placed an emphasis on enhancing cooperation between the education sectors of APEC economies as a means of fostering “innovative growth as students, researchers and education providers build scientific, technological and linguistic communities”.

In preparation for the May 2014 workshop on *Promoting Regional Education Services Integration: APEC University Associations Cross-Border Education Cooperation*, desktop research was undertaken to investigate the existing literature, practice and commentary around CBE. The research focused on four key areas:

- Student mobility – including credit transfers, qualifications recognition and enhancing equity.
- Researcher mobility – including doctoral training, fellowships, research collaborations and joint publications.
- Provider mobility – including GATS, quality assurance and regulations.
- Virtual mobility – including Open Educational Resources (OER) and Massive Open Online Courses (MOOCs).

For each type of CBE, the research aimed to achieve a number of outcomes, each of which had a specific focus on APEC economies. First, to identify currently available data on the magnitude of the form of CBE, changes to its size over time and future predictions. Second, to determine motivations for the form of mobility among stakeholders, and expectations of its impact. Third, to illustrate the form of mobility with contemporary examples, identifying a number of case studies to demonstrate the way in which it finds expression among APEC economies. Fourth, to ascertain barriers which individuals and institutions currently encounter in the form of CBE.

The research highlighted a number of opportunities for collaboration between university associations for each form of CBE and these were highlighted throughout the workshop paper. The workshop paper provided a foundation for, and shaped, discussions at the workshop. It also provides a comprehensive resource for university associations, universities, governments, researchers and policy makers with an interest in CBE at the higher education level. It can be accessed from: <https://www.aei.gov.au/International-network/Australia/policyupdates/Pages/Article-APEC-University-Associations-Cross-Border-Education-Cooperation-Workshop.aspx>.

The broad trends highlighted by the research included insights into the way in which CBE is being reshaped by external forces. First, the direction of CBE is being transformed by shifts in geo-political and economic power. The old dominant pattern in which students and researchers moved from emerging economies to wealthy English-speaking economies is changing. There is an increasing focus on intra-regional movement, particularly within South East Asia and within North East Asia.

There is also an increase in multiple patterns, with students moving to and from APEC economies rather than in a uni-directional flow. Among institutions there is greater emphasis on equal

partnerships and mutual cooperation than has characterised CBE in the past. Rather than assuming that there is a better way to do things, there is growing acknowledgement of the value in diversity and in multiple approaches and perspectives.

Second, there is an increasing emphasis on the development of regional structures to facilitate CBE, and to overcome barriers to its growth. Rather than copying advanced mechanisms in regions such as Europe, these are being reinterpreted and refreshed to meet the particular contexts found among APEC economies. These include quality assurance programmes, collaboration in qualifications frameworks and credit recognition, and an emphasis on research clusters. Among APEC economies the cluster of economies in South East Asia, under the ASEAN umbrella, are arguably leading the way in regional cooperation around CBE.

Third, more attention is being paid to equity implications of CBE, both in terms of who is able to participate and in the impact which it has on economies. Concern about the negative legacy of brain drain has caused economies such as Viet Nam to move toward an emphasis on short-term and limited forms of CBE in which students can some of the benefits of CBE without their skills and knowledge being lost to their country of origin.

Other forms of equality of concern to practitioners in CBE are at a number of levels. There is increasing concern about the inequality of access to CBE within APEC economies, with those in regional areas recognised as being particularly disadvantaged. There are also indications that access to CBE is mediated not only by socio-economic status but also by other characteristics, including gender.

Fourth, there is recognition of the potential which lies in CBE to contribute to both economic development and the solution of pressing regional challenges. Issues such as climate change, disease epidemics and ageing populations can only be addressed in a limited way by individual economies. When APEC economies cooperate, however, there are significant synergies to be gained from the sharing of resources, skills, knowledge and research funding.

Fifth, there is increasing recognition of the benefits which CBE generates for students, researchers and institutions. This is particularly the case in laying the groundwork for sustained people to people interactions across the APEC community of economies. Utilising the opportunities provided by the spread of access to the internet, there are enhanced opportunities for utilising the benefits of CBE and spreading them to a far greater proportion of students, researchers and institutions than are able to currently benefit.

Finally, there is growing awareness of the role of CBE in developing a sense of APEC identity, to coexist with the multiple other identities which people inhabit. In a globally interconnected world CBE is an increasingly important element of human capital development and will form the foundation which brings APEC economies together for their mutual benefit in future years.

WORKSHOP DISCUSSION AND OUTCOMES

In this section, an overview is provided of the presentations and discussions at the May 2014 workshop *Promoting Regional Education Services Integration: APEC University Associations Cross-Border Education Cooperation*. For each of the four key themes, the section reports on key elements identified by workshop participants including the barriers to mobility, best practice forms of cross-border education cooperation (CBE), and mechanisms for ongoing collaboration around CBE.

Enhancing the mobility of students

Perhaps the most visible aspect of CBE is the movement of students across international borders. Much student mobility occurs among APEC economies, with 69 per cent of the 1.2 million outbound students from APEC economies in 2010 choosing to study in another APEC economy. By 2020, APEC aims to achieve a target of 1 million intra-APEC university-level students per year and it is likely that this goal will be achieved.

Two forms of student mobility are present among APEC economies: credit mobility, where a student moves abroad for part of their qualification; and degree mobility, where a student moves abroad to undertake a whole degree or other qualification. Traditionally, students have been attracted to study in English-speaking APEC economies but these patterns are changing with increasing intra-regional mobility. This frequently occurs at the sub-regional level, for example, within North East Asia and within South East Asia.

Two important issues in relation to student mobility are often overlooked. First, despite the massive scale of student mobility, 99.5 per cent of tertiary students do not participate in mobility during their studies. Although the numbers of mobile students are certain to rise, this proportion is likely to remain relatively stable as more students enter higher education. Second, that student mobility can lead to brain drain, with some of the most able students from a country attracted both to study abroad and also remain there for employment. This can be a serious issue for growing economies.

The workshop discussions on enhancing student mobility were informed by four presentations:

Global Capacity-building in Student Mobility Data Collection and Dissemination

Ms Raisa Belyavina
Senior Research Officer
Institute for International Education, the United States

Student Mobility: a Vietnamese perspective

Dr Nguyen Thi Thanh Minh
Deputy Director General, Vietnam International Education Development
Ministry of Education and Training, Viet Nam

Sharing the University of Malaya perspective

Ms Rozitah Mohammad Amin
Director, International Student Centre, University of Malaya, Malaysia

Revolutionary Student Mobility: A New Role for Credit Transfer Processes

Mr Trevor Goddard
Associate Director, Global Programs, Office of the President and Vice-Chancellor,
Monash University, Australia

Figure 1: Workshop Presentations - Student Mobility

Each presenter and discussant brought their expertise to bear on a particular element of student mobility and this helped to shape the focus which was given to barriers to student mobility, best practice in student mobility and methods to enhance collaboration on student mobility.

Barriers to student mobility

Perhaps the greatest barrier to international student mobility is **cost**. This is true not only for students from emerging economies, where the cost of studying in an advanced economy such as the United States or Australia is prohibitive, but also for many students in advanced economies.

While cost tends to be regarded as a monolith it is useful to consider its contributory elements, which include tuition fees, the cost of living and travel expenses. This is important because overcoming the cost barrier often requires a number of initiatives, each of which address particular cost components. It is also important to recognise that while tuition fees tend to be seen as the greatest cost, **living expenses** often pose even greater problems for students.

Cost barriers should not just be seen at an economy level but also within economies, as there are significant variations by **region**. For example students in regional areas of Indonesia, the Philippines and Viet Nam are much less likely than those from more central and urban areas to participate in mobility, or to receive scholarships to do so. At the same time, institutions in other countries tend to only be interested in sending students to well known urban institutions which means that regional institutions are often overlooked.

Many governments and other entities provide **scholarships**, but the number and monetary value is frequently insufficient to meet demand. For example the Vietnamese government provides scholarships to 10,000 Vietnamese students to undertake study abroad, but a further 110,000 students use alternative sources of funding (predominantly families) to support their mobility. Similarly, the Indonesian government provides scholarships to around 7,000 students but a total of 70,000 are outwardly mobile.

Even when scholarships are provided these are often deemed insufficient by recipients. For example the University of Malaya provides funding to its students who study overseas but they find that this is too little due to the much higher cost of living in other economies. These patterns ensure that students who are not from wealthy backgrounds are often unable to engage in mobility, despite wishing to do so, resulting in **inequitable access** and outcomes.

Another barrier to, or drawback of, student mobility is **brain drain**. To optimise economic growth it is important for emerging economies to invest in the education of their young population. But is it equally important that the skills and knowledge which students gain is retained in the country. When economies fund students to study abroad this is regarded as investment in human resources which will contribute to the economy and society.

But many emerging economies suffer from negative patterns of brain drain in which students move to other countries to further their education and then fail to return, partly because advanced economies commonly establish visa systems which encourage the non-return of international students. For example Viet Nam loses about 20 per cent of students and researchers who move overseas to study. This can make governments of emerging economies wary of providing scholarships for degree mobility. In addition, those students who do return from long periods abroad can be viewed by employers as **unsuitable** for the employment environment in their home country.

Teaching staff are often overlooked in discussions of mobility but ensuring their support can be essential in encouraging student mobility. If they are negative towards student mobility they may actively discourage students, particularly their top students, from participating. In contrast, those who are in favour of mobility, for example if they have experienced it themselves, are much more likely to encourage their students to take up any opportunities for mobility on offer.

Students may also **perceive** that mobility is both too difficult and too expensive, and therefore fail to investigate the options, even if they would be interested in studying in another country. Those who are not interested in mobility may view going overseas as less beneficial than staying with their family.

Concern about the **recognition** of study undertaken in another country deters many students from engaging in mobility out of concern that they will lose their academic standing if they do so. A lack of clarity and agreement around credit transfer processes can also deter students from mobility to anything other than a similar institution with similar units of study, rather than going somewhere offering less homogenous courses which could enhance their study even more.

One of the important limitations in the ability of university associations and their member institutions to enhance student mobility are the **gaps in the data** about student movement. This is important because it is difficult to develop institutional and national strategies around student mobility, to improve mechanisms for attracting students to participate in outbound and inbound mobility and to allocate resources if current patterns of student mobility remain unclear.

Data on inbound student mobility tends to be collected on a systematic basis, but this is not uniform. For example Viet Nam does not collect data on incoming international students. Much less rigorous data collection occurs for forms of mobility such as dual and joint degrees and non-award experiences such as internships, research, study tours and language courses. In addition, very little data is available on **virtual** forms of student mobility.

Best practice in student mobility

Speakers reported that universities in both Vietnam and Malaysia have negotiated **cost-sharing** agreements with universities in other APEC economies. For example both universities agree to reduce tuition fees for each other's students, to support scholarship schemes and, in some cases, to provide internships.

The University of Malaya in Malaysia is the top university for inbound students in Asia and the 6th university for outbound students in Asia. In 2013 The University of Malaya had 2,400 inbound students (particularly from China, Indonesia and Korea) and 2,200 outbound students (particularly to Korea, Chinese Taipei and Thailand). The international student centre aims to ensure that five per cent of all undergraduates are international students and that they have student exchange programmes with at least ten partner universities in other countries.

The University of Malaya has achieved this outcome through establishing reciprocal arrangements with other institutions. For example, partner institutions agree to waive tuition fees and provide free accommodation. The University also provides outbound students with a living allowance and pays 70 per cent of students' airfares.

Figure 2: Good Practice Example - The University of Malaya

An alternative strategy which is used is **joint training programmes** in which institutions collaborate with overseas partners. For example, there are 438 joint training programmes in Viet Nam (12 at the PhD level, 164 at the Masters level and 262 at the undergraduate level). These are currently focused on the field of business and economics but there is a move towards expanding these into the fields of technology and science. This had the advantage of students being able to remain in their country, or only study abroad for a short time, both providing international experience without the need for a prolonged stay overseas.

The Collective Action for Mobility Program of University Students in Asia is a student exchange program supported by the governments of China, Japan and Korea to facilitate connections between universities. The underlying objective is to enhance the integration of universities and to nurture global competitiveness. The programme is modelled on the European ERASMUS programme and encompasses the exchange of students and researchers.

An example of an initiative under this programme is cooperation between the National Graduate Institute for Policy Studies in Japan, the School of Public Policy and Management at Tsinghua University in China and the Korea Development Institute School of Public Policy and Management in Korea. The three institutions jointly conduct public policy education for professionals and exchange postgraduate students³.

Figure 3: Good Practice Example - The CAMPUS programme

Scholarships for teaching staff to undertake research abroad have been found to be important in Viet Nam both to encourage student mobility, as lecturers return and influence their students, and to enhance the quality of provision, as lecturers bring back ideas from foreign universities. Viet Nam issues 500 scholarships a year to support lecturers to study overseas and the target is to have 20,000 lecturers gain PhDs from foreign universities by 2020.

Resistance to mobility among students can be overcome by discussing opportunities with students at an early stage so that it becomes an expected outcome. Universities Australia is working with high school students to **raise awareness** of opportunities for international mobility before they commence university studies. The objective is to build aspirations towards international mobility and it is hoped that the involvement of an alumni group of returned mobile students will prove to be a particularly valuable element.

Overcoming concerns about a lack of recognition of study undertaken overseas requires collaboration. This can take place at two levels. One is via **university-university agreements**, such as the one in place between Monash University in Australia and Warwick University in the United Kingdom⁴. This approach works well but is not easily scalable to facilitate agreements with large numbers of universities.

An alternative approach is to develop a **regional credit transfer system**, such as the one used in the European Union. This first requires the development of a regional quality framework. Two initiatives among a selection of APEC economies – the ASEAN Credit Transfer System (ACTS) and the Universal Mobility in Asia and the Pacific (UMAP) – indicate potentially valuable approaches.

The **ASEAN Credit Transfer System (ACTS)** is being implemented in 31 universities across 11 countries (Brunei, Cambodia, Indonesia, Japan, Lao, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam). Its aim is to enhance and facilitate student mobility among member universities. It is based on student workloads and learning outcomes and takes into account existing institutional and national credit systems.

Figure 4: Good Practice Example - The ASEAN Credit Transfer System

Boosting the **quantity and quality of data** available on student mobility requires cooperation to agree on definitions and data usage, collaboration and knowledge transfer to expand skills in rigorous data collection and the creation of opportunities to share data.

Project Atlas is an initiative in which a network of institutions around the world collaborates on data collection about student mobility. In APEC economies these include the China Scholarship Council, the Japan Student Services Organisation, the Ministry of Higher Education in Malaysia and Australia Education International in Australia.

The objective is to collect and report accurate, timely and comprehensive data on global student mobility and to address the need for sharing harmonized and current data by publishing it on a website. Workshops are conducted to enhance the capacity of institutions and agencies to design and implement systems for collecting and disseminating student mobility data.

Figure 5: Good Practice Example - Project Atlas

Opportunities for collaboration to enhance student mobility

There are a large number of ways in which APEC economies could collaborate to enhance student mobility. The workshop discussed a number of these and arrived at a number of findings.

Recognise and build on existing good practice – Sharing information on good practice in student mobility is essential in ensuring efficiencies and avoiding the replication of complex processes if every university tries to start from scratch. Establishing regular workshops, conferences, meetings, newsletters and other means to encourage the transfer of good practice would reap efficiency dividends.

Establish joint scholarship funds – The significant variations in wealth among and within APEC economies means that students have extremely variable access to opportunities for mobility. Workshop participants were in favour of the establishment of a joint APEC scholarship fund to provide opportunities for mobility to the most disadvantaged students, particularly those in regional areas, in order to ensure the spread of benefits to a wider population of students.

Expand cost-sharing agreements and reciprocal arrangements – Good practice in the development of cost-sharing and reciprocal arrangements demonstrates their importance in facilitating student mobility between institutions in different APEC economies. An expansion of the principle of reciprocity in student mobility between universities in the APEC region would reduce much of the cost burden of mobility on students and significantly expand opportunities.

Focus on joint training programmes and short term exchanges – Avoidance of brain drain is a significant issue in many APEC economies and requires attention to be paid to the form of mobility on offer to students. A focus on joint training programmes and short term mobility, rather than degree mobility, is therefore encouraged. This calls on universities to develop joint training programmes with their peers in other APEC economies.

Credit sharing processes – Credit transfer processes can be complex and uncertainty about credit recognition can undermine student mobility. Credit sharing would take the attention away from trying to exactly match subject to subject and instead work on the agreement that students can do a certain proportion of their degree at another institution and it will be accepted. This recognises the value of difference and of international exposure in a student's educational experience. It is important to engage teaching staff, employers and professional accreditation bodies in credit sharing initiatives.

Nomination of programmes and courses – Workshop delegates discussed the possibility of having APEC recognised programmes and courses. This would mean that a university would nominate, for example, its degree in mechanical engineering to be an APEC recognised degree. A regional quality assurance process would check that all nominated degrees are of appropriate quality and, if accepted, students who undertook mobility to APEC recognised programmes would be guaranteed to have their study recognised by other universities within APEC economies.

