#### IROPINE

School of Open Learning Hong Kong Metropolitan University 10 October 2022

#### Innovation in Open and Distance learning

#### **Dr. Tony Bates**



Senior Advisor, School of Continuing Education, Toronto Metropolitan University and Research Associate Contact North Ontario



#### Overview

- 5 myths about innovation
- Why innovation is essential for ODL institution
- Lessons from ODL about innovation
- Six examples of innovation in teaching and learning
- How innovation works: small steps
- Strategies to support innovation
- Conclusion



Trying to convince the mass of a new idea is useless. Convince innovators and early adopters first.

#### 5 myths of innovation

- 1. Innovation is difficult
- 2. Innovation 'just happens'
- 3. Innovation happens in a vacuum
- 4. Innovation needs creative geniuses
- 5. Innovation is always good



# Why innovation is essential for ODL institutions

- **Definition:** the implementation of *improved* ideas, knowledge, and practices: adds value
- Essential for ODL institutions: they offer something *different* from the conventional system
- Need to serve those not served by others
- Dependent on constantly changing technology and teaching methods





#### Changing requirements for ODL institutions

- Move from content delivery to skills development to meet 21st century needs
- Early ODL models: "industrial" content production/delivery: ADDIE model
- Now need flexibility: agile design focused on 21<sup>st</sup> century learning outcomes



An Agile Learning Design Process (Example)

#### Lessons from literature on innovation in ODL

- Successful innovation in ODL focuses on achieving better/different learning outcomes
- 2. Sustainable innovation easier than disruptive innovation
- 3. Size matters: more difficult in large organisations: stronger intervention
- 4. Continuous innovation is essential for ODL survