



LIFELONG LEARNING & THE DIGITAL REVOLUTION?

P. **4**

Will Asia become a world leader in the use of learning technologies?

> Both over-optimism and over-pessimism about online distance learning exist in Asia

P. **18**

Can the Confucian learner become a lifelong learner?

> The Confucian teaching and learning culture constitutes a challenge

P. **28**

MOOCs are a revolution for higher education in India

> Mobilisation of educational resources are imperative in India

This changes everything: can the digital revolution change education?

The long-standing, and still prevalent, claim is that digital technologies are creating a pedagogical revolution. There is, however, still no evidence for this. **Meanwhile, for many, the spread of digital technologies is having an impact on access to information.**

By CLAUS HOLM
Chief Editor and
Chair of ASEM LLL Hub

Even revolutionaries are – in the words of the former Swedish prime minister Olof Palme – at best, reformers the day after the revolution; also, they must be able to relate to what already exists. We will not succeed in changing everything; we try to do so in vain. Nevertheless, there is a belief that the availability of a number of information and communication technologies means a radical transformation of the way students learn: the digital revolution creates an educational revolution. That is in any event the claim, a claim that is just as strong in Asia as in Europe. But why is it so strong, when there is no evidence that technologies such as laptops, tablets, mobile phones and online and open distance learning courses make a substantial difference to student achievements?

Professor Larry Cuban from Stanford University, in the book *Inside the Black Box of Classroom Practice: Change without reform in American education*, notes firstly that major studies have repeatedly shown weak to no linkage between these devices or software and substantial changes in teacher practices or improved test scores. And this conclusion also includes the idea of online learning as the disruptive innovation that promises to replace regular schools. Secondly, Larry

Cuban demonstrates that students' achievements are influenced by teachers' pedagogy, students' socioeconomic status and other instructional material among other things. So you could say that the claim that online learning revolutionises teaching and students' learning is, to put it mildly, just that – merely a claim.

But why do governments continue to make this claim? There are different answers to this question. One answer is that strong market interests, which capture public attention and create a bubble of hype and a 'must have' factor, contribute to a herd mentality and encourage large investments in these

“the claim that online learning revolutionises teaching and students' learning is, to put it mildly, just that – merely a claim.”

technologies. Another answer is that certain parts of the world actually need nothing less than a revolution – and also a revolution that is relatively inexpensive. This makes the idea of, for example, online distance learning with its lower instructional costs – once programmes are up and running – very attractive: not only for providers, but also for buyers with a small budget and an overwhelming number of people with a largely unmet need for access to education. One example is India: in this issue of *ASEM Magazine*, Professor Dr Karan Pushpanadham from the

MS University of Baroda reveals that the Indian government attaches great importance to getting broadband into rural areas.

One might say that, today, access to these digital technologies plays an important but not exclusive role in changing many people's ability to learn. It is certainly interesting to hear that farmers in rural areas use mobile phones to learn how to cultivate their land in a better way. Similarly, it is interesting to hear that teachers in higher education in Asia use text messaging to improve students' learning. In terms of pedagogy, these stories are often not revolutionising, but even small changes in access to digital technologies sometimes make great differences in specific contexts. My claim is that technologies such as laptops, tablets, mobile phones and online and open distance learning courses can be pedagogically appropriate. This requires that change is not implemented by an uncompromising revolutionary who refuses to listen to the evidence that digitisation does not automatically mean progress in students' learning. Or couched in positive terms, it requires that gradual changes in the use of digital technologies are carried out by reformers who know that respect for the starting points of different learning cultures is a prerequisite for achieving fundamental changes. ■





ASEM Magazine
No. 05
November 2014

EDITOR
Claus Holm, Editor in chief
Anders Martinsen, Editorial assistant

PROOFREADING
Lorna Coombs

CONTACT
Claus Holm
Chair of ASEM LLL HUB

International Research Policy Office
Department of Education
Aarhus University
Tuborgvej 164
2400 Copenhagen NV
Denmark

T: +45 8715 1842
M: +45 2688 5600
E: asemLLL@dpu.dk
W: www.asemlllhub.org

SUBSCRIPTION
www.asemlllhub.org/magazine

DESIGN: Hiske Jessen
COVER: Hiske Jessen
PRINT: Zeuner A/S

FRONT PAGE
Polfoto

ASEM Magazine for lifelong learning is a journalistic print and online magazine with articles on research in lifelong learning. The magazine was launched in November 2011 and is published twice a year. The magazine is published by the Secretariat for ASEM LLL Hub, at the Department of Education, Aarhus University.

Read more at www.asemlllhub.org

2 | EDITORIAL

4 | Will Asia become a world leader in the use of learning technologies?

Online distance learning in Asia is associated with the view that the use of learning technologies will miraculously bring about a learning society. But how effective are the technologies used?

8 | The education system – what to do?

Education is becoming lifelong, spanning from kindergarten almost to the end of life. We all need to enhance our skills and acquire new skills regardless of our age and role in society.

10 | Responses from researchers

Q&A: Will MOOCs change the very DNA of higher education?

13 | NEWS FROM ASEM LLL HUB

14 | Open educational resources are 'open' for interpretation

16 | Policy Brief: Professionalisation of adult educators does not happen

18 | Can the Confucian learner become a lifelong learner?

22 | The dilemma for Japanese students – to stay or to go?

The Japanese job hunting system inhibits Japanese students from studying abroad.

24 | Cooperative learning in Confucian heritage cultures is a superficial success

The use of cooperative learning in Asia does not take the sociocultural aspects into consideration.

28 | MOOCs are a revolution for higher education in India

*Will Asia
become a
world leader
in the use of
learning
technologies?*



Online distance learning in Asia is associated with the view that the use of learning technologies will miraculously bring about a learning society.

But how effective are the technologies used?

Education in Asia is full of contrasts. We see high growth rates in participation in higher education in Malaysia, South Korea, Taiwan, Hong Kong and Singapore. However, some of

Asia's least developed countries strive to achieve universal primary education. But across these variations, Asian governments give high priority to open and distance learning as part of lifelong learning strategies. For the same reason, Asia has the largest number of adult online distance learning learners in the world, seven of the world's mega-universities, over 70 open universities and a large and growing number of dual-mode providers. So the Asian version is probably what Professor Insung Jung from the International Christian University in Japan calls "Edutopia". She defines Edutopia as an education welfare state – a society of open and lifelong education to allow each and every individual equal and easy access to education at any time and place.

The vision of an Edutopia goes back to 1990 when South Korea developed and implemented the concept. In 1997 a Presidential Commission on Education recommended the establishment of a virtual university, a national credit bank system and the use of advanced technologies in education as a possible means of realising this Edutopia. At that time it was the national aspiration of South Korea to become a world leader. Insung Jung remembers a Korean newspaper writing: "We fell behind in the industrial revolution, but let us lead in the information revolution."

Today Korea is only one example of this Asian readiness to be the first movers in the use of learning technologies. But Insung Jung also says: "We have to ask ourselves the question whether the rise and popularity of, for example, the use of mobile phones help to make Asia a world leader in the use of e-learning."

The mobile revolution

One of the learning technologies disseminated with the fastest rate is the use of mobile phones. Asia has 1 billion of the world's 2.7 billion mobile phone users and the world's fastest growth in number of subscribers. The extent of this mobile revolution becomes clear when it is recognised that there are only 1.3 billion fixed landline phones and 1.5 billion TV sets worldwide and there are now more mobiles than PCs in use across the globe.

Insung Jung explains that mobile phones are being used both at university level and in

informal learning contexts. At one Japanese university researchers found that periodically emailing short lesson inputs and prompts to students via their mobiles resulted in better learning outcomes in English vocabulary lessons than providing identical material in print or via the Web. At the same university they also found that most of the students preferred mobile learning to computer-based learning for their vocabulary learning. Another example comes from the University of Philippines Open University where mobiles are so widespread that the university is supplementing face-to-face teaching with mobile learning in its community health nutrition, literacy and numeracy programmes. Yet another example comes from local farmers using mobile phones and satellite and wireless technology. It is now also possible to provide .m extension files that allow these farmers to spend more time out in the fields, give them immediate access to up-to-date information, make on-the-spot recommendations and establish community networks for sharing information, experience and ideas.

It is one thing that more and more mobile phones and other information and communications technology (ICT) systems are in place in many Asian countries. But how effective is the use of this and other learning technologies in relation to creating a substantial learning outcome for users?

E-readiness

According to Insung Jung, it is important to distinguish between having ICT systems in place and the effective use of these in gov-



“Asia has 1 billion of the world’s 2.7 billion mobile users and the world’s fastest growth in number of subscribers.”

Source: The Global Information Technology Report 2014

TOP 10 IN ICT READINESS 2014

The Network Readiness Index (NRI) 2014 issued by the World Economic Forum provides decision-makers with a conceptual framework to evaluate the impact of ICT at a global level and to benchmark the ICT readiness and usage of their economies. In 2014 the report says the following concerning the top 10:

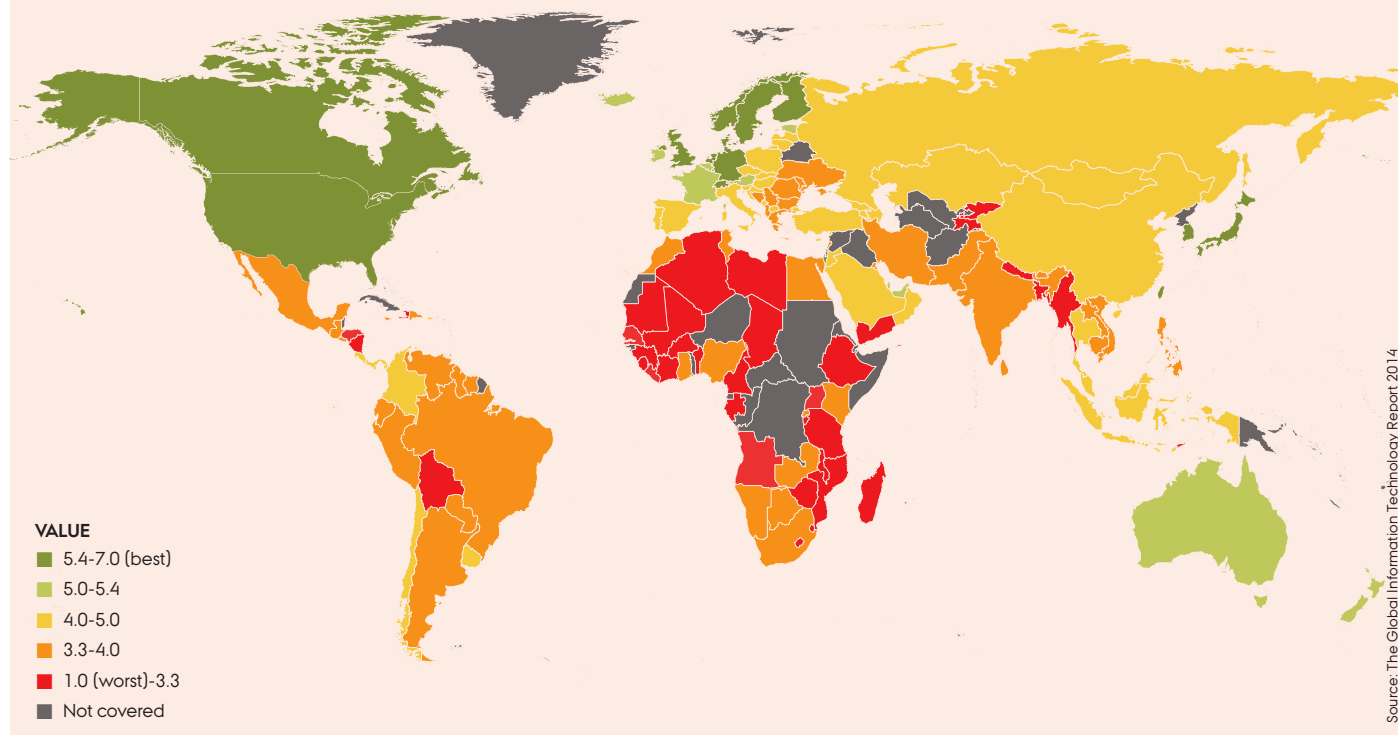
“The top 10 spots continue to be dominated by Northern European economies, the Asian Tigers, and