Data enhancement – Workshop delegates discussed the need to enhance data collaboration. This can be done through initiatives such as Project Atlas or the Cross-Border Education Data Gathering and Dissemination Technical Assistance project being undertaken between 2014 to 2019 in APEC economies. In addition, there is a lack of data about the outcomes and impact of student mobility, such as the influence which it has on career choices and attitudes towards global issues. Collecting this data would help demonstrate the value of student mobility, particularly if it were to include qualitative data to capture the unique experiences which students have.

Enhancing the mobility of researchers

Researcher mobility is an important, but often overlooked, form of CBE. Researcher mobility encompasses both the physical mobility of researchers across borders and also the shared use of research facilities, research funding and joint research publications. Researcher mobility generates a number of benefits including the development of international research networks, an increase in the quality of research being produced, and an improvement in the transfer of knowledge internationally.

Data on researcher mobility is extremely limited and it is not known how many researchers are involved in the different variants of researcher mobility. But the escalating cost of conducting research, particularly when expensive instruments and infrastructure is required, has increased the need for collaboration of specialised researchers to ensure the success of research projects. Measuring the impact of collaborative research can be difficult, but analysis of the impact of publications is one common method used. Social network analysis has shown that the intensity of collaboration seems to be positively and significantly related to the quality of research output.⁵

The workshop discussions on enhancing researcher mobility were informed by three presentations:

Student and researcher mobility: An Indonesian perspective

Professor Paulina Pannen

Expert, Higher Education, Directorate General of Higher Education,
Ministry of Education and Culture, Indonesia

Mobility and Qualifications Frameworks

Mr David Yu, Senior Manager

Hong Kong Qualifications Framework, Hong Kong, China

Researcher Mobility Programmes

Dr Chantavit Sujatanond

Interim Director, SEAMEO RIHED, Thailand

Figure 6: Workshop Presentations - Researcher Mobility

Each presenter and discussant brought their expertise to bear on a particular element of researcher mobility and this helped to shape the focus which was given to barriers to researcher mobility, best practice in researcher mobility and methods to enhance collaboration on researcher mobility.

Barriers to researcher mobility

Similarly to student mobility, the greatest barrier to researcher mobility is **cost**, and this has a particularly negative impact on researchers in emerging economies. Where scholarships are provided they can be insufficient to cover the cost of living in a much more expensive economy. Moreover, **research grants** and funding tend to focus on the fiscal year, which is often out of step with the cycle of research projects.

In addition to the cost of researcher mobility, there are significant disparities among APEC economies in the funding of research and the **infrastructure** available to conduct research. In emerging economies access to expensive research equipment can be limited or non-existent. In addition, the loss of many researchers from emerging to wealthy economies through **brain drain** can deplete the **human resources** available in an economy to conduct research.

Visas can cause problems, in particular for short term academic research and for research students. Researchers fall into the grey area between business and student visas, with classification and requirements varying from country to country. Bureaucracy and the time taken to process visas can make researcher mobility much more difficult than it needs to be.

Even when researcher mobility is facilitated, it can be difficult to **motivate** researchers to look beyond their own communities and see the value of engaging in collaborative research with colleagues in other APEC economies. This can be confounded due to a lack of **awareness** of opportunities available and a lack of **encouragement** (particularly of research students) from their supervisors, with a failure to acknowledge the enriching nature of researcher mobility.

Publications in international journals can be difficult for researchers in many countries for a number of reasons. **Language** barriers are a significant issue, with few international publications accepting papers in languages other than English and many researchers finding that their English language skills are inadequate to write at an academic level. If researchers wish to use a service to edit their manuscript to ensure that the English is accurate this can incur **high fees**.⁶

When publications are in languages other than English or Japanese they are not included in the Scopus abstract and **citation database**. This makes it difficult for researchers to build up an international reputation and to make contacts with colleagues in other countries for the purpose of collaboration. Making research available for broad consumption can both spread knowledge and also enhance the impact of research. For example funding agencies for research in Canada have an **open access** policy to support open dissemination.

Another limitation to researcher mobility relates to **access to and ownership of data**. Data which is openly accessible in some countries may be classified as secure in others. When data is shared, this can also lead to complexities about ownership, with competing expectations and protocols around data usage and storage.

Best practice in researcher mobility

Speakers and contributors at the Workshop identified a number of ways in which researcher mobility is being supported and promoted among APEC economies. Indonesia has been successful in **leveraging funding** so that when research funds are received from overseas organisations these are matched by the Indonesian government.

At the same time research partners are encouraged to have **shared ownership** of all publications and research products and the Indonesian government provides support to Indonesian researchers to work with researchers in other countries to produce publications in the **English language** in order to enhance their Scopus index.

The **Association of Pacific Rim Universities** provides a transnational space to encourage research partnerships between institutions which may not otherwise collaborate. This is done with a focus on collective action to find solutions to Asia-Pacific challenges including health, climate change and ageing. Support is provided through seed funding and university partnerships are encouraged to combine efforts to seek funding at the regional and global levels. Research hubs enable collaborations which are sustained in the long and medium term.

Figure 7: Good Practice Example - Association of Pacific Rim Universities

Workshop participants emphasised the importance of identifying **thematic areas** of common interest to APEC economies and focusing research efforts on these. An example is the **SUSTAIN EU-ASEAN** initiative which focuses on climate action, resource efficiency and raw materials issues and aims to enhance collaboration between researchers in the EU and the ASEAN region.

The **Association of South East Asian Nations** (ASEAN) is focusing on research collaboration through a series of research clusters. These have been identified as particularly important areas for regional collaboration and each one is led by two or more ASEAN countries: Singapore and Thailand will lead research in health and medicine; Indonesia and the Philippines will lead research into the environment and biodiversity; Indonesia, Thailand and Viet Nam will lead research into agriculture and food; and the Philippines and Singapore will lead research in the social sciences.

In each research cluster core universities with strong research activities in relevant topic areas have been selected. The overall objective is to make strategic investment in important areas of research in a coordinated manner in order to enable efficiencies and to work towards long term regional competitiveness and sustainability, and to solve shared regional challenges.

