Re-thinking online education: definitions, frameworks, myths and future
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Re-thinking online education
Beata Webb, Bond University, Gold Coast, Australia

1. My experience with online teaching: Introduction
2. The world megatrends and online education
3. Rapidly changing concepts and need for new frameworks
4. Myths and online education
5. The future?

Paul Robertson

‘Everybody is talking about online education but nobody knows how to do it.’
• University of Mataram, Lombok, 2016

Me Exponential growth
• Research and practice
• New technologies
• New applications
• New ways of doing different things

What do the TESOL programs develop?
• the theoretical knowledge and
• practical skills for Teaching English to Speakers of Other Languages (TESOL)
Who are the TESOL programs for?

01. If you are a TESOL teacher and wish to extend your qualifications
02. If you are a teacher of other subjects and would also like to teach English as a Second Language
03. If you plan to teach English as a Second Language but have never done it

How is it taught?

Program delivery:
1. In the brick-and-mortar classroom and
2. Through educational digital technologies: Blackboard Learning Management System + Bb Collaborate Ultra

Language Teacher Education:
TESOL Programs: 3 semesters in 1 year

- Graduate Certificate in TESOL (1 semester)
- Master of Arts in TESOL (3 semesters)

Different modes of delivery:
- On-campus: Since 1989
- Online: Since 2013
- Mixed (informally so): Since 2014
- A student-driven option

1. On-campus
   - 3 hour weekly interactive face-to-face sessions per subject
   - Lecture & seminar together
   - Plus Contact with lecturer: office hours and beyond

2. Online
   - 2 hours of weekly interactive sessions using Blackboard Collaborate Ultra
   - Min. 1 hour of work: pre-recorded materials
   - In total: Min. 3 hrs contact per week per subject
   - Plus Contact with lecturer: office hours and beyond
2012-13 - what I had to start learning

2012-13 - what I had to start learning

more about how to manage the systemic content, technology,
- where is the whiteboard??

to rethink how I reach the teaching and learning objectives
- Interact... how? Peerwork/groupwork... how? Good classroom management... how? Building communities... how?
to understand a different student cohort
- cohesively work full-time and have families

Find different ways of implementing the same beliefs, philosophy achieving the same outcomes

Discovery 1: A great level of [interactivity] in content delivery thanks to the Collaborate Ultra

Discovery 2: and a great level of [collaboration], relationship building, personal involvement

Content delivery: what the students say

Learning and social community: what the students say

How does online education fit into the bigger picture?
2. Trends and Megatrends

In 2014, Dr Stefan Hajkowicz’s lecture at International Education Conference, Brisbane.

A global foresight project: Megatrends in World Economy

2009 CSIRO (The Commonwealth Scientific and Industrial Research Organisation)


2. Trends and Megatrends

- A Trend
  • is an important pattern of social, environmental and economic activity that will play out in the future.

- A Megatrend
  • the intersection of many trends;
  • a major shift in environmental, social and economic conditions that will substantially change the way people live;
  • relevant to contemporary decision making, governance models, business processes and social systems.

Megatrends

1. Forever young (the aging world)
2. Going...going...gone? (biodiversity)
3. The silk highway (from East to West)
4. More from less (less resources more ways)
5. Virtually here (The digitalisation around us)
6. Great expectations (tomorrow's winners innovate today)
7. The innovation imperative (tomorrow's winners innovate today)
8. More from less (less resources more ways)

World megatrends & online education: going to a fortune-teller; only through science

World megatrends & online education: going to a fortune-teller; only through science

Megatrends and online education

1. Forever young
2. Going...going...gone...
3. The Silk Highway
4. More from less

Meet an older woman from another country
Stay at home and save the environment
From East to West
New ways of doing old things: Ephemeralisation

TESOL ONLINE PROGRAM
Megatrends & Bond programs

- Virtually here
- Great expectations
- Innovation imperative
- World megatrends and online education
- Program delivered via internet
- It’s more about the learning and social experience
- Invest today or stay behind tomorrow
- All the boxes ticked!

TESOL ONLINE PROGRAM

Three facts...and yet...

1. Australia: 1.3mln students at universities; 410,000 (31.5%) online
2. Globally: 77.84% of respondents reported having taken online courses in the past
3. 2015: the e-learning market was worth $166.5 billion, with the estimates of growth to $255 billion by 2017

Two challenges for research: Talking to Alicia

1. How do we describe it: Finding new terms and concepts
2. How do we construct programs to address challenges

Synchronous versus Asynchronous

- Synchronous: Teaching and learning happens at the same time
  - Live on campus
  - Live online

- Asynchronous: Learners learn any time, learning and teaching happen at different times
  - Pre-recorded MIses and videos of lectures, recorded online tutorials, digital resources
Old terms new concepts
online versus face-to-face?