some of the most advanced Western economies. Three Nordic economies – Finland, Sweden, and Norway – lead the rankings and are positioned among the top 5. Denmark and Iceland, the remaining two Nordic economies, also perform strongly, and despite small slips this year they feature among the top 20. Overall, their performance in terms of ICT readiness, with excellent digital infrastructures and robust innovation systems,

allows them to score very highly both in ICT use – with almost universal Internet use, for example – and in innovation performances. The Asian Tigers – composed of Singapore, Hong Kong SAR, the Republic of Korea, and Taiwan (China) – also perform very strongly, all of them positioned at the forefront of the NRI and with Singapore, Hong Kong SAR, and Korea featuring among the top 10. All these economies continue to boast outstanding business

and innovation environments that are consistently ranked among the most conducive to entrepreneurship in the world. Finally, the top 10 includes some of the most advanced Western economies – the Netherlands, Switzerland, the United States, and the United Kingdom – that have recognized the potential of ICTs to embark on a new economic and social revolution, and thus have substantially invested in developing their digital potential.”

MAPPING NETWORK READINESS



ernment, business, education and community development. To describe the ability to use ICT, in 2000 the Economist Intelligence Unit introduced the expression ‘e-readiness’ in order to assess the world’s largest economies on their ability to absorb ICT and use it for economic and social benefit. Until 2010 these measures were known as the ‘e-readiness rankings’, but in 2010 the study was renamed as the ‘digital economy rankings’ to reflect the increase in influence of ICT in economic and social progress. Seventy of the world’s top economies are covered in this annual benchmarking exercise (see the factbox on page 5 and the illustration Mapping Network Readiness above).

Insung Jung says: “When you look at these measurements over time, one can see that Asian nations improved significantly on their early years of ranking. Conversely, there is a decline in e-readiness in some European countries. And countries like Hong Kong and Singapore are contesting the long-standing competitive supremacy of the West.”

Insung Jung, however, stresses the great differences between the Asian nations when it comes to the use of ICT in relation to education. Countries such as South Korea and

Singapore are on an advanced level, where teachers receive training not only in ICT skills but also in e-learning. This is followed by the countries that are at the stage of trialling ICT integration, including coun-

**“Not everything
needs to be
digitised simply
because it can.”**

THE GLOBAL INFORMATION
TECHNOLOGY REPORT

tries such as China, Thailand, Japan and the Philippines. Here, many teachers are fearful of the technology, unconvinced of its worth and slow to change their teaching methods. And the last group of countries – countries at the earliest stages of adoption – include

Myanmar, Laos, Vietnam, Cambodia, Bangladesh, Maldives and Bhutan. Here, ICT is often treated as an extra-curricular activity, there is a lack of computers and internet access, and there is limited teacher training in ICT skills.

Does the use of these learning technologies make the way of learning the same on a global level?

“That is one of the major debates. If you look at countries such as Japan, South Korea, Hong Kong, Singapore and India they have absorbed many Western ideas and ways of doing things. On the one hand you hear that the result is that an increasing number of Asian organisations, institutions and individuals are now bicultural, capable of switching their world view or Asian point of view according to the context. On the other hand, you also hear that there is a significant difference between Western and Eastern ways of thinking. For example that Western thought derives from Greek philosophy and Eastern thought from holistic Asian [philosophy]. And that these philosophies still make a difference also for how effective the use of these e-learning technologies is in reality,” says Insung Jung.

Over-optimism

The Global Information Technology Report 2014, issued by the World Economic Forum, says that South Korea is well known for both the density of its broadband penetration and the strength of its digital vision. The country leads the world in e-government, according to the United Nations E-Government Survey of member states. But even this country's wired citizens do not take full advantage of more than 150 service portals offered by the government. A survey conducted by the government's Board of Audit and Inspection found that although awareness of e-government portals was high, less than one-half of the citizens surveyed actually used them. So the report indeed concludes that utility is the main issue, but that governments should take heed; not everything needs to be digitised simply because it can.

Assistant Professor Min Yang from Hong Kong Institute of Education shares this view. She has conducted research about the use of online distance learning and learning technologies in higher education in China. She says: "Policies are often over-optimistic. They are based on the presumption that as long as learning resources are in place for students' free choice, students can and will automatically go about their acquisition of the knowledge that they need. Such over-optimism reflects the unbalanced emphasis on connectivity, contents and cost-effectiveness rather than a use of ICT that enhances the learner relevance and quality of education in online distance learning. The policies are dangerously pedagogically flawed."

What do you mean by pedagogically flawed?

"To put it simply, however sophisticated the educational technological infrastructure for online distance learning is constructed, and however user-friendly for e-college teachers, students and administrative staff the public service system becomes, these should and could never substitute educators' thoughtful curriculum and assessment design that is specifically relevant to the group of students they teach," explains Min Yang and continues: "Often a distinction is made between, on the one hand, a Confucian approach to education that is examination- and teacher-centred and a Western approach that is process-oriented and learner-centred. I acknowledge that there are real existing discrepancies, but more basically it is a misconception that learner-centeredness is relevant only to a Western educational tradition. That said, my research in online distance learning does show that the majority of these courses are examination- and content-oriented and put students in an imbalanced power-relationship with their teachers."

"Audio-visual media, radio and TV are particularly valuable in countries with high illiteracy rates and with large distributed populations."

Insung Jung
PROFESSOR

Over-pessimism

Microsoft founder Bill Gates once said that computing cannot benefit the world's 2 million poorest people. Rather, the first need is a schoolroom, the second is a teacher who shows up, the third is electricity, and only then may it be appropriate to consider ICT. But Min Yang suggests that this may be too pessimistic a view of ICT. She says: "Paradoxically, both over-optimism and over-pessimism exist in Asia. The over-pessimism has to do with the lack of integration of online distance learning with lifelong learning and the ensuing overemphasis on formal and academic on-campus education rather than informal or non-formal education and vocational education and training via online distance learning."

Insung Jung agrees: "In Asia we have a great number of adults who lack the access and means to pay for their education and training. There is an enormous development gap in Asia, much of which is due to the urban-rural divide. Currently 600 million adults and adolescents and 60 million out-of-school children in Asia are incapable of reading and writing the simplest statement relevant to their daily lives. Here, an unbiased use of open distance learning and ICT can make a contribution."

In what way?

"In ways that are adapted to the user base. It must be remembered that audio-visual media, radio and TV are particularly valuable in countries with high illiteracy rates and with large distributed populations," says Insung Jung.

An example is that India uses popular media such as Bollywood music videos with the lyrics highlighted karaoke-style across the bottom of the screens so that the viewers can sing along and practise their reading at the same time. Another example is that many Asian open distance learning institutions help farming communities apply science-based knowledge to their operations. In China, for example, the National Farmers' Science & Technology Training Centre and Central Agricultural Broadcasting & Television School are partners in

fostering food and agriculture development and modernisation. They do this by providing formal and non-formal agricultural, agro-technological and rural development distance education programmes for tens of millions of farmers using radio, TV, audio and video cassettes, DVDs, print and face-to-face teaching at local centres.

The question for this article was whether Asia would become a world leader in relation to the use of e-learning technologies. The answer is that the e-learning technologies are being used, but not always with the same effectiveness. But the question is, if not, Asia's population and demographic composition between rich and poor, between urban and rural population, mean that they are almost forced to become a world leader in, and to explore how to use, e-learning technologies most effectively. ■

By CLAUD HOLM
clho@edu.au.dk



Insung Jung

Dr Insung Jung is Professor of Education at the International Christian University (ICU) in Tokyo, Japan. Before joining ICU in 2003, she was an Associate Professor of the Department of Educational Technology and served as the Director of the Multimedia Education Centre at the Ewha Womans University in Seoul. She is co-author and co-editor of recent publications: *Distance and Blended Learning in Asia* (Routledge, 2010), *Quality Assurance and Accreditation in Distance Education and E-learning: Models, policies and research* (Routledge, 2011), *Quality Assurance in Distance Education and E-learning: Challenges and solutions from Asia* (Sage Publications, 2013), *Online Learner Competencies: Knowledge, skills and attitudes for successful learning in online and blended settings* (The Ibstpi series) (Information Age Publishing, 2013) and *Culture and Online Learning: Global perspectives and research* (Stylus, 2014).



Min Yang

Dr Min Yang is an Assistant Professor of the Department of Curriculum and Instruction, Faculty of Education and Human Development, Hong Kong. Prior to joining the institute, she worked with the University of Hong Kong (2007-11) and Hong Kong Polytechnic University (2006-07). Dr Min Yang has been researching online distance learning, effective teaching, assessment and curriculum design for Chinese learners. Of relevance for online distance learning and lifelong learning she has published the article "Rethinking lifelong learning through online distance learning in Chinese educational policies, practices and research" and "Disaffection of adult distance learners: a Chinese phenomenon."

THE EDUCATION SYSTEM - WHAT TO DO?

By JOERGEN OERSTROEM MOELLER

The challenge can be summarised like this: the ability to learn how to learn and other metacognitive or thinking skills, the ability to learn on the job and in teams, the

ability to cope with ambiguous situations and unpredictable problems.¹

First, education is becoming a large, worldwide industry. Students go where they can get the best education for the money they can afford. Currently, the number studying outside their home countries is about 3 million (more than 2 per cent of all students) – and this is expected to almost triple by 2025.

They go to the USA, the European Union, Australia, New Zealand, Canada and Japan, plus a few other countries. They come from Asia, with China (750,000) and India (400,000) accounting for the largest share.

Foreign students contribute about USD 15 billion to the US economy (one pro mille of US Gross Domestic Product). In Australia and New Zealand the education sector is one of the main export industries.

Emerging Asian countries with high economic growth are beginning to receive

“We all need to enhance our skills and acquire new skills regardless of our age and role in society.”

Joergen Oerstroem Moeller
SENIOR RESEARCH FELLOW
& ADJUNCT PROFESSOR

students from abroad. China ranks as number three among recipient countries and, together with Singapore and Malaysia, accounts for about 12 per cent of the global student market.

Second, education is becoming lifelong, spanning from kindergarten almost to the end of life. We all need to enhance our skills and acquire new skills regardless of our age and role in society.

Society needs to allocate more resources to education outside the conventional sphere of education, which means for people not necessarily in the productive part of society. The skills of teachers must be diversified and adjusted to those they are teaching. Teaching methods must be enhanced and made to fit into the context provided by society and technology.

Third, the world is becoming a combination of a learning and teaching society. It is

no longer possible to dichotomise learning and teaching. In fact, the relationship between teacher and students is turning into a kind of interactive play where both gain from mutual contact.

Rosemary Luckin² puts it this way: “We now face a situation in which the teachers and experts, who know more than the learners about the ‘stuff’ we want people to learn, may well not know as much as the learners about the technologies that could act as learning tools. There is now a real opportunity for reciprocal teaching and learning. Learners need to know enough about these tools to learn more about a particular subject or skill, and teachers and experts need to know enough about these tools to scaffold learning.” This statement underlines how the new instruments of teaching based on ICT and/or digital instruments change the setting for teaching/learning and the relationship between the teacher and the student.

Fourth, the main future pedagogic principles are known under the label ‘from sage-on-the stage to guide-by-the side’ and this is closely connected with problem-based Learning (PBL).³

The basic idea is to focus on the method to solve problems instead of directly approaching a particular problem. By honing



“Universities must focus more on improving teaching/learning skills on behalf of the faculty. The digital age opens the way for a renewal and renaissance of the individualisation of teaching/learning rather than continuing to use the old tutorial system, but possibly retaining some of its advantages.”

Joergen Oerstroem Moeller
SENIOR RESEARCH FELLOW
& ADJUNCT PROFESSOR

the skills for interaction between tutor and student, this kind of learning aims at problem solving, encourages asking questions, facilitates acquiring methods for understanding, and improves the reasoning of students, therefore resulting in a higher level of understanding.

Students are steered towards interdisciplinary approaches and the ability to apply their skills at problem solving irrespective of the subject being studied. They have an enhanced capacity to enter the challenging field of combining working alone with working in teams, as well as knowing how and when to switch from one to another.

Fifth, in the future, learning methods may well be more important than the curriculum. OpenCourseWare (OCW)⁴ and similar initiatives are revolutionising education. Digital instruments provide access through open educational resources to the best possible curriculum, crowding out other curricula.

The new competitive parameter for universities may be learning methods – pedagogy. Three researchers⁵ put it this way: “The university may need to reorganize itself quite differently, stressing forms of pedagogy and extracurricular experience to nurture and teach the art and skill of creativity and innovation. This would probably imply a shift away from highly specialized disciplines and degree programs placing more emphasis on integrating knowledge. To this need, perhaps it is time to integrate the educational mission of the university with the research and service activities of the faculty by ripping instruction out of the classroom – or at least the lecture hall – and placing it instead in the discovery environment of the laboratory or studio or the experimental environment for professional practice.”

The shift to a focus on learning methods will be combined with improved capability to access information and use information – that is, store it, classify it, sift through it to make new combinations that open the way to using the information better than others. Universities become like a kind of bank, storing knowledge and competencies for society.

Universities must focus more on improving teaching/learning skills on behalf of the faculty. The digital age opens the way for a renewal and renaissance of the individualisation of teaching/learning rather than continuing to use the old tutorial system, but possibly retaining some of its advantages. Teachers can interact with students via ICT, and by so doing they can tailor their learning and judge the capability of students to access progressively what they need to learn and are ready to digest.

Sixth, Asia cannot escape the choice between public and private financing and, concomi-

tantly, the political question of who will be controlling and governing higher education over the next 25 years: the nation-state, the regions and/or local communities, or private enterprises. As funding shifts away from the public sector and relies more and more on private enterprises, a crucial political decision faces Asia’s political leaders. If they want universities to be integrated into the public sector services available to the population, financing needs to be bolstered and the share coming from the public sector increased. The alternative is to continue to rely on private funding, accompanied by the inevitable consequence of less public direction and more private control of higher education, accentuating the transformation of universities into multinational, intellectual enterprises.

Conclusion: Ultimately, the education sector offers services to the nation-state, society and communities. Business, the government and the public sector are the three main stakeholders. ASEM countries would be wise to shape a social contract with citizens, business, education including universities, and the public sector deciding together how to change the education sector, make the financing available and distribute the benefits. ■

¹ Hargreaves, David H. (2003). *Education Epidemic: Transforming secondary schools through innovation networks*. London: Demos.

² Luckin, Rosemary (2008). The learner centric ecology of resources: A framework for using technology to scaffold learning. *Computers and Education*, 50 (2), 449–462. Available at: www.sciencedirect.com

³ Se Sim Heng Chye, Matthew; Wee Keng Neo, Matthew; and Kek Yih Chyn, Megan. *From Sage-on-the Stage to Guide-by-the-Side: Effective tutor skills in problem-based learning*. Temasek Business School. Available at: <http://www.ntu.edu.vn/Portals/96/Tu%20lieu%20tham%20kha0/Phuong%20hap%20giang%20day/role%20of%20tutor%20in%20pbl.pdf> with a bibliography referring inter alia to the works of Professor Howard S. Barrows.

⁴ <http://ocw.mit.edu/OcwWeb/web/home/home/index.htm>

⁵ Duderstadt, James J; Wulf, Wm. A.; and Zemsky, Robert (2005). Envisioning a transformed university. *Issues in Science and Technology*, Fall 2005



Joergen Oerstroem Moeller

Joergen Oerstroem Moeller is a Visiting Senior Research Fellow, Institute of Southeast Asian Studies, Singapore; Adjunct Professor, Singapore Management University and Copenhagen Business School; and a member of the Honorary Alumni, University of Copenhagen. This feature article is based on excerpts from Joergen Oerstroem Moeller’s book *How Asia Can Shape the World: From the era of plenty to the era of scarcities* (Institute of Southeast Asian Studies, 2010).

Will MOOCs change the very DNA of higher education?

Massive open online courses create great expectations about a revolution of higher education.
But is it a myth that MOOCs bring change, or is the truth about MOOCs that they simply preserve the status quo?

By ANDERS MARTINSEN

If one were to collect the comments on massive open online courses (MOOCs) from professors in higher education institutions, there would be a majority of negative reactions. This negativity could be related to a belief that MOOCs automate many of the tasks traditionally done by professors in higher education. Technology has slowly taken over the role of the professors as craftsmen. To cite the authors of the book *The Idea of the Digital University: Ancient traditions, disruptive technologies, and the battle for the soul of higher education*, “[t]he cliché in higher education has been that the sage on the stage has been replaced with the guide on the side”. Thanks to online learning the latter is no longer a cliché.

But what can be said about the use of MOOCs in relation to lifelong learning? Is it possible to find a positive, critical and balanced approach to this question?

The positive view claims that MOOCs will be a revolution. Advocates of this view believe that MOOCs will open up new possibilities for the relationship between higher education and lifelong learning, which no one has ever dreamed of. It is true that the main characteristics of MOOCs – massiveness, openness and connectivity – promise greater availability and

commitment for a significant part of the population throughout their lives, whether they live in cities or rural areas. This is something that is appealing not only to many learners looking for novel learning opportunities, but also to individuals seeking to acquire new skills not necessarily as a strictly academic endeavour.

The critical view claims that the so-called revolution is a myth. The advocates of this view state that MOOCs are a Western invention that is not immediately compatible with either the developmental level of many states, or the Confucian culture’s view of education. In short, the critics say that it is a myth that the provision of not-for-profit open online learning in itself addresses the challenges of expanding higher education in the developing world. Along the same line of thought is the conventional view from a traditional professor that universities have been devastated by the digital revolution. More specifically, online learning has lured students away from existing universities and has created brand new institutions where none existed before.

The balanced view praises MOOCs but at the same time says that they are a failing product. To be more specific, advocates of this view praise MOOCs for making thought and knowledge more open, yet they believe that MOOCs are failing to teach critical and creative thinking. They question whether



PHOTO

MOOCs can be considered a truly revolutionising phenomenon, or whether they are merely maintaining the status quo by continuing to attempt to improve the learning experience and increase participation in higher education.

So will MOOCs revolutionise the very concept of teaching and learning, will they disrupt the traditional notions of higher education, or will they maybe only bring small changes? Will the digital revolution change the very DNA of higher education? *ASEM Magazine* asked some of the researchers within the ASEM LLL Hub to state their point of view.



Bowon Kim

Professor Bowon Kim is a professor at Korea National Open University and Coordinator of ASEM LLL Hub's Research Network for Development of ICT skills, e-learning and the culture of e-learning in Lifelong Learning.

How big a change do you expect MOOCs will bring to higher education?

First, the open courses will restructure the academic-centred characteristics of traditional higher education, embracing a wide range of practical needs, current issues of job competencies and local communities.

Second, this process will extend the realm of higher education. Higher education will be not only for high school graduates, but also for people at different stages of their lives. Consequently, newly emerging academic disciplines will establish their own academic realms, and will be blended with existing ones and spread out.

Third, methods of education will have to undergo fundamental changes. Classroom-based education will have to accommodate online education, blended learning or flipped learning.

What effects do you foresee MOOCs will have in your country?

First, it will contribute to the internationalisation of academic communities in Korea. Korean learners will be more actively involved in overseas MOOCs, and Korean courses more accessible to international students, which will eventually contribute to Korean educational discourses becoming internationally acknowledged.

Second, MOOCs will reinforce localisation and Koreanisation. As MOOCs reduce the entry barriers to higher education in terms of cost, time and language, underprivileged learners and peripheral areas will have more opportunities to participate and to raise a stronger voice. More MOOCs will be produced to accommodate local and national characteristics, especially specific courses on Korean society, culture and language.

Mie Buhl

Professor Mie Buhl is a professor at Aalborg University, Denmark, and Co-Coordinator of ASEM LLL Hub's Research Network for Development of ICT skills, e-learning and the culture of e-learning in Lifelong Learning.

How big a change do you expect MOOCs will bring to higher education?

The changes that MOOCs can bring to higher education are closely connected to the status of the credits earned by the enrolled students. Do they actually achieve the grade that can enhance their chances of getting a good or better job? The possibility of reaching the masses through the internet is of course fascinating. However, from my point of view, the idea of mass education online raises a lot of quality questions of an educational nature. For the courses to succeed – not only with a large number of enrollees, but also with a fair number of graduates – the construction of the courses, the culture of the teachers and the learners, and the pedagogy are crucial. On an international level, the differences of pedagogy are significant and vary from region to region and do not necessary fit.

The temporal and spatial flexibility of MOOCs is of course attractive for learners who are already employed. At the same time, that same issue makes it difficult to reach potential learners who are not used to engaging with education. If MOOCs are to lead to improvements in educational levels, the whole idea of what higher education means should be re-thought in terms of the learning paths for knowledge, skills and competencies.

What effects do you foresee MOOCs will have in your country?

One of the advantages of MOOCs is that education becomes free of charge. In a Danish context, higher education is already free of charge in ordinary study programmes. Different blends of contact teaching and e-learning are and have been a part of many universities' development strategies

for several years. On the one hand, Danish MOOCs could serve as an international shop window for Danish university pedagogy. On the other hand, international MOOCs could serve as resources. As a business model, I cannot really see the benefit for Danish universities at the moment. But the concept of sharing and distributing knowledge and different patterns of interaction have potential for improving pedagogy in the study programmes.

Mansor Fadzil

Professor Dr Mansor Fadzil is Senior Vice President of Open University Malaysia and a member of ASEM LLL Hub's Research Network for Development of ICT skills, e-learning and the culture of e-learning in Lifelong Learning.

How big a change do you expect MOOCs will bring to higher education?

