

Blended Learning for the Indo-Pacific

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Slides: http://www.tomw.net.au/technology/it/indo_pacific_blended_learning/

UN Sustainable Development Goals

Computer professionals can help:

4: "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"

9: "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation"

From: UN General Assembly resolution 70/17, Transforming our world: the 2030 Agenda for Sustainable Development, A/RES/70/1 (21 October 2015). <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf>



China's Belt and Road Education Plan

Chinese unis & joint ventures:

1. Two-Way Student Exchange
2. Co-Operation in Running Educational Institutions
3. Teacher Training
4. Joint Education and Training



From: China Ministry of Education. Education Action Plan for the Belt and Road Initiative, 2016.
URL <https://eng.yidaiyilu.gov.cn/zchj/qwfb/30277.htm>

International Students in Australian Higher Education

391,136 international students in Australian HE (2016):

67% from the Indo-Pacific.

29% outside Australia (“offshore”) & 26% of these part-time.

Only 7% by distance education.

Part time & distance education *not permitted* for on-shore international students.

So offer online courses for ***part-time offshore students***.

Australian Education and The Indo-Pacific

20,000 students from the region in Australia under 1950s Colombo Plan. Could be revived for education:

“We will uphold these principles as we mobilize investment in infrastructure, such as energy, transportation, tourism, and technology that will help stabilize economies, enhance connectivity, and provide lasting benefits throughout the region.”

From: Partnership for Indo-Pacific infrastructure, Australia, Japan, & USA, July 2018

Teaching computer professionals to deliver online training

- Learning and development assessment
- Learning and development management
- Learning delivery
- Learning design and development
- Teaching and subject formation



From: Skills Framework for the Information Age (SFIA) <https://www.sfia-online.org/en/framework/sfia-7>

Flip the Online Teaching Course

Teach computer professionals to teach:

1. Three online modules, each one week for one ***micro-credential***.
2. Equivalent to one semester 120 hour course.
3. Provide a ***blockchain*** based testamur.

Graduates then design and deliver courses this way.

Proposed for the Solomon Islands

- *Micro-credentials by Mobile Phone*
- Entered in the Solomon Islands Technology for Development Challenge
- Up to \$250,000 AUD from Australian Government for implementation



Exploring the mobile internet,
Solomon Islands, Photo: Irene Scott/DFAT

More Information

Blended Learning for the Indo-Pacific

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http://www.tomw.net.au/technology/it/indo_pacific_blended_learning/

Abstract—Information Technology disciplines make up a significant proportion of the degrees taken by international students at Australian universities. These programs are primarily delivered on-campus, but are increasingly using e-learning techniques and becoming, in effect, blended. This provides the opportunity to offer international students part of their program by distance education before, or instead of, traveling to Australia. This could complement the campus-based education provided and complement initiatives by China, Australia, Japan and the United States for regional development. However, Australian university academics have little background or training in e-learning and program designs have not made use of the flexibility this provides. In this paper, we discuss how computer professionals can be trained online to deliver online training to students of the Indo-Pacific. The application of learning theory to support distance learners is also discussed in this paper.

Keywords—Training, Employment, educational institutions, teaching, Australian educational system, assessment, cognitive learning theory, social learning theory, Indo-Pacific, blockchain, microcredentials

Two of the UN Sustainable Development Goals are to Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (Goal 4 and Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (Goal 9). These can be aided by computer professionals using their technical skills to help provide education.

UN General Assembly resolution 70/17, Transforming our world: the 2030 Agenda for Sustainable Development, A /RES/70/1 (21 October 2015). Retrieved from <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N15/291/89/PDF/N1529189.pdf>

China's Belt and Road Education Plan envisages students from the Indo-Pacific region studying at campuses in China and also on regional joint venture campuses. However, the plan appears to cover only on-campus face-to-face education. This provides the opportunity to enhance the plan by offering online learning using mobile devices. The techniques to provide such education are proven. A limiting factor is teaching staff who are competent in both the subject area, in education and in the delivery technology. Computer professionals already have the subject matter knowledge of computing and much of the knowledge needed for online delivery, they just need some training in teaching.

See:

Australian Department of Education. China's Belt and Road Initiative – Education, 2017.

URL <https://internationaleducation.gov.au/International-network/china/PolicyUpdates-China/Pages/Chinas-Belt-and-Road-Initiative-.aspx>

China Ministry of Education. Education Action Plan for the Belt and Road Initiative, 2016.

URL <https://eng.yidaiyilu.gov.cn/zchj/qwfb/30277.htm>

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Solomon Islands, Photo: Irene Scott/DFAT

A preview of this presentation was given under the title "Mobile Learning from Canberra with Microcredentials and Blockchain for the Indo-Pacific: Colombo Plan 2.0" at the Australian Computer Society Canberra Branch Conference, 1:15 pm, 4 September 2018, in Canberra (replacing the "Security" presentation listed in the program).