Figure 8: Good Practice Example - ASEAN Research Clusters

Discussions at the workshop highlighted that many research collaborations are organic and are based on **personal relationships** and this reinforces the necessity of providing fora (such as conferences) which bring researchers together to discuss their research with peers. It also demonstrates the importance of exposing **research students** to mobility in order for them to build connections with researchers in other APEC economies at an early stage in their careers.

While researcher mobility is valuable it is important that this does not lead to brain drain from one APEC economy to another and thus the emphasis on **short term** programmes is important.

The Indonesian Directorate General of Higher Education has created the **Scheme Program for Academic Mobility and Exchange** (SAME) to facilitate researchers to go to the United States. It aims to both enhance teaching skills and also to develop partnerships between universities through exchanges, sandwich programmes, co-publications and collaborative research. Overseas mobility lasts from two weeks to three months and the scheme covers travel and living expenses. Over six years, 300 researchers have participated in the scheme.

Figure 9: Good Practice Example - Scheme Program for Academic Mobility and Exchange

Opportunities for collaboration to enhance researcher mobility

There are a large number of ways in which university associations and their members could collaborate to enhance researcher mobility. The workshop discussed a number of these and arrived at a number of findings.

Encouragement of research collaborations – Stimulating research collaborations between researchers in more than one APEC economy can be achieved through a number of structural practices. These include providing easier access to research funding for collaborative projects, ensuring that collaborative research is regarded favourably in applications for career advancement,

and supporting researchers to attend conferences in other APEC economies. In addition, institutional emphasis on establishing linkages with universities in other APEC economies can greatly facilitate researcher mobility.

An important element of research collaboration is that wealthier APEC economies provide support to emerging APEC economies to build the capacity of researchers. One method might be to encourage retired researchers to spend time in emerging economies to share their expertise, including developing the skills of researchers in writing academic publications.

Common research fund – Addressing significant disparities in access to research funding can be addressed through the establishment of an APEC research fund. This could be built up through each economy contributing an amount relative to their economic capacity, and through contributions from other agencies such as the World Bank and the Asian Development Bank. This research fund could be used to support scholarships for researchers (including research students), to provide mobility grants, to encourage cross-institutional collaborations, and to fund joint publications.

Expansion of ASEAN research cluster – The good practice example of the ASEAN research cluster could be expanded, both to include other APEC economies as well as to focus on additional areas of research. This could be achieved through the establishment of a steering committee, representing all APEC economies. Through workshops and meetings the steering committee could identify common areas of interest and draw up a roadmap to establish how research could be coordinated across the region.

APEC Researcher Travel Card – The APEC Business Traveller Card significantly facilitates movement of business people around APEC economies. Workshop participants were strongly in favour of the development of a linked APEC Researcher Traveller Card. This would reduce the barriers to researcher mobility caused by complex visa regulations.

Workshop with industry and research organisations – Encouraging researcher mobility across APEC economies would benefit from bringing together researchers and industry representatives in a joint discussion about ways to facilitate this. Industries often operate across multiple economies and may be able to contribute to the establishment of schemes which enhance researcher mobility between APEC economies. Discussions with industry could also focus on the value of using local researchers in an APEC economy rather than on bringing in researchers from outside.

Support for female researchers – Due to competing responsibilities in their personal lives and ingrained assumptions about gender roles, female researchers in many APEC economies can be disadvantaged in opportunities for mobility. This can be overcome by schemes which specifically target female researchers and support their specific needs to encourage greater mobility.

Measurement of researcher mobility – There is almost no data on researcher mobility and this makes it difficult to target funds and support where it is most needed. Shared data collection on researcher mobility would inform policy and decision making. Data collection could include the measurement of researcher movement, as well as the impact of research outcomes.

Establishing a APEC citation index which recognises both English and non-English publications, building on an initiative already underway among ASEAN economies, would enhance the visibility of research that is already being conducted and enable the measurement of the impact of collaborative research.

Enhancing the mobility of education providers

Provider mobility refers to the provision of university education by educational providers in APEC economies other than the one in which they originate. This can be through the establishment of a branch campus in another economy, but other forms of provider mobility include franchises, twinning arrangements, and joint or double degree programmes.

Provider mobility is important in boosting the capacity of APEC economies to provide places for those who wish to gain a university education. It also enables the top students to access an international education without leaving their place of origin, reducing the risk of brain drain. In addition, research opportunities in the host economy may be enhanced through new collaborations and resources and teaching staff may gain new skills through employment at the foreign provider.

For providers who are mobile benefits include enhanced prestige from raising their international profiles; revenue from student fees; mobility opportunities for home country students; international experience for staff; and relationships with foreign institutions, governments and commercial organisations.

Enhancing provider mobility requires the alignment of two contexts. First, a university needs to consider whether mobility fits with its strategy and mission. Second, mobility needs to be facilitated by the host country. This requires amenable policies and conditions in the receiving economy including regulations, and the provision of education hubs and systems which enable the mutual recognition of qualifications.

The workshop discussions on enhancing provider mobility were informed by two presentations:

Cross-Border Mobility: Provider Perspectives

Professor Christine Ennew

Provost and Chief Executive Officer, Malaysia Campus of the University of Nottingham, Malaysia

Asia Pacific Regionalisation of Higher Education: Findings from JICA-RI Surveys for East Asian Leading Universities

Professor Kazuo Kuroda

Professor of International Education, Graduate School of Asia-Pacific Studies, Waseda University, Japan

Figure 10: Workshop Presentations - Provider Mobility

Each presenter and discussant brought their expertise to bear on a particular element of provider mobility and this helped to shape the focus which was given to barriers to provider mobility, best practice in provider mobility and methods to enhance collaboration on provider mobility.