We found one!
Online versus brick-and-mortar classroom

In search of a new framework for developing quality (O&B) education programs which address the challenges.

2. Challenges of online education
- Institutions
- Student experience

- The way we use technology blurs these definitions

Institutions: globally and across educational levels
- ‘Online learning cannot offer human interaction.’
- ‘Not even the best online course can fully replace the personal contact with a teacher, or the human relationships that develop in a group.’
- ‘Online courses may create a sense of isolation’
- ‘Little or no face-to-face interaction’
- ‘No face-to-face meetings’
Online Education Cons

- Limited Social Interaction
- Technology Cost and Scheduling
- Problematic for Instructors
- Effectiveness of Assessments

(Kumar, 2015)

A delicate engagement: Challenges from student experience

Isolation
- Academic challenge
- Ownership
- Acquiescence

2. Looking for a learning environment framework that embraces the new concepts:

- Doing research: do we know what it is yet?
- All referred to Learning Environments (many political references from)
- Most on learning environments with a connection with technology, to blended learning etc.
- Many pointed to problems of implementation
- Many written by IT experts; great frameworks and graphics of these, but we couldn’t understand them
- Koper (2000): “the term ‘learning environment’ has been widely used but it has rarely been defined.”


What’s ‘a holodeck’?

“On board Star Trek’s USS Enterprise, there was a room where Lt. Commander Data could experience the world of Sherlock Holmes, Lt. Worf enjoyed cowboy adventures with his son and Captain Jean-Luc Picard relaxed while roleplaying as private detective Dixon Hill.”

(Webb & Vallero, 2017)

From the Campfires to the Holodecks

Learning environment as a pedagogical setting:

The four elements
The framework we love: Thornburg (2013)

(Webb & Vallero, 2017)
Learning Space 1: **Campfires**

- The home of didactic presentation of material
- Early campfires: home to storytelling
- A place where people gather to hear stories told by others
- Storytellers were the keepers of knowledge
- Teachers are arbiters of knowledge
- The home of lectures

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**Campfires: Learning space 1 and its elements in the Bond programs**

<table>
<thead>
<tr>
<th>Learning space</th>
<th>Examples of resources</th>
<th>Examples of activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synchronous</td>
<td>Lectures: live on campus</td>
<td>Diverse range, work individually; in groups, whole class or small groups, with one another, interact with materials, teachers, other students</td>
</tr>
<tr>
<td></td>
<td>Lectures: live online</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Observations of language lessons in BUC</td>
<td></td>
</tr>
<tr>
<td>Asynchronous</td>
<td>Pre-recorded lectures (subject or experts)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pre-recorded language lessons</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internet resources</td>
<td></td>
</tr>
</tbody>
</table>

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Learning Space 2: **Watering holes**

- A place of social learning among peers
- Social learning as a dominant activity in societies
- Conversations not lectures
- Watercooler, Photocopier, Lunchroom?
- Vygotsky: the zone of proximal development triggered by social interaction
- McLuhan: close the universities and go to pubs (in Thornburg, 2013, p.18)
- Conversation groups: 3-4 members

(Mals & Vallero, 2017)

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**Bond Watering Holes**

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**Online Students about online TESOL program**
5.2 Online students on online education

Donna

'I love the interactivity of the classroom.'

'I'm also loving that collaboration with my teammates, with my classroom. You know, with the other students in there. I feel like I've got a good relationship with them, when I see other students when I see Katie as well. I genuinely (and Charles... Donna laughs) I genuinely get... I am really excited like, you know, I belong there... that's where I belong... with those other people who are part of this class, too. And you kind of get to know them beyond just the classroom even though we are in a classroom (even Charles... Donna laughs).

Katie

'For me, part of getting back to study and getting back to education, was to socialise... socialisation... Part of it was to go and meet people and have adult conversations and, be a grown-up and get my brain working again... One of the disadvantages... this disadvantage I found... I had no interaction with incredible people that I have in the classroom... up to that point... That actually... flipped... I found that the people that... Donna, Beata, Charles... weird people (laughs)... the people that I interacted with in my online class have a better... They have more in common with and they're not shyly, shying away people because they've got a history as to why they're not on campus... and they are all the same age and they're not easily making the things... Everyone's gone way way out of their way to become the people that they're interesting through education so I felt the richness of the people in the collaborative classrooms (…) so deep and... I get a real connection with the... with the online classes and because you're in their homes... I get a connection with their personality and their lives and their family and their story... which I think because you're in their homes... I am getting emotional...'