It will certainly be big. But when it will happen depends on so many factors, namely:

- 1) Availability of quality providers of MOOCs
- 2) Availability of quality content
- 3) A good and practical MOOCs delivery model
- 4) A good and viable MOOCs business model
- 5) Availability of a good and reliable ICT infrastructure at affordable costs
- 6) Accreditation of MOOCs courses by a qualification agency
- 7) A strong and serious awareness campaign by the government to promote the culture of lifelong learning.

I believe that, if properly implemented, MOOCs can be a game-changing delivery tool in the very near future. The need for brick and mortar universities will be less and less over time.

What effects do you foresee MOOCs will have in your country?

More and more people will choose to study at home. There will be less and less reliance on traditional universities. Higher education will be more accessible at affordable

costs. The mode of delivering education will be changed for ever to suit the needs of the learners. Higher education is no longer confined to the elites. Instead almost everyone can access higher education. The culture of lifelong learning will thrive in this new educational scenario.

Rita Birzina

Rita Birzina is a leading researcher at the University of Latvia and a member of ASEM LLL Hub's Research Network for Development of ICT skills, e-learning and the culture of e-learning in Lifelong Learning.

How big a change do you expect MOOCs will bring to higher education?

On the one hand, MOOCs are an agent of change that will challenge an educational

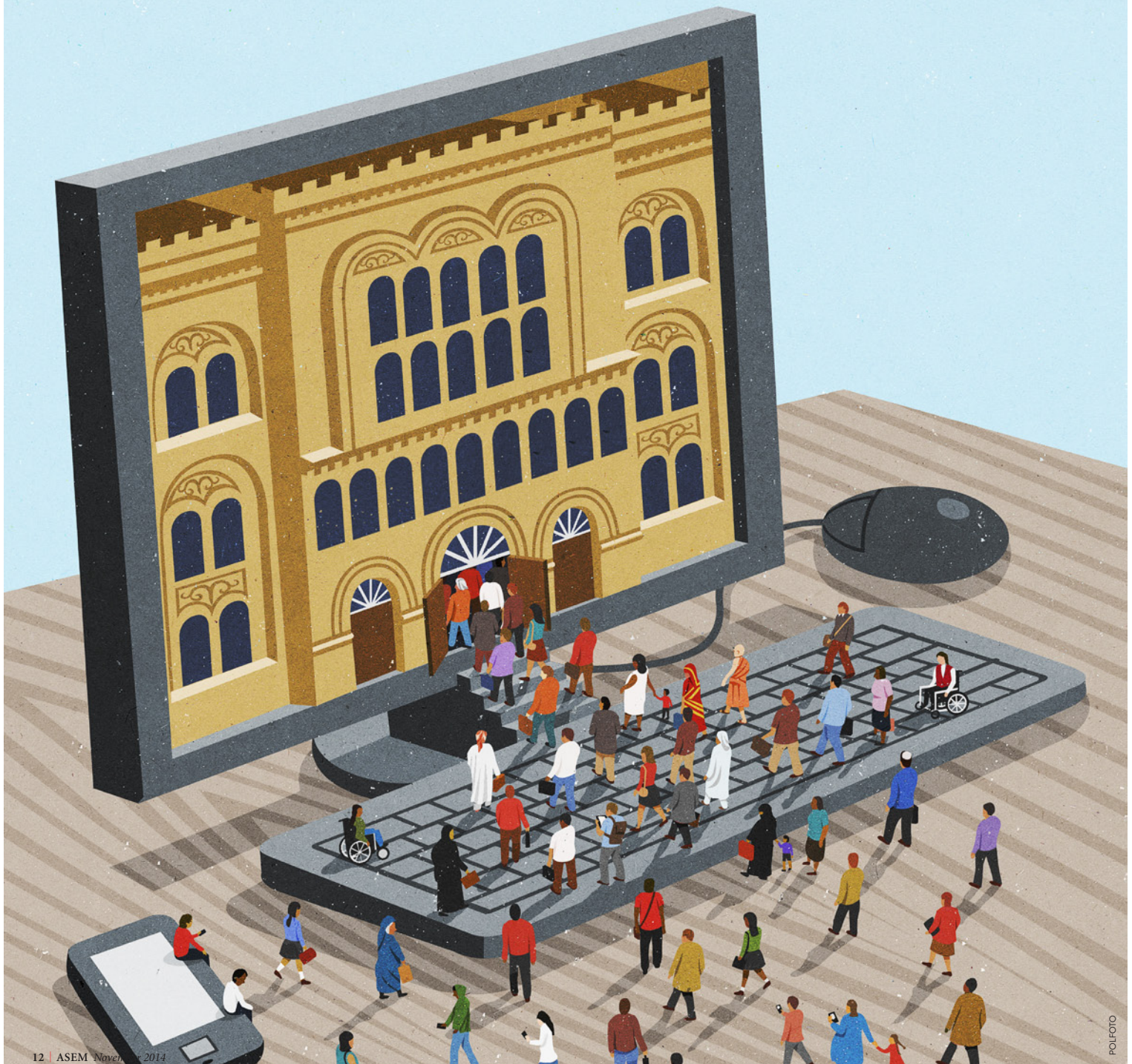
institution to deliver education of higher quality and efficacy, gain competitiveness and growth, support new knowledge in society, improve the educators' reputation and university recognition, and increase educational opportunities for students to do more individualised learning.

On the other hand, there are some points of possible criticism. MOOCs could be seen as a business project for some institutions and hence the educational resources may not always be good quality. Moreover, they require serious evaluation and may give rise to problems in relation to the management of the study process – how to provide effective feedback to students, how to evaluate, etc. I think the influence of the professor's personality on the student is essential – a very important factor that is not supported in screen-to-screen

communication and therefore creates an impersonal feeling.

What effects do you foresee MOOCs will have in your country?

The implementation of MOOCs will be a good opportunity and will have an impact on learning media in Latvia at both national and international levels. The main aspects could be: to promote the internationalisation of education, to foster the quality of national educational materials in competition with international resources, to provide us with a variety of opportunities to use the material, and obtaining an economic benefit. But I would like to make it clear that there are barriers for the development of MOOCs that have to be overcome on governmental, institutional and personal levels before MOOCs will become relevant for us. ■





Asia-Europe Meeting

News from

ASEM education and research hub for lifelong learning

ASEM LLL Hub has introduced 'Policy Briefs'. The objective with Policy Briefs is to deliver research-informed analysis and recommendations on new policies for the benefit of ASEM members, governments and stakeholders. Policy Briefs are written by ASEM LLL Hub members on the basis of their research and based on national or international policies in lifelong learning. In addition to the Policy Brief you will find on pages 16 and 17 in this issue, the following three have been published in 2014. All of them can be found on our website, where you can also sign up to receive the latest Policy Brief:

<http://asemlllhub.org/policy-briefs>

→ Lifelong Learning in India: A policy perspective

Lifelong learning has been an integral part of Indian culture, but the most populous South Asian country is yet to develop the following framework for lifelong learning.

→ China writes a new chapter in the history of learning cities

China is the global leader in terms of number of learning cities, but China's policy in relation to learning cities also shows that a learning city is not only about competitive-ness, but also about social cohesion.

→ United Kingdom: Masking cuts for community-based learning?

Has community-based learning become the 'learning arm of community development', or is it just a way of masking cuts in funding of the more institutionalised forms of provision for adult learning?

Read more

WWW.ASEMLLLHUB.ORG

About ASEM LLL HUB

The ASEM LLL Hub is the world's largest research network within lifelong learning. The ASEM LLL Hub brings together over 100 researchers in its five research networks,

senior representatives of 36 universities in its University Council, and senior officials from 22 ministries of education and five flagship international organisations. The ASEM LLL Hub was established as the result of preparatory work for the ASEM IV Heads of State Summit in Copenhagen in 2002. The work underscored that lifelong learning enables

governments to respond constructively not only to the changing demands of the knowledge economy but equally to strengthening social cohesion by engaging with the most vulnerable groups of society through raising participation in education and training, regardless of age and social and economic circumstances.

Three GOALS

THE ASEM LLL HUB SEEKS TO:

1. stimulate the production and dissemination of new research-based knowledge in the field of lifelong learning.
2. facilitate the exchange of students and academic staff, in the interests of strengthening mutual understanding and higher education collaboration between Asia and Europe.
3. be an advisory mechanism between researchers and policy makers, thus casting the Hub as an important source for sustainable human resource development and policy recommendations concerning competence development and effective lifelong learning strategies.

The FIVE RESEARCH NETWORKS

- DEVELOPMENT OF ICT SKILLS, E-LEARNING AND THE CULTURE OF E-LEARNING IN LIFELONG LEARNING
- WORKPLACE LEARNING
- PROFESSIONALISATION OF ADULT TEACHERS AND EDUCATORS
- NATIONAL STRATEGIES FOR LIFELONG LEARNING
- CORE COMPETENCES

SPONSORS & PARTNERS

THE ASEM LLL HUB WORKS IN CO-OPERATION WITH AND RECEIVES SUPPORT FROM ITS PARTNER UNIVERSITIES AND ASEM GOVERNMENTS. THE HUB'S ACTIVITIES ARE ORGANISED AND SPONSORED BY THE FOLLOWING MAIN SPONSORS:



Asia-Europe Foundation with the financial support of the European Commission



The Department of Education, Aarhus University



Danish Ministry of Education



Danish Ministry of Foreign Affairs

OPEN EDUCATIONAL RESOURCES ARE ‘OPEN’ FOR INTERPRETATION

Open educational resources promise equitable access to knowledge and learning in Asia, **but the definition of ‘open’ requires even further clarity.**

The Asian Development Bank suggested in 2009 that ICT had the potential to be an important tool that could ‘bridge the knowledge gap’ in the developing economies of Asia. ICT could play a role in improving the quality of education, making accessibility boundless and borderless, and reaching populations in distant areas. In recent years this empowering tool has become even sharper. Open educational resources (OER) are – all over the world – now increasingly being promoted as one solution to cope with the difficulties of access, cost and, not least, quality and equity in the provision of and participation in higher edu-

“In the practice of education, as we know it in Asia, the literature does not adequately address the value of open access in terms of educational practice.”

Gajaraj Dhanarajan
EMERITUS PROFESSOR

cation. But, according to Professor Gajaraj Dhanarajan from Wawasan Open University, Malaysia, more needs to be done in order to benefit from the potential of OER; in other words, the window of opportunity is not open enough. In his opinion, before many

developing Asian countries can benefit from the full potential of OER, we have to question the assumption as to whether all citizens who stand to benefit from OER have the skills to exploit the opportunity.

Assuming openness

The marketing of OER promises equitable access to knowledge and learning. But, as stated by Gajaraj Dhanarajan, this is an assumption and certainly not a reality in many places.

“OER, especially with reference to what it means to be ‘open’ in the context of educational resources, is still being debated. ‘Open’ in this instance goes beyond ‘open entry’ to enrol in courses and programmes. In the practice of education as we know it in Asia, the literature does not adequately address the value of open access in terms of educational practice,” says Gajaraj Dhanarajan.

What kind of openness are you calling for?

“True openness. It means not only the removal of restrictions on the use of educational resources, but also, more importantly, making sure that the citizens are capable of independently using and benefiting from such freely available resources.”

Limited benefits for the lifelong learner

Whereas in many parts of the developed world the matter of cost has often been used as a reason to seriously consider OER as an alternative to higher tuition fees as well as inflexible learning opportunities and expensive course books, according to Gajaraj Dhanarajan this is not entirely the case for countries in Asia. Instead, he points to two types of barrier that hinder the development of OER in developing countries: technical and attitudinal.

Technical barriers include everything from setting up technical infrastructure, locating and clearing copyright, to supporting the digitisation of existing resources. Attitudinal barriers range from perceptions of inadequate time to create OER by content providers and a lack of confidence in learners' skills to use digital resources. In addition, the lack of a relevant curriculum in specific fields has also been cited by many in academia. All these barriers seem to discourage individuals, especially teachers, from using digital resources.

So even though advocates of OER claim it to be a future solution, Gajaraj Dhanarajan still draws attention to these barriers for OER in relation to lifelong learning. He says: “Most Asian nations have adequate ICT provisions, and skills to use computers and access to the internet are also adequate, but the limited availability of bandwidth and appropriate software to access, remix, reuse and redistribute content requires further and additional investment. The poorer nations especially are somewhat handicapped in this aspect. Until the availability of these technologies is assured, strengthening OER as freely and easily available resources in many developing Asian countries will be a tremendous challenge in the near term.”

Slow motion

Despite these indisputable reasons, Gajaraj Dhanarajan still believes that development has been too slow in the poorer Asian nations. Moreover, he believes that knowledge of OER and its value among members of the wider Asian academic community as well as educational policy-makers is modest at best. This slowness can be attributed to a continent that is large, diverse and relatively conservative in its attitude to teaching and learning, especially within the higher education community. Awareness and knowledge-building both among teachers and policy-makers are



critical for the acceptance and integration of resources for the purposes of teaching.

Following this, Gajaraj Dhanarajan says: “We have to examine whether present policies and practices in higher education place restrictions on all those who wish to fully benefit from the opportunities offered by OER to lifelong learning, because the availability of OER presents unique opportunities for all to learn and benefit from the acquisition of global knowledge.”

Clarify the purposes!

In the view of Gajaraj Dhanarajan, OER needs to be promoted in developing Asia with an unambiguous clarity of purpose.

“It is important to improve cost-free access to up-to-date and current information relating to the content. At the same time, it is also important to keep reducing the cost of curriculum transformation, assisting in designing employment-relevant curricula, supporting flexible ways of delivering curricula, and facilitating and enhancing inter-institutional collaboration and cooperation in content development and sharing. Lastly, it is important to make sure that individuals have sufficient skills. Sadly, there is little evidence of this taking place.”

How does the future for OER look in the developing part of Asia?

“Asian education still needs to find a meaningful purpose for OER. To put it clearly, production, distribution and use of OER are still in the early stages of development in most parts of Asia. Having said that, the potential value to improving the quality of curriculum, quality of content and instruction, facilitating academic collaboration and enhancing equitable access to

“Until the availability of all the technologies strengthening OER is freely and easily available, many developing Asian countries will not be in a position to benefit from the full potential of OER in the near future.”

Gajaraj Dhanarajan
EMERITUS PROFESSOR

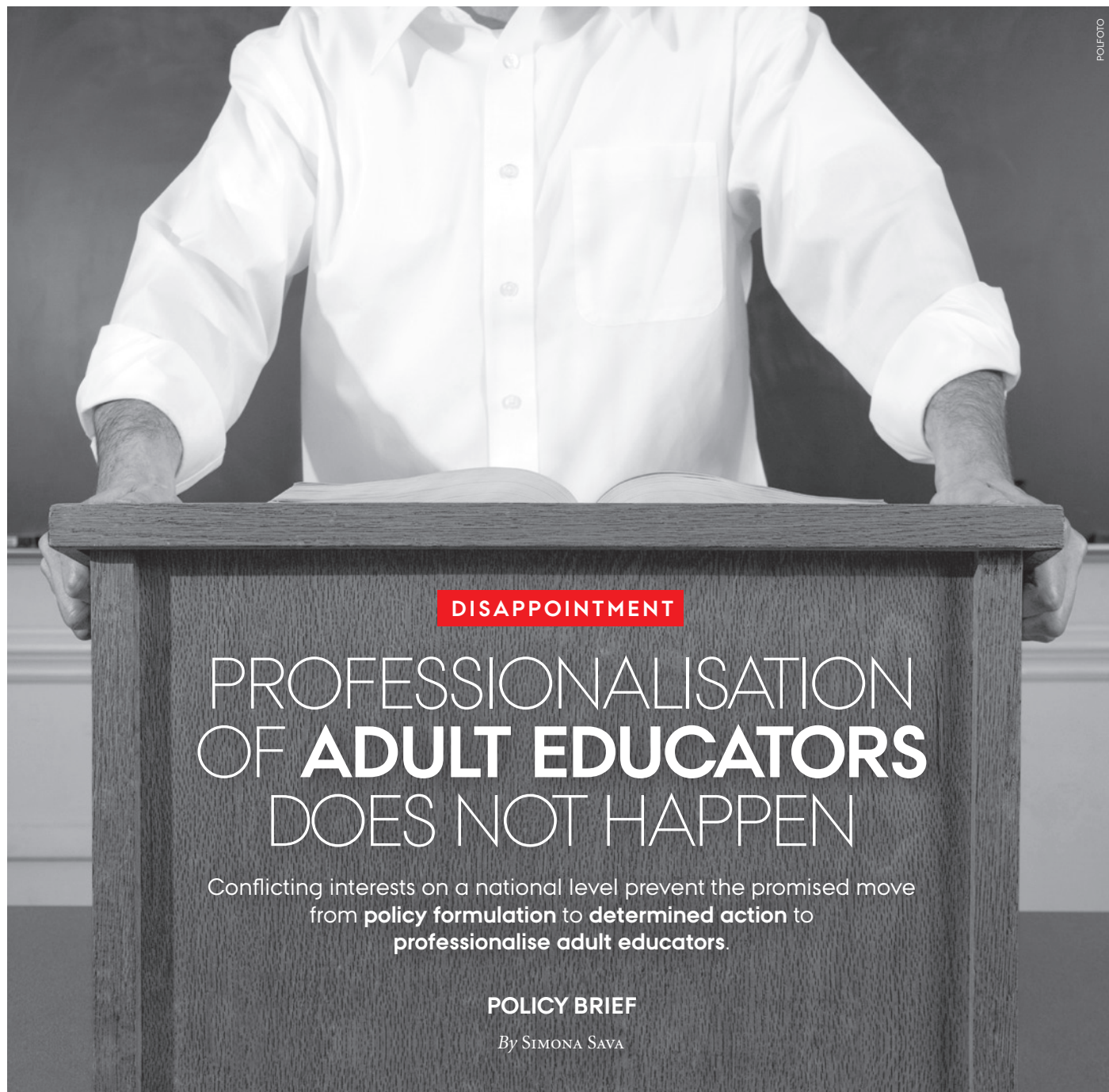
knowledge cannot be overstated. Educators and their political masters need to invest efforts in OER, which has the potential to serve a potpourri of multiple purposes of lifelong learning. This includes accessing such content for both informal self-directed and formal organised learning in areas such as adult basic education, self-enrichment, personal and professional development.” ■

By ANDERS MARTINSEN
andm@dpu.dk



Gajaraj Dhanarajan

Gajaraj Dhanarajan is Emeritus Professor and the founding Vice Chancellor of the new Wawasan Open University, Malaysia. He retired from this position in December 2009. He is currently the Chairman of the Board of Governors of the university. He has previously served as President of the Commonwealth of Learning and CEO of the Open University Hong Kong.



DISAPPOINTMENT

PROFESSIONALISATION OF ADULT EDUCATORS DOES NOT HAPPEN

Conflicting interests on a national level prevent the promised move from **policy formulation** to **determined action** to **professionalise adult educators**.

POLICY BRIEF

By SIMONA SAVA



In the strategic document launched by the European Union to guide the development of education and training until 2020, and in the document focusing specifically on action to be taken between 2012 and 2014 with a view to contributing to the 2020 goals, the issue of professionalisation of staff in adult education and lifelong learning is frequently mentioned. The former initiative, *Rethinking Education*, calls on countries to revise and strengthen the professional profile of everyone in the teaching professions.

“Indicators of the low professional status of adult educators have been formulated by academics, transnational studies, professional associations, trade unions and different stakeholders. But there are contradicting interests, difficult to overcome, at different levels.”

Simona Sava
PROFESSOR

There is increasing emphasis in the European policy documents on the need to professionalise adult learning professionals, and lifelong learning staff in general, considering that the quality of professional behaviour is seen as a determinant for the quality of learning. Furthermore, in the *European Agenda for Adult Learning* it is stipulated that by the end of 2014 the member states should have set up their national systems for the professionalisation of adult learning staff. Has this happened? Did the member states follow this recommendation? Looking at the actions carried out by the member states during this period, the situation is quite disappointing.

Modest progress

Even in countries such as Romania, where efforts have been made with the direct involvement of the Ministry of Education, action has been limited. Researchers and university professors from Timisoara and Bucharest, together with representatives from the Ministry of Education, began the evidence-based policymaking groundwork by running a national survey in 2012 on the needs and expectations of the beneficiaries of a national system of professionalisation of adult educators. Based on the wide consultation of the relevant stakeholders, the concept of such a system was designed. But the next steps of the policy circle are missing.

The situation is the same at the European level. There have been numerous attempts at exchanging good practice, common reflection, reports and studies from, for example, the European Centre for the Development of Vocational Training (Cedefop) and the Commission of the European Communities, with mappings and recommendations, and there is systematic monitoring of the way the policy formulation is followed and implemented in the member states once action plans have been agreed. But, in spite of all this, the progress at the national levels is quite modest.

Conflicting interests

One of the explanations for this is the conflicting interests at the national level. Indicators of the low professional status of adult educators have been formulated by academics, transnational studies, professional associations, trade unions and different stakeholders. But there are contradicting interests, difficult to overcome, at different levels: the practitioners themselves, the employers and the policymakers. There are two sides to this situation.

On the one hand, the practitioners have agreed to this ambiguous situation, leaving space for creativity and diversity, for benefiting from people's expertise without constraints, in a flexible way. Some practitioners are against any form of regulation, preferring to rely on the rules of the competitive market. The employers also have hesitations, as a practitioner with a higher level of qualification is likely to demand more money. The state, as the main employer in adult education in a lot of countries, is saving money by employing mainly freelancers, not qualified individuals. Such a situation exists in almost all countries, not only in Europe, but also all around the world; countries from other continents face an even more precarious situation with regard to adult educators.

On the other hand, such 'freedom' and diversity make it difficult to increase the

professional status of adult learning professionals (ALPs), in that anyone can enter this occupation. And this might result in bad quality, and thus, consequently, a bad image. Any constraint on continuing professional development (CPD) has a bad effect on the image of the professional status of adult educators, as signalled by the final report from Adult Learning Professions in Europe (ALPINE) on quality in adult learning, which highlights the lack of a clear view of what is required of adult learning staff.

No use of evidence

A national system for the initial and continuing professional development of the (teaching) staff working in adult education should set entry requirements, career steps, systematic opportunities for further training of ALPs, etc. In line with this, the European

“It is not clear how the ‘effective’ initial and continuing professional development systems to be established by the member states might look.”

Simona Sava
PROFESSOR

policy for professionals in adult education has clearly been calling for the setting up of such national systems for the professionalisation of adult educators since at least 2006, arguing that it is a precondition for improving the quality of adult education. Furthermore, in the latest document, *Council Resolution on a Renewed European Agenda for Adult Learning*, the group of professionals is no longer seen only as a prerequisite for the quality of provisions and learning, but they also need quality for their own learning, the right to have a training qualification, etc. The further training is not meant to be arbitrary, but should be completed against a competency profile, which is to be set incorporating the carefully established career steps and levels of expertise that a coherent system of CPD should include. This is how the action towards improving the quality and efficiency of education and training is understood.

It is possible to say that at least at European level the actions cover all the policy circles, from the research studies – for example in

the 2008 ALPINE report – aimed at grounding the policymaking, through formulating visions and setting policy agenda in different policy documents, to putting in place tools and instruments for implementation (for example, Europass and the European Qualifications Framework), financial measures (see the grants available within Erasmus+), and undertaking close monitoring through progress reports or evaluation and impact studies. However, it is not clear to what extent such studies are used in formulating further policy documents, nor whether we can talk about a coherent evolution even as far as the previous documents are mentioned. It cannot be assumed that the new policy documents are built on lessons learned and impact analysis. Even representatives of the national authorities of the member states involved in the Thematic Working Group on Quality in Adult Learning for reflecting on implementing the stipulations of the Agenda for Adult Learning concluded that “more systematic evidence-based evaluation of quality approaches and tools in adult learning is needed to inform/enable further development.”

Nevertheless, in spite of all these efforts and developments, the questions launched for debate in the *Memorandum on Lifelong Learning*, “What can be done to modernize and improve initial and in-service training for ... practitioners? Where are the most urgent needs for enriched training?” are still not answered in a convincing way, and it is not clear how the ‘effective’ initial and continuing professional development systems to be established by the member states might look. Instead, the solution recommended is learning from each other with the help of staff mobility. The vague mention may be a reason why the member states did not put in place such systems, nor a wider training resources system for (up)skilling adult learning professionals. These may be possible explanations, but more determined action at national levels relies on the determination of the member states to adopt and implement the needed policy measures and tools in a systematic way. Of course, this needs a clear vision, and an action plan to be followed. ■



Simona Sava

Professor Dr Simona Sava is a professor at West University of Timisoara, Romania, and a member of ASEM LLL Hub's Research Network for Professionalisation of Adult Teachers and Educators in ASEM countries.

Can the Confucian learner become a lifelong learner?

A successful lifelong learner has 'learning how to learn' skills. This requires a learning culture that appreciates self-assessment. **But this constitutes a challenge for the Confucian teaching and learning culture.**

The Confucian learner has a long-held reverence for the teacher, text and transmission of knowledge, whereas the Western, Socratic, learner has an equally long-held reverence for self-directed and individualised learning. There is, of course, a risk of exaggerating the differences between education in East Asian countries and in Western, and in particular Anglophone, countries. But differences are present

“I believe that formative assessment becomes an indispensable part of lifelong learning. It means that assessment moves from the exclusive domain of the assessors, the teachers, into the hands of the learners.”

David Boud
PROFESSOR

– and these differences have an impact on what kind of learning communities to create.

The fact that we are heading into a learning society is not questioned by Professor David Boud from the School of Education, University of Technology, Sydney: “I am well aware that the notion of a learning society widespread in current debate is problematic and elusive, but it is one we have to work with as it is a part of the central discourse of our time. We need to develop a view about what a learning society means for us. Singularly and collectively, and we need to explore the implications it has for students, who are challenged to become effective lifelong



“In the same way that the goal for a good chef is to make the best soup for the guests, it is of utmost importance that the teachers use summative assessment of their students. Not least because it can also be one of the strongest signs that formative assessment of the highest quality is present.”

John Hattie
PROFESSOR

learners. In my view this requires that the students should be prepared to undertake assessment for the learning tasks they face throughout life.”

This type of assessment David Boud has named sustainable assessment, because of its resonance with sustainable development. Sustainable development is defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. And in parallel to this David Boud defines sustainable assessment as assessment that meets the needs of the present without compromising the ability of students to meet their own future learning needs.

How do you see the importance of this type of assessment in the future?

“I believe that formative assessment becomes an indispensable part of lifelong learning. It means that assessment moves from the exclusive domain of the assessors, the teachers, into the hands of the learners. And the consequence will be a focus of the learners’ attention on the processes of assessment and to permit them to make these processes on their own, rather than the ones they are subject to. I also call it for lifelong assessment as a necessary feature for a learning society. It is only when we can view it in formative terms that we can avoid assess-

ment becoming a form of incarceration,” says David Boud.

But isn’t this focus on formative assessment as the learner’s individual assessment a very Anglo-centric approach to lifelong learning? Or is it actually the case that we find ourselves in a historic situation where a global learning society emphasises the individual’s responsibility for their own learning processes? And doesn’t the latter situation complicate matters for what you would call the Confucian learner – that is to say, students from a Confucian heritage setting re-

ferring to the educational systems of China, Japan, South Korea, Singapore, Taiwan and Hong Kong? These are exactly the countries that are examination-driven and are deeply rooted in a teaching and learning tradition that emphasises summative assessments.

Summative and formative assessments

Before we get the answer to this question there is a need for further clarification of the concepts of formative and summative assessments. Formative assessment is to be used by teachers and learners to decide where we are as learners in our learning process. The purpose is to aid student learning by guiding the learner on how to learn what they wish to learn, and to tell us how well we are doing in the process. Summative assessment is an act not of the learner, but an act performed on the learner by the teacher making judgments of students’ performance. The purpose of summative assessment is summing up achievement by grading or measuring using tests or high-stake public examinations.

But are there fundamental reasons to prefer one type of assessment over the other? Yes, sometimes you will certainly find preferences for formative tests instead of summative tests. Summative tests generate negative publicity in the form of complaints that teaching to the test and the tyranny of testing narrow



POLIFOTO

the scope of learning and put an unhealthy focus on performing in order to get marks. Other times it is the opposite – for example, when the world-famous researcher John Hattie in his book *Visible Learning for Teachers* compares assessment with culinary arts.

In the same way that the goal for a good chef is to make the best soup for the guests, it is of utmost importance that the teachers use summative assessment of their students. Not least because it can also be one of the strongest signs that formative assessment of the highest quality is present. Or to put it differently: serving poor soup for guests is probably the best indicator that the chef was miserable at savouring it during the cooking. Of course, too much emphasis on tasting the soup leads to lack of focus on the goal – with the result that the soup is cold when the guests arrive.

Going back to the article's main issue, the question is whether in a Confucian heritage culture you spend too little time on tasting the soup.

Why change successful test-takers?

That there is much focus on summative assessment is definitely the case in Hong Kong. Whether there is too much focus – and whether it comes at the expense of formative assessment – is more difficult to answer. *ASEM Magazine for Lifelong Learning* asked Professor David Carless from the Faculty of Education at the University of Hong Kong. David Carless has researched this issue and

“Here in Hong Kong I have learned that if you want to renew the assessment practice you should start with teachers’ existing beliefs and practices, rather than the state of the art in implementation of formative assessment.”

David Carless
PROFESSOR

written the book *From Testing to Productive Student Learning*, which focuses on experiences from Hong Kong.

He explains: “One thing that everyone seems to agree on is that formative assessment is – or rather would be – a good thing to practise. Also here in Hong Kong. Another thing is the reality, and the reality is that it is difficult to implement formative assessment in Hong Kong. One of the main reasons is that competition is the essence of schooling in Hong Kong. Not only is it a way to achieve better results, but more importantly it is a means of socialization to prepare the young for tougher competition in society.”

What does this mean in practice?

“It means that the teachers adopt an exam-oriented teaching style with frequent

About 200 South Koreans and foreigners in a traditional Korean costume participate in the “Gwageo” or “state examination”. The 2006 event offered a more visual effect by letting the participants use technology to solve given quizzes.

completion of past papers and examination practice exercises. More child-centred or discovery approaches, recommended by curriculum reformers, are generally considered by teachers as time-consuming and inefficient for these exam-oriented purposes.”

But are there any good reasons to change this system? David Carless indicates that students from Hong Kong are diligent, test-savvy and generally perform well on international comparisons of student achievement. And that goes whether we are talking about international tests in mathematics, science studies, reading or the Programme for International Student Assessment (PISA). In all of them students from Hong Kong are constantly getting top rankings.

So why focus more on formative assessment when Hong Kong students on an international level are doing so well?

“I think there are three reasons why this issue is open for debate. The first one concerns the relationship between achievement in tests and mastery of material. This relation-

ship is unproven. Secondly, I will point to the fact that learning involves much more than testing. And thirdly, I would say that although Hong Kong students perform well in tests, it is a disputed point whether they are also developing interest in learning for its own sake and the kind of learning dispositions that will sustain them at university, in the workplace and for lifelong learning.”

Failed attempts at reform

From the late 1980s and early 1990s onwards the Hong Kong government sought to minimise the unwanted consequences of the competitive examination-oriented culture. A major policy development in the primary sector was the Target-Oriented Curriculum (TOC) launched in the early 1990s, but it was abandoned towards the end of that decade. David Carless tells us that this attempt at reform was only moderately successful, and that evaluations of TOC indicated that the assessment aspects were considered the most problematic and unpopular. Problematic because the teachers associated formative assessment with recording of data about learners, which they do not have the time, skills or support to make use of by feeding back data into the classroom. And unpopular because the teachers tended to see assessment as something that would seldom involve their professional judgement in contrast to their belief in tests, which stress the validity of objective, reliable and formal assessment.

What has subsequently been done from the political level?

“First of all it was acknowledged that that TOC did not have much impact on modifying the prevailing examination-oriented culture. So the politicians made a new attempt. A new curriculum reform was launched in 2001 under the theme of learning to learn. And again assessment was addressed in the proposals in terms of suggestions to create more space in the curriculum by reducing excessive tests, examination and dictations.”

Did the new attempt then make a difference?

“No, I think it is fair to say that there remains little evidence that governmental attempts to promote assessment for learning have led to much change in schools. Of course you can find pockets of diversified practices but assessment is still dominated by competitive tests and a focus on grades. The explanation is probably not only teachers’ beliefs, but deeply rooted cultural values. Learning to learn may be more complicated to develop in collectivistic rather than individualistic societies.”

Can you change Confucian culture?

The educational culture of Hong Kong is part of a Confucian heritage setting and

tradition – a tradition that goes back to the ancient Chinese imperial system of civil service examinations. This is the most long-standing testing system; it is a system that focuses almost exclusively on competition and a system that has pervasive influence in the context of Confucian heritage culture. So it is against this cultural background – David Carless explains – that we should understand why in Confucian heritage cultures there is a conviction that competition brings out the best in people, leads to hard work and helps society to become prosperous. And it is also against this background that you can understand the students’ ability to combat tough examinations and their endurance developed during many years of intensive test preparation.

Is it then not possible to change this culture?

“I believe it is possible. But if you are to be successful then starting in the context is inevitable. This means that you need to take as point of departure the fact that competition is still the essence of schooling in Hong Kong. In short, my point is the following: given the high degree of diligence and motivation I have a nagging feeling that learning outcomes and the development of student learning dispositions could be even better than they are. Examination-oriented education might be a large part of the problem. But it also tells us that we need to work with what I call contextual adaption of formative assessment strategies if this kind of assessment is to have a chance of success in Hong Kong.”

Confucian formative assessment

David Carless’s recommendation for a contextual adaption of formative assessment is based on his overall judgement that teacher change in relation to assessment practices is most likely to come about under a combination of two circumstances. The first one is that teachers should perceive a need to make changes to their assessment practices because of dissatisfaction with student response of learning progress. The second, and equally important, is that the proposed change is not too far removed from their existing pedagogic beliefs and practices. David Carless says: “You do not jump directly from one culture where the assessors are the teachers to a culture where the learners are the assessors,” and he continues:

“Here in Hong Kong I have learned that if you want to renew the assessment practice you should start with teachers’ existing beliefs and practices, rather than the state of the art in implementation of formative assessment.”

It is for this that David Carless more generally proposes that in Confucian heritage settings you start to work with formative use of

summative assessments. Basically his idea is to start using tests not just to look backwards at student performance, but also to help students move their learning forwards. From such processes, tests can become productive learning opportunities for both teachers and students. In that sense he proposes a distinction between restricted and extended formative assessment. The reason for distinguishing is that it makes it possible to talk about the fact that alternative forms of formative assessment are likely to appear most feasible in different cultural settings.

But is the use of restricted formative assessment sufficient for Hong Kong to get success as a learning society?

“I know that formative use of tests are mainly teacher oriented and controlled and in that sense a restricted form of formative assessment. And of course you can in terms of maximising student learning capacities say that it is probably more desirable to make use of extended formative assessment, which places self-assessing processes at the centre of learning. But that said you have to face up to the fact that restricted formative assessment is a way to start building different – and sustainable – roads for Hong Kong teachers and students who are challenged as to how they are to become effective lifelong learners.” ■

By CLAUS HOLM
clho@edu.au.dk



David Carless

David Carless is Professor of Educational Assessment, Faculty of Education, University of Hong Kong. He has worked in the field of education in Hong Kong for nearly 30 years. His next book focuses on assessment for learning in higher education. It is entitled *Excellence in University Assessment: Learning from award-winning teachers*. It is published by Routledge and will appear in April 2015.



David Boud

David Boud is Emeritus Professor at the University of Technology, Sydney and Director of the Research Centre in Assessment and Digital Learning, Deakin University, Melbourne. He has been involved in research and teaching development in adult, higher and professional education for over 30 years and has made an extensive contribution to the literature on assessment in higher education.

*The dilemma
for Japanese
students:*

TO STAY OR TO GO?

By ANDERS MARTINSEN

The Japanese job hunting system inhibits Japanese students from studying abroad. A Japanese professor says it is a huge dilemma for the students.

Global student mobility is a captivating subject for many researchers in comparative education. The researchers who enjoy international mobility

themselves are recognising its benefits. It is therefore quite natural for them to hope that younger generations will follow suit. But a problem has arisen, the consequences of which are felt particularly keenly in Japan. Japan has the seventh-largest number of inbound international students in the world. However, when it comes to outbound student mobility in Japan, there is a gap between theory and practice. According to Professor Takao Kamibeppu from Tokyo Jogakkan College, there are good reasons for this missing link.

Employers ignore intercultural skills

The Japanese employment system is very different from other Asian countries. There is a strong need for people who understand the Japanese culture and language. The experience of obtaining intercultural



“How dare you go to Bangladesh and not the UK or the US?”

*Takao
Kamibeppu*
PROFESSOR

skills while studying abroad is not always welcomed by Japanese companies. Takao Kamibeppu explains why: “The employment system in Japan is very focused around seniority and you are as an employee not to question anything.”

Japanese companies have their own way of running a company. Certain behaviour is accepted and you have to be very obedient to the boss – you simply have to be a member of the corporate culture. Takao Kamibeppu explains that Japanese traditions and different cultural experiences do coexist but they are also contradictory. English skills are, for example, very welcome in Japan. But if you are too internationalised you may be out of touch with Japanese traditions, whereas if you are too domestic you will not understand international experience.

Despite this, many people in Japan still see a need for students to go abroad to have a good experience and come back with what they in Japan call global human resources. This is very much related to the fact that Japan is an extremely homogeneous country. Demographic data shows that 98.4 per cent of the population in Japan are Japanese nationals.

According to Takao Kamibeppu, the Japanese students feel the pressure to experience different cultures and have intercultural management skills. But when these students go for a job interview at a Japanese company, they are met with a demand for Japanese-skilled sales people and an employer that does not care about intercultural skills.

“Theory and practice of student mobility simply do not match,” says Takao Kamibeppu.

What is wrong with you?

But Japanese students have been influenced by a variety of other traditions. As with the rest of Asia, student mobility in Japan used to be a matter of going to North America or the more advanced countries in Europe. “As a Japanese student you were met with the question of ‘What is wrong with you?’ if you went to other Asian countries,” says Takao Kamibeppu and continues:

“I remember one of my Japanese students who went to Bangladesh and was met with a prejudice bias: ‘How dare you go to Bangladesh and not the UK or the US?’ This attitude is still found in the Japanese culture.”

Despite these attitudes, there is an increase of intra-regional student mobility. For a Japanese student today it is seen as a good investment. This is clear when you look at the data for outbound student mobility in Japan. Whereas it used to be only 5 per cent of Japanese students who studied in other Asian countries, this number has now increased to close to 40 per cent.

But why this increase, when it cannot be used to get a job in Japan?

“It probably has to do with the fact that some of them who go abroad to study focus on an international career,” says Takao Kamibeppu.

Asian students go to Japan

One would expect that the Japanese students would learn something about intercultural skills from the foreign students coming to Japan. But the inbound mobility is limited to the Asian continent.

A total of 135,500 international students are in Japan at the moment, and the target is to reach 300,000 students by 2020. But mainly due to the earthquake and tsunami followed by nuclear power plant accidents a few years ago, the numbers are going down and it looks as if it will be difficult to reach the target within the next five years. Out of all the international students, 60 per cent come from China, followed by a big portion of South Korean, Vietnamese and Taiwanese students.

All in all, 92 per cent come from the Asian region and therefore there is a lack of diversity. The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) is trying to diversify and make Japan more attractive for non-Asian students, but so far the success has been limited. Consequently, apart from a strong Asian influence, there is little internationalising to be found in Japanese higher education.

Who decides on the issue of mobility?

Whereas almost all other students from Asian countries start job hunting when they graduate, Japanese students start in the third year of a four-year Bachelor’s course. In addition, in Japan it is a matter of demonstrating that you have potential rather than showing that you have actual skills and knowledge. Instead, the Japanese companies offer in-house training and use this to modify their new employees. Takao Kamibeppu says: “A company will modify you anyway and university is consequently mainly seen as a time for you to prepare to enter the company.”

But even if that is the case, the Japanese industry is according to Takao Kamibeppu putting pressure on the Japanese Ministry of Education, Culture, Sports, Science and Technology to deliver globalised and internationalised, good-quality graduates. The ministry therefore provides scholarships for the students to go abroad, but the students are aware that the international experience is not necessarily helpful. Takao Kamibeppu explains: “I believe that the Japanese government unconsciously tries to balance the

Western paradigm and the Japanese paradigm so that the Japanese traditions can be maintained and the country at the same time can compete internationally.”

But what is the immediate result?

“Japanese students are at the moment making a clear and rational decision to stay in Japan,” says Takao Kamibeppu and continues: “The students believe that it is better for them to stay in Japan, so they do not miss any of the good job opportunities at the big companies. The Japanese job hunting system simply inhibits the students from going outside Japan. It is a huge dilemma for all of the stakeholders involved.” ■

“A company will modify you anyway and university is consequently mainly seen as a time for you to prepare to enter the company.”

Takao Kamibeppu
PROFESSOR



Takao Kamibeppu

Takao Kamibeppu is Professor at Tokyo Jogakkan College in Japan. His research interests include history and politics of international education policymaking, international student mobility, and internationalisation of higher education. Previously, he worked at the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Tokyo and at UNESCO in Bangkok in the field of international educational development and cooperation. He has served as a consultant for UNESCO, ASEAN, East Asia Summit, MEXT, and other organisations.

*Cooperative
learning in
Confucian
heritage
cultures is a
superficial
success*

The use of cooperative learning in Asia does not take the sociocultural aspects into consideration. Researchers say that there is a need for healthy scepticism when importing any foreign educational reforms.



Imagine a classroom in which students passively receive information and instruction from the teacher, where the teacher focuses on drills and practices and ignores teamwork skills, and where the objective is a well-organised lesson. Then imagine a classroom in which positive interdependence exists among group members, where the teacher trusts the learning process conducted by the students, and where the objective is the emphasis of cognitive, affective as well as social domains. The former characterises a teacher-centred classroom, whereas the latter characterises a cooperative learning classroom.

It is common to experience the first classroom in countries like China, Hong Kong, Korea, Malaysia, Singapore, Taiwan and Vietnam. All of these countries are influenced by a Confucian heritage culture (CHC). Moreover, these CHC countries have all felt the significant changes that have been

driven by the new globalised knowledge-based economy. This also applies to their education system.

A clear example of this is the publication by CHC governments of a series of reports that suggest replacing teacher-centeredness with student-centeredness. A possible solution to this has emerged in the form of cooperative learning. The benefit of this kind of learning is that it provides students with the skills required in today's workplace, but it also demands a shift from a traditional teacher-centred instructional paradigm to a learning paradigm.

However, both Asian and European researchers are aware of the issues that follow when the sociocultural aspects are not taken into consideration. According to Professor Pham Thi Hong Thanh from Monash University in Australia and Professor Bjarne Wahlgren from Aarhus University in Denmark, there is a need for a healthy scepticism as well as awareness of the challenges when introducing cooperative learning.

Culture-determined pedagogy

Bjarne Wahlgren has for a long time done research in the field of cooperative learning. He states that there is evidence for cooperative learning generally leading to better results than more individual learning methods. But he also explains that this evidence is subject to contextual factors. He says:

“There is a proliferation of international studies from different perspectives examining the effect of cooperative learning. The research focuses in part on the general principles of cooperative learning, partly on more specific effects in relation to specific contexts. The basic question is always whether the cooperation results in better learning than teacher-mediated instruction or individual work.”

Pham Thi Hong Thanh is also well aware of the contextual factors, as she explains the advent of cooperative learning in Asia. She says: “There is a demand for cooperative learning because globalisation is ensuring that information on Western teaching and learning is readily available in Asia. Having



“The basic question is always whether the cooperation results in better learning than teacher-mediated instruction or individual work.”

Bjarne Wahlgren
PROFESSOR

said that, this is often with no evidence on its suitability in culturally different contexts. And regrettably, many Asian educators adopt Western practices without considering the suitability for either the different instructional contexts or the influence of these practices on their students’ learning.”

Postulation of success

In her new book *Implementing Cross-Culture Pedagogies: Cooperative learning at Confucian heritage cultures*, Pham Thi Hong Thanh points out that educators in CHC countries often borrow Western philosophies and practices with the postulation that the East will see the same successful outcomes as the West. But as Pham

Thi Hong Thanh clarifies, the generally acknowledged success of cooperative learning in Western classrooms is questioned in CHC classrooms. The modern instructional approach of cooperative learning is, in many cases, believed not to be more helpful than the traditional teacher-centeredness in the East.

Bjarne Wahlgren agrees with Pham Thi Hong Thanh: “From research we know that cooperative learning is expected to have a relatively small positive effect in situations where school culture is strongly oriented towards performance in the form of examination and characters. Here, cooperative learning is perceived as a detour or barrier to the acquisition of the substance.”

“Cooperative learning reformers in CHC countries have a tendency to treat learning as an isolated factor that is independent of additional factors including teaching, assessment, local culture and institutional conditions.”

Pham Thi Hong Thanh
LECTURER



implemented, says Pham Thi Hong Thanh: “If the reform does not interest students, makes them uncomfortable and does not help increase their achievements they simply tend to reject the reform or implement it wrongly.”

The key to success

Until now cooperative learning reforms in CHC countries have followed the procedures of the traditional designer-administrator-worker model that conceptualises educational reforms as involving different stages throughout the process. This includes the policymakers, school administrators, and the teachers and students respectively. But the problem is that the different stakeholders involved in the implementation process of cooperative learning at CHC institutions act separately, have diverse discourses and only have partially shared dialogues.

Pham Thi Hong Thanh says: “To optimise success in importing cooperative learning to CHC classrooms, one needs to provide an applied theoretical framework and culturally suitable and practical instructions that could assist policymakers, reformers and teachers to address various factors at multiple levels. Everyone involved in the implementation process needs to have better mutual negotiations. All in all is there a need for healthy scepticism when becoming acquainted with any foreign educational initiatives.” ■

By ANDERS MARTINSEN
andm@dpu.dk



Bjarne Wahlgren

Bjarne Wahlgren is Professor in Adult Education at the Department of Education, Aarhus University. He works with learning theory and competence development in a lifelong learning perspective, and is a member of ASEM LLL Hub’s Research Network for Professionalisation of Adult Teachers and Educators in ASEM countries.



Pham Thi Hong Thanh

Pham Thi Hong Thanh is a lecturer at Monash University. Thanh’s main teaching and research interests are cross-culture education, and pedagogical practices. She published her book *Implementing Cross-Culture Pedagogies: Cooperative learning at Confucian heritage cultures* to discuss how to introduce Western pedagogies into non-Western classrooms. She uses Activity Theory as a theoretical framework to research the reverse, introducing non-Western education into Western pedagogies.

Bjarne Wahlgren therefore finds it very important to be context-critical against much of the research on cooperative learning. His advice is to have all the various factors examined in different contexts. The various forms of cooperation, compared to various forms of education, are either based on individual activities or more teacher-led activities.

Clashing with Confucian values

Pham Thi Hong Thanh sees a clear conflict with the imposition of cooperative learning in CHC countries. She believes that very many principles of student-centeredness and cooperative learning clash with Confucian cultural values. The consequence is that there is no guarantee of genuine change

by mandatorily requiring CHC teachers to change their teaching practices without considering their voice.

On the contrary, the failures of implementing cooperative learning in CHC classrooms arise from the problem that this instructional approach does not fit the sociocultural context of CHC countries in many ways. Pham Thi Hong Thanh considers that this is not sufficiently recognised and says: “Cooperative learning reformers in CHC countries have a tendency to treat learning as an isolated factor that is independent of additional factors including teaching, assessment, local culture and institutional conditions.”

However, this is not the case and the problems then arise when the ideas are



“There is no doubt that the internet and the use of ICT are vital to realising the mission of MOOCs in India – something that is not to be taken for granted.”

*Karanam
Pushpanadham*
PROFESSOR

MOOCs are a revolution for higher education in India

Students from middle and higher income groups in India are migrating from the country at an alarming rate to get higher education degrees.
But if India is to avoid this the mobilisation of educational resources is imperative.

By **KARANAM PUSHPANADHAM**

Even though India has world-class institutions, they are far outnumbered by weaker institutions that have lagged behind the technological curve that has gripped the Indian economy. Therefore, it is of paramount importance that the Indian government takes significant strides to improve, adapt and grow the overall knowledge capital and its availability to all Indian

students in the higher education system. This has given massive open online courses (MOOCs) the role as a powerful platform to disseminate the knowledge developed collaboratively across the globe and prepare human resources for global requirements.

Building educational resources

The National Knowledge Commission in India recently presented a number of recommendations to the Prime Minister. These recommendations were all to serve the purpose of greater overall knowledge capital and its availability to all Indian

“The education system has to come out of its age-old tradition of teaching and learning if it is to progress and embrace active and joyful learning in the multicultural context of globalisation.”

Karanam Pushpanadham
PROFESSOR

>



POLIFOTO

students in higher education. Some of the more pressing, important issues that need attention are: the paucity of high-quality teachers, the inadequate infrastructure of the universities and more specifically their libraries, and, not least, the poor quality of educational resources utilised at the various universities and colleges.

If these problems are not solved expeditiously, the overall impact on the Indian economy could be disastrous. The number of students graduating from India's institutions will be greatly diminished as they seek better educational alternatives abroad. The students who do graduate from India's colleges and universities will be less and less employable as they will lack the necessary skills and relevant knowledge to compete in the global labour marketplace. And most frustrating of all, Indian students coming from socioeconomically disadvantaged backgrounds will find fewer and fewer opportunities for social and academic mobility because of quality constraints.

Away with age-old traditions

One of the many steps that the National Knowledge Commission recommends

“A long-standing concern for India has been its ‘brain drain’. Students from middle and higher income groups are migrating from the country at an alarming rate to get relevant degrees”

Karanam Pushpanadham
PROFESSOR

to address these pressing problems is to increase the amount of open educational resources and open access. If these goals can be accomplished, the easy and widespread availability of high-quality educational resources will drastically change the paradigm of teaching for the better and improve the quality of education for all students. In addition, Indian students will have access to previously inaccessible information as well

as the knowledge on how to access global educational resources.

The education system has to come out of its age-old tradition of teaching and learning if it is to progress and embrace active and joyful learning in the multicultural context of globalisation. Technological innovations and satellite communications have made the globe like a village and connected every part of the world through inter- and intra-networks.

The world today can be best described as a global knowledge society. To meet the increasing educational demands of the growing population of a society, it is necessary to utilise the potential of information and communications technology (ICT) in pedagogy. The accumulation of knowledge in the cyber age is as significant as its dissemination. Lifelong learners need to keep up with the growing pace of this knowledge explosion, and require the facilities to access, deliver, communicate and disseminate knowledge. As the world moves inexorably towards adopting a knowledge currency, India has the opportunity to participate in the ICT movement by introducing various reforms in all sectors, and education is not an exception.

The MOOC revolution

A long-standing concern for India has been its 'brain drain'. Students from middle and higher income groups are migrating from the country at an alarming rate to get relevant degrees. The majority of Indian students who study in the United States, for example, do not return home. India is eager to make its own universities more attractive for foreign students, and India is in a unique position among developing countries with the potential to become a significant participant in international higher education. While traditional higher education will continue to exist, student-centred, asynchronous learning environments are being created to deliver courses at any time, any place.

This is to be seen in the light of speculation over the past few years that a sea change will occur in higher education: accommodating more learners at lower costs and facilitating a shift away from the accumulation of knowledge to the acquisition of a variety of high-quality, cognitive and non-cognitive skills. This change is forecast because of the utilisation of ICT in education, and MOOCs are the most recent ICT innovation in the field of higher education.

An India-specific MOOC platform – likely to be named 'Swayam' indicating self-learning – was launched on 25 September 2014. This Indian MOOC platform will be completely free of cost and promises to offer top-quality courses in a number of Indian languages. Meanwhile, the Indian Institute of Technology Kharagpur is preparing a blueprint for the national e-library project. This will collect, preserve and disseminate all the intellectual output of the country and cater for the needs of students from school level to postgraduate level and provide free access to quality e-content and education material to students at all levels. MOOCs are going to be a revolution in the field of education, especially higher education, in India as the existing political commitment and good governance support the realisation of the vision in the coming years. However, to be successful it is still important to continue to combat earlier reluctance to broadband.

India's vision for global higher education

India's vision is to become the leader in the field of higher education by 2030 – that is, not just the best in the world, but the best for the world for delivering social, economic and intellectual value par excellence. By 2030, India will be among the youngest nations in the world. With nearly 140 million people in the college-going age group, one in every four graduates in the world will be a product of the Indian higher education system.

India is an acknowledged leader in providing large-scale, affordable access to high-quality university education and has emerged as a role model for other developing economies. In order to realise its goals, a transformative and innovative approach is planned across all levels of higher education: from curricula and pedagogy, through the use of technology, to partnerships, governance and funding. More specifically, the Indian Ministry of Human Resource Development has recently announced that it will soon launch a Campus Connect programme to make 21,000 colleges and 420,000 classrooms Wi-Fi-enabled, giving access to academically relevant websites to around 15 million students. As a result of this programme, all the buildings of 600 universities that have 1 Gbps bandwidth will be Wi-Fi enabled.

The growing broadband market

There is no doubt that the internet and the use of ICT are vital to realising the mission of MOOCs in India – something that is not to be taken for granted. While India initially embraced the internet with a degree of ambivalence, there was tremendous enthusiasm among dial-up users and an estimated 60% of internet users were still regularly accessing the internet via the country's more than 10,000 cyber cafes. When it came to high-speed broadband access, however, there was a reluctance to adopt what was on offer, especially within the corporate sector, and the growth of broadband remained relatively slow for some time. By mid-2012 there were around 14 million fixed broadband subscribers – a small penetration (by population) of slightly more than 1%. In the meantime, mobile broadband technologies were starting to attract considerable interest in India. Having paid large licence fees on the back of the government's spectrum auction in 2010, the operators were keenly promoting their mobile data services.

Significant developments have taken place during the last half-decade and a mention of these in this context is necessary. The fixed broadband market was growing at an annual rate of around 25% in early 2013 and the fixed broadband penetration (by population) was around 2%. On top of that, the take-up rate for wireless broadband was accelerating rapidly, and the government has therefore prepared a National Broadband Plan, although it does not have the profile expected of such a key document. Lastly, the government has also placed a major emphasis on getting broadband into the rural areas, and a large broadband company launched its first foray into enterprise cloud services in India in early 2013. All these

developments have set a platform for the creation of open educational resources and made them easily accessible to all.

Access and delivery

One of the main concerns regarding the open educational resources initiative moving forward in India is the necessity to develop it in other subject areas. It is vital for India to leverage these initiatives as a readily available, economically viable, source of quality content for adoption and adaptation, as well as to serve as a model for indigenous content production. A set of key institutions and experts representing diverse knowledge areas should therefore be selected to develop standards-based, customisable, high-quality content and make it available not only for Indian institutions but also for global consumption. Moreover, there should be a high priority for developing e-content and curriculum for various subjects and in different regional languages.

Along with the national initiative for content, India must develop a network-enabled delivery infrastructure with the focus on two primary areas: access and delivery. For access to the network, high bandwidth connections across institutions and a national backbone that provides advanced networking capabilities are major requirements. ■

“Indian students coming from socioeconomically disadvantaged backgrounds will find fewer and fewer opportunities for social and academic mobility because of quality constraints.”

Karanam Pushpanadham
PROFESSOR



Karanam Pushpanadham

Karanam Pushpanadham is a Professor of Educational Management, Faculty of Education and Psychology, the M.S. University of Baroda, India, and a member of ASEM LLL Hub's Research Network

for Development of ICT skills, e-learning and the culture of e-learning in Lifelong Learning.

**LIFELONG
LEARNING
& THE DIGITAL
REVOLUTION?**