Barriers to provider mobility

While host economies may welcome foreign providers, they also tend to carefully **regulate** them in order to ensure that the education and student experience provided are of an appropriate quality and that it is **consistent** with the domestic system and its principles and values. For example Indonesia already has more than 5,000 higher education institutions and is wary about expanding this even further, despite the ongoing lack of capacity of provision.

One of the complexities of provider mobility relates to **accreditation**, with differing policies on whether a mobile provider should be accredited by its home system, the host system or both. There are also complex arrangements around **taxation**, the hiring of local and overseas **teaching staff** and what **fees** can be charged to local students.

In many APEC economies it is only possible for foreign providers to establish themselves in collaboration with a **local partner**. This puts provider mobility at odds with other service industries in which provider mobility is both more common and less constrained. It can also lead to complexities around **degree awarding** powers.

A significant barrier to provider mobility is the lack of **recognition** of qualifications from one institution by other institutions. This has an equally negative impact on student mobility. There is a lack of **transparency** around many university qualifications and this complicates comparisons across institutions and APEC economies, impeding **credit transfer**.

Potential problems in provider mobility can arise when there is a clash of culture around elements such as freedom of speech and academic freedom. Although these issues may hit the headlines, more common problems arise from a **clash of priorities** within the home institution and unrealistic expectations about **market size**, illustrating misconceptions about the host economy they are entering into. This can cause institutions to pull out when their hopes are not realised, **destabilising** the host economy's higher education sector.

Best practice in provider mobility

Speakers reported multiple examples of provider mobility, some of which have been successful and others which are examples of what not to do. Sharing examples of good practice can help establish strategies and principles most likely to achieve positive outcomes.

Research undertaken by the **Japan International Cooperation Agency** looked at 1000 cross-border collaborative programmes and found that the main motivation for provider mobility is a desire to improve international visibility and the reputation of the university. The study found that partnerships are seen as more effective than one-sided forms of provider mobility in encouraging joint flows and mutual benefits. The emphasis on reciprocity was deemed to be of particular importance.

Figure 11: Good Practice Example - Japan International Cooperation Agency

Overcoming issues around recognition and accreditation requires significant efforts to be made in aligning qualification frameworks and quality assurance systems. Within a higher education system it is important that policies are in place which can evaluate and regulate the quality of a programme of institution without being unduly onerous.

The **Hong Kong Council for Accreditation of Academic and Vocational Qualifications** in Hong Kong, China conducts accreditation of programmes offered by foreign providers. This is a robust process and once programmes have been accepted they are listed on a central database and qualifications obtained from these programmes are recognised by other institutions in Hong Kong, China. In addition, students can receive government subsidies to study at recognised providers.

Figure 12: Good Practice Example - Hong Kong Council for Accreditation

Bilateral approaches to collaboration around qualifications frameworks and quality assurance can yield dividends and are increasingly being put in place. For example, Thailand has funding from the Asian Development Bank to create a credit transfer structure which can interface with the European Union and with higher education systems in other parts of the world.

The **Hong Kong Qualifications Framework** in Hong Kong, China has established memoranda of understanding around cooperation on the development of qualifications frameworks with other economies. These include Scotland in the United Kingdom, Guangdong in China and New Zealand. Additional work is underway with Thailand on cooperation around a qualifications framework. The Hong Kong Qualifications Framework has also been invited to collaborate with the European Union on referencing of qualifications frameworks. Together these agreements remove some of the existing barriers to both student and provider mobility.

Figure 13: Good Practice Example - Hong Kong Qualifications Framework

Regional approaches to quality assurance have a great deal to offer but remain at a relatively early stage. They take their origins in work which has been done in the European Union but are designed to specifically reflect what happens in the local context.

The **Quality Network of the ASEAN University Network** trains and certifies quality assessors who conduct reviews at programme and institutional levels in other ASEAN member countries, including the APEC economies of Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, Thailand and Viet Nam.

Figure 14: Good Practice Example - Quality Network of the ASEAN University Network

Foreign providers often have to work around regulatory regimes in both their home country and in the host country, dealing with contrasting approaches to quality assurance and needing to align governance with local requirements. They are required to balance the need for local autonomy against a consistent approach to delivering education which meshes with the core values of the home institution.

The **Malaysia Campus of the University of Nottingham** was established as a joint venture with a Malaysian company and opened to students in 2000, the first international campus of a British university. It retains a British model of education, awarding degrees from the University of Nottingham and with the British institution controlling all academic matters. Yet it adapts to the local context and serves a student body comprised of Malaysian students as well as those from other countries. Staff include those from the UK and Malaysia as well as others who have been recruited internationally. Degrees are offered in Arts and Social Sciences, Engineering and Science at both the undergraduate and postgraduate level⁷.

Figure 15: Good Practice Example - Malaysia Campus of the University of Nottingham

Opportunities for collaboration to enhance provider mobility

There are a large number of ways in which APEC economies could collaborate to enhance provider mobility. Workshop delegates discussed a number of these and arrived at a number of findings.

Recognising and building on best practice – Encouraging open discussion and critique of provider mobility in a range of context can help inform future developments but requires institutions to overcome their suspicion of sharing information with potential competitors.

Removing reference to branch campuses – As provider mobility evolves it is increasingly important to move away from conceptualising it as a 'parent – child' relationship. Changing the discourse can help to focus attention on the two way flows of skills and knowledge and to encourage students to flow in both directions. This is an important step in helping campuses to move away from a sense of dependency in which they are unable to respond to local contexts.

Development of an APEC qualifications framework – Perhaps the greatest barrier to provider (and student) mobility is the lack of integration of qualification frameworks. Working towards the development of an APEC qualifications framework, building on the work being done among ASEAN countries, would significantly facilitate provider and student mobility between APEC economies. This should involve the development of an APEC system of quality assurance.

Focusing on sustained commitments – There has been a number of cases of foreign universities pulling out of other APEC economies when their short term goals are not achieved. This is destabilising and it is important that institutional leaders recognise the need for long term commitments when they decide to engage in provider mobility. This may mean accepting that short term financial losses are more realistic than short term surpluses, but that a longer term commitment will yield both reputational and financial dividends.