Learning Space 3: Caves

• Home to reflective learning
• Home to cognitive construction of understanding
• Depending on the learner, it can be a solitary one
• Not just giving the learners 'with reflective time or special place, it is giving students something to reflect on' (Thornburg, 2013, p.27)
• A curricular challenge because if you're reflecting, others may think you're not working.

Caves: Learning spaces 3 in the Bond programs: campus, home, hotel: anywhere anytime

Learning Space 4: Life

• This is where the learners demonstrate that they know what they have learnt
• Meaningful application of the things they have learnt
• Learner continues the learning process through applying what they have learnt in authentic situations and sharing the application with others (Thornburg, 2013)
• It ties all other elements.

Caves and Life: Learning spaces 3 & 4 and their elements in the Bond programs

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<td>Caves</td>
<td>Asynchronous</td>
<td>Reflective learning, self-tests and quizzes</td>
</tr>
<tr>
<td></td>
<td>Personal reflection on the campfire and watering hole content</td>
<td></td>
</tr>
<tr>
<td>Life</td>
<td>Synchronous</td>
<td>Teaching strategies and activities</td>
</tr>
<tr>
<td></td>
<td>Using teaching resources</td>
<td>Lesson Planning</td>
</tr>
<tr>
<td></td>
<td>Asynchronous</td>
<td>Reflecting on teaching</td>
</tr>
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<td></td>
<td>Developing teaching resources</td>
<td>Working with supervising teacher</td>
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Preparing for teaching and teaching

Life: Learning spaces 4 in the Bond programs

From the Campfires to the Holodecks
OBM simple framework crossing boundaries between Online and Brick & Mortar
Thornburg (2013)

Camfires
Watering Holes
Caves
Life

The way I see the future...

"But enough about me, let's talk about you... what do YOU think of me?"
(CC Bloom, in the movie 'Beaches', 1988)

"But enough about me, let's talk about you... How do YOU see the future?"

Meet Jill Watson and her dad

- Professor Ashok K. Goel, Computer Science and Cognitive Science, Georgia Institute of Technology, Atlanta, Georgia, the United States
- Jill Watson's dad
- Master of Computer Science (Online)
- Spring 2015: 350 students posted 10,000 messages
- What if...

How do others see the future?
About Jill

- Jill Watson, a teaching assistant
- Jill assists Professor Ashok Goel
- Jill started working in January 2016 as a new class started with about 350 students
- At first, she was not that great
- Jill interacted with 400 students, 97% accuracy

Future: Going the full circle of education

- The past and future of education
- Personalisation through cognitive technology
- Dr Simon Easson:
  - “We will go full circle with education”
- Professor Ashok Goel:
  - “I envision a future in which all of us will have access to teaching the systems like Jill Watson anytime, anywhere for any task. I envision a future in which education will be affordable, and not only accessible to all but teaching and learning will also be personal and fun”

Rethinking universities

- Daphne Koller: universities will have to change their role
- It is already happening
- Traditional role of universities is changing

Dr. Simon Eassom
Professor of Engineering, Learning Systems and Cognitive Engineering Leader IBM

The full circle of education

(Eassom, 2017; Darwin 2 TLC)
What I see: one classroom for all!

What does it mean? Back to basics?
• Classroom
• Students
• Teacher
• Board
• Chalk
• All in one space

Future is already here:
working with the Surface Hub

To conclude

1. What others see:
• Artificial Intelligence/cognitive technologies
• Personalisation and involvement through cognitive technologies
2.1 What I see

- I see what others see but also
- The holodeck programs: a universal framework
- Personalised, collaborative, interactive, and personal

2.2 An all inclusive ONE classroom with a teacher at the board

What else do I see

3. What do you see when you look into the future?

To conclude:

The Holodeck as a Learning Environment

- The holodeck learning environment is at the intersection of four (five..) megatrends
- Developments in educational technology force us to reconsider traditional definitions and boundaries. For example:
  - Online face-to-face
  - On campus synchronous and asynchronous learning experiences
- Learning spaces conceptual rather than physical
- Effectiveness of the holodeck is supported by students involved in this project
- Learning in the holodeck is already here — it’s just not very evenly distributed. Gibson, 1993/1999

The future is already here — it’s just not very evenly distributed.

Thank you for listening