



## Editorial

### Improving Access using ICT and OER in Asia

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Many practitioners are moving towards adopting OER for improving access and quality. This is particularly true in Asia where universities are reforming aiming to be so-called world-class universities. The shortcut to them seems to be importing ready-made courseware from the elite western universities as OER. However, we have yet to see clear research evidence in comparative studies on the improvements brought by using OER. We are also in danger of moving backwards to more teaching-centred practice. We should be wary too about some institutions and individuals simply dumping lessons onto the web and calling them free OER. We need to be very careful in what OER we adopt and how we adapt and re-use them. Certainly the efforts by the Commonwealth of Learning and UNESCO (2011) and the OPAL Project (2011) are to be supported - towards developing practices and pathways for learning. The key issue is to develop these learning pathways.

Some top brand-name universities attracting the best students are uploading many old OER for free use by anyone with an internet connection. The result we are seeing particularly in Asia is that weaker universities seize on these hand-me-down second-hand clothes as a shortcut to becoming an equal world-class university. Just by importing the OER from MIT and Stanford, Yale and others, they assume that they too can become equally prestigious - this is sadly short-sighted. Moreover, those

elite universities can afford to not worry about student drop-out - even if their students did drop out, they can fill their rooms ten times over with the status they enjoy - this was pointed out by Ormond Simpson (2012, p109) in his reference to Anderson : other lower level universities have a high drop out rate already and losing more can damage their market standing.

We are suggesting that, in Asia, universities need to develop their teaching capacities. Students need the teaching to guide the student in reorganising knowledge in the mind to transfer short-term working memory into well-structured long-term memory. This will free up and release working memory capacity for further input and for problem-solving capacity.

Personally we would like to see less concern towards importing novel OER and more on using tried-and-tested interactive ICT between teaching guidance and students learning. We can reduce drop-out rates from the high of 95% non-completion on-time seen in one college, to about 47% through better preparation, support and course selection guidance. And this can be reduced to around 13% through tutor contact – say by telephoning to the student who has missed two assignments. Ormond Simpson has found that pre-course telephone (specifically to elicit the student’s awareness of own strengths) can reduce this another 4% (Simpson, 2012, p 104 ; Simpson 2004). In order to bring this rate further down, we then need to increase the

courseware interactivity, and this is where ICT becomes efficient. Even putting the text online with annotation on demand on mouse-over can improve the interactivity and the achieved quality of learning. (Kawachi, 2007). Voice with text can also improve learning – although three or more multimedia can be too much.

Concerning the additive and potentially synergic advantages of multimedia for learning (Kawachi, 2005), the educational value of plain text can be enhanced through adding multimedia to simplify comprehension. However, some additions for example of text to a presentation of animation and narration have been found to show poorer learning outcomes. And Beccue & Vila (2001) have found no learning benefit from adding audio to multimedia of text plus graphics. However multimedia does have the established potential to offer the students some choices in learning pathways, and interactive ICT courseware can incorporate the capability for horizontal and vertical navigation to other pages - as demonstrated by Kawachi (2007) leading to improved quality of learning and with cost savings. A judicious use of multimedia for self-personalisation of the learning task can be extremely motivating and successful.

The role for the instructional designer is to create courseware with learning pathways that the student herself can choose. Until OER are better linked and embedded as options in the background without overcrowding the content given to the student, then OER should be applied in practice carefully. We need now more supporting research to validate the use of OER, and at the same time we should adopt more interactive ICT to better serve the students.

In this Issue we have several Papers on using interactive ICT. One of the best interactive learning technologies can be student-created inter-campus radio. This can be very low-cost and highly focused on what the students at the moment are challenging - discussions by students and with other students on their course tasks can be achieved. This is shown in the first Paper by Sukmaya Lama in a rural state in India.

The second Paper by Sandhya Doluweera and co-researchers shows that basic ICT such as audio-cassettes can still be effective and are wanted by the students - as student-centred choices.

Then we move on to a Paper on the effectiveness of OER in practice. The OER here included those from MIT now edX. This Paper by Benjamin Lu and Hsiao-Ping Yeh in Taiwan shows that the OER were effective when selected by the teacher in class and used to give depth and further explanation to the existing syllabus. In other words OER worked where they were well fitted by the expert teacher into the pre-existing syllabus and lesson plan. The following Paper is by Shahinshah Babar Khan and Nabi Bux Jumani in Pakistan. They compared traditional face-to-face classes with the virtual university. Their findings are surprising. They found that e-learning was not preferred over teacher-led classes - that the students appreciated the teaching role in traditional face-to-face classes while at the same time recognizing that e-learning was the future and would be necessary for national development.

The next Paper by Madhu Sahni and Anju Sharma compared plain text with various multimedia. This is discussed above here in that multimedia should be blended in moderation, and not be too excessive. They found that multimedia gave better quality learning - and this is well supported by similar studies that show that weaker students benefit from repeating the material at home until mastery (while actually the best students do not show any benefit) so that the class average grade increases. They specific report that “multimedia proved to be more effective for low achievers as compared to high achievers”.

The Paper by Shashi Singh and colleagues shows that students using open resources are less motivated academically than those with a teacher in face-to-face classes. This suggests that the teaching role is important not only to negotiate the content and guide the input, but also to help motivate the student in a humanistic approach. They also found that to succeed using open resources the student needs to bring her own intrinsic motivation to learn.

This Paper supports our stand that the teaching role is important in Asia even where OER are used. Jose Ramos and Bernadette Borte then show that for postgraduate students there was no significant difference in stress or strategies between those at a distance online and those face-to-face. Here prior learning skills and e-learning readiness are likely the relevant equalisers. Whether they would find the same results in a similar study at the first-year undergraduate level remains to be explored. In Bangladesh, the developing status of the country and national open university was compared to that in India and to that in Sri Lanka. Monira Jahan and co-researchers report that to improve the quality in Bangladesh they need more ICT use and more teaching guidance. Specifically they point out that tutorials should be improved and e-learning use expanded. These findings support the other Papers in this Issue that together suggest that ICT can be improved for better quality learning, and that where OER are used then more teaching guidance should be included.

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