Enhancing virtual mobility

A focus on mobility has traditionally highlighted physical mobility but in the contemporary context an increasing emphasis is being placed on virtual mobility. Virtual mobility provides the opportunity for transnational connections to be built between institutions, researchers and students without the need for any actual movement. Virtual mobility optimises the near-ubiquity of the internet and mobile phones in modern day communication to enhance educational outcomes.

Virtual mobility is an important element of CBE for two key reasons. First, it helps improve the capacity of the higher education sector to absorb the millions of students who represent demand for a university education which cannot be met through traditional means. Second, it enhances access to mobility among students, researchers and institutions without the financial means to engage in other forms of mobility.

Virtual mobility can be characterised in many ways but the focus here is on Open Educational Resources (OER) and Massive Open Online Courses (MOOCs). OER is teaching, learning or research materials that are freely available for use, adaptation, and distribution. OER can refer to teaching materials (everything from full courses to short modules), learning resources (from textbooks to a range of other media), assessment materials and the tools to make these available. OER have particularly been taken up by distance learning but can also be used in traditional classrooms.

MOOCs are one of the most talked about developments in the university sector in recent years. They vary in form and use but are frequently characterised by the enrolment of several thousand students who enrol in an online course with no fees, no pre-requisites, no expectations and no formal accreditation. Both MOOCs and OER are a new form of mobility in which education breaks away from domestic bonds. Key issues include qualification recognition, quality assurance, content and delivery.

The workshop discussions on enhancing virtual mobility were informed by one presentation:

Open Educational Resources: Opportunities for Collaboration

Professor Rory McGreal

UNESCO/Commonwealth of Learning/International Council for Open and Distance Education Chair in OER, Athabasca University, Canada

Figure 16: Workshop Presentation - Virtual Mobility

The presenter and panel members brought their expertise to bear on a particular element of virtual mobility and this helped to shape the focus which was given to barriers to virtual mobility, best practice in virtual mobility and methods to enhance collaboration on virtual mobility.

Barriers to virtual mobility

The greatest barrier to virtual mobility is **restrictive publishing** practices which control access to many educational resources and research outputs. These prevent the sharing of resources between institutions. This reinforces a 'cottage industry' approach to the development of teaching resources in which lecturers develop materials in isolation from one another. It also prevents the sharing of skills and knowledge accrued from research to those without access to university libraries and academic journals.

Another barrier to virtual mobility is the **lack of recognition** of qualifications gained from MOOCs, from prior learning and from other institutions. This ensures that education is place bound and

restricts the mobility of students. **Accreditation** bodies are only just beginning to recognise achievements from MOOCs and many institutions remain wary of giving credit to studies undertaken outside of a formal context.

The lack of recognition of credits gained from virtual education is partly due to the embryonic stage of the **assessment** of virtual learning. This prevents students from gaining **credentials** from many forms of virtual learning which are recognised by other institutions.

Best practice in virtual mobility

Creative Commons Licences make educational resources available to all, but do not give users carte blanche in their usage. For example it is still possible to assure that users attribute the author, that any adapted versions are also made available, and to restrict derivatives and commercial usage.

The **Commonwealth of Nations** has an Open Educational Resources model. This brings together a network of higher education institutions across Africa, Asia, North America and the Pacific (including a number of APEC economies) to collaborate to share educational resources with each other.

Figure 17: Good Practice Example - Commonwealth of Nations

The **recognition of prior learning** traditionally takes place through students submitting portfolios but this approach is time consuming and labour intensive. An alternative approach is 'challenge for credit' in which students undertake assessment in order to provide what they know and can do. New technologies increasingly mean that this can be done online, with **machine scoring** becoming more and more accurate.

OER Universitas is an initiative which focuses on access, equity, affordability and sustainable education practice. It enables students to choose to study subjects or courses from 30 institutions in eleven countries on five continents. All member universities agree to accept credits from each other's institutions. This is done through open assessment services in which learners pay to have their skills and knowledge recognised. This opens up university study to disadvantaged students, a proportion of whom are likely to transfer into mainstream programmes.

Figure 18: Good Practice Example - OER Universitas

Virtual mobility is particularly important in **emerging APEC economies** in which the capacity to provide university education to all those who wish to gain it is limited. Initiatives are underway at the national level in a number of APEC economies to develop online resources which contribute to enhancing the skills and knowledge of the population. For example **Universitas Terbuka** in Indonesia is a MOOC developed with input from BINUS University.

The **Thailand Cyber University** was established by the Thai government in 2005 to expand educational opportunities and promote lifelong learning. Users can access 807 online courses including a Bachelor degree in Tourism and a Master's degree in Pharmacy. In total 170,000 learners are registered. There are quality controls to ensure that all online courses meet government standards and there is a credit exchange system between institutions. One programme which is delivered on the Thailand Cyber University and which has been developed, and is delivered by five universities, is training for teachers in using e-learning and ICT in education.⁸

Figure 19: Good Practice Example - Thailand Cyber University

Opportunities for collaboration to enhance virtual mobility

There are a large number of ways in which university associations and their members could collaborate to enhance virtual mobility. Workshop delegates discussed a number of these and arrived at a number of findings.

Recognition of need to meet unmet demand – It is important to acknowledge the challenges which the university sector faces in meeting the demand for university education from millions of potential students. Efforts to do so promote the active search for models of education which offer a low cost and high capacity alternative to traditional university models. Virtual mobility, through OERs and MOOCs are two of the options which can help meet the unmet need.

Sharing resources through the use of Creative Commons licences – One way to make educational resources available to a wider community of students and researchers is to make greater use of creative commons licences. This ensures that restrictive publishing licences are avoided and that knowledge and resources can be shared.

Harnessing technology to exchange information – Technology can be used to enable a more fluid exchange of skills and knowledge. It can bring students and researchers together across large distances and enables university education to be made available to otherwise marginalised groups. Exploring the options for expanding the use of technology in virtual mobility can yield many benefits for a wide range of higher education stakeholders.

WORKSHOP FINDINGS

At the APEC University Associations Workshop on Cross-Border Education Cooperation, held in Kuala Lumpur between 20 and 22 May 2014, delegates discussed ways to enhance collaboration among university associations on CBE. A Communiqué was drafted to provide a summary of the suggestions which delegates put forward. The Communiqué highlighted measures to enhance the mobility of students, researchers and providers as well as virtual mobility. The key findings are provided below.

Enhancing the mobility of students

- The establishment of a joint scholarship fund to support students from disadvantaged backgrounds to experience the benefits of cross-border mobility.
- The expansion of cost sharing and reciprocal arrangements between universities to help minimise tuition fees and living expenses.
- A focus on joint training programmes and shorter term exchange where students gain international exposure without needing to leave their home for extended periods of time.
- A consideration of the sharing of experiences around good practice to facilitate credit sharing, leading to mutual recognition of credits and programmes.
- The possibility of universities nominating particular courses and / or programmes to become APEC recognised, undergoing quality assurance and then having guaranteed credit transfer to other universities in APEC economies.
- A focus on data collection, incorporating agreement around definitions, as well as the development of protocols around data capture, use and dissemination, and including data collection on the outcome and impacts of mobility on students' lives and careers.

Enhancing the mobility of researchers

- The development of a pool of joint funding to support researcher mobility, including collaborative research projects, joint doctoral programmes and joint publications.
- The expansion of the ASEAN research cluster to plan research strategies and to coordinate research around common challenges.
- The creation of an APEC Researcher Travel Card as an additional element of the APEC Business Travel Card.
- The coordination of a future workshop on researcher mobility to include industry partners and research organisations.
- To provide specific support for the mobility of female researchers.
- To develop a shared data collection on researcher mobility, including its scale and impact.

Enhancing the mobility of education providers

- To remove the reference to 'branch' campuses, instead emphasising mutually beneficial partnerships.
- To develop an APEC qualifications framework to facilitate credit transfers.
- To enhance APEC collaboration around quality assurance.
- To encourage mobile providers to make a long-term commitment.

Beyond mobility – enhancing virtual Cross-Border Education

- To recognise the limitations of place-based universities in meeting the demand for university education among APEC economies.
- To encourage the development and use of open educational resources.
- To use Creative Commons licences in order to share teaching and research materials.
- To use technology to enable the exchange of skills and knowledge and interaction of students and researchers across large distances, particularly to benefit marginalised groups.
- To share regulatory approaches to online and virtual forms of education.

ENDNOTES

¹ APEC Economic Leaders. (2012). "APEC Economic Leaders' Declaration: ANNEX D - Promoting Cross-Border Education Cooperation." Retrieved 20 March, 2014, from http://apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexD.aspx

² APEC Economic Leaders. (2012). "APEC Economic Leaders' Declaration: ANNEX D - Promoting Cross-Border Education Cooperation." Retrieved 20 March, 2014, from http://apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexD.aspx

³ National Graduate Institute for Policy Studies (2014). What is CAMPUS Asia? <http://www.grips.ac.jp/campusasia/en/about/> Accessed 9 June 2014.

⁴ Monash University (2014). Monash – Warwick Alliance. <http://www.monash.edu.au/about/world/warwick/> Accessed 5 June 2014.

⁵ Liao, C. H. (2011). "How to improve research quality? Examining the impacts of collaboration intensity and member diversity in collaboration networks." *Scientometrics* 86(3): 747-761.

⁶ Elsevier (2014). Author Services. Accessed 9 June 2014 from <http://www.elsevier.com/journal-authors/author-services>

⁷ The University of Nottingham (2014). Malaysia Campus. <http://www.nottingham.edu.my/index.aspx> Accessed 9 June 2014.

⁸ Thailand Cyber University Project (2014). History of the TCU Accessed 8 June 2014 from <http://www.thaicyperu.go.th/index.php?lang=en-us>; Sombuntham, S. & Theeraroungchaisri, A. (2006). Thailand Cyber University: The Strategic Move to Higher Education Reform Thailand Cyber University Project. Commission on Higher Education, Thailand. Accessed 8 June 2014 from <ftp://web.bsru.ac.th/incoming/ict/2c-4.pdf>

REFERENCES

APEC Economic Leaders. (2012). "APEC Economic Leaders' Declaration: ANNEX D - Promoting Cross-Border Education Cooperation." Retrieved 20 March, 2014, from http://apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexD.aspx

Elsevier (2014). Author Services. Accessed 9 June 2014 from <http://www.elsevier.com/journal-authors/author-services>

Liao, C. H. (2011). "How to improve research quality? Examining the impacts of collaboration intensity and member diversity in collaboration networks." *Scientometrics*. 86(3): 747-761.

Monash University (2014). Monash – Warwick Alliance. <http://www.monash.edu.au/about/world/warwick/> Accessed 5 June 2014.

National Graduate Institute for Policy Studies (2014). What is CAMPUS Asia? <http://www.grips.ac.jp/campusasia/en/about/> Accessed 9 June 2014.

The University of Nottingham (2014). Malaysia Campus. <http://www.nottingham.edu.my/index.aspx> Accessed 9 June 2014.

Sombuntham, S. & Theeraroungchaisri, A. (2006). Thailand Cyber University: The Strategic Move to Higher Education Reform Thailand Cyber University Project. Commission on Higher Education, Thailand. Accessed 8 June 2014 from <ftp://web.bsru.ac.th/incoming/ict/2c-4.pdf>

Thailand Cyber University Project (2014). History of the TCU Accessed 8 June 2014 from <http://www.thaicyperu.go.th/index.php?lang=en-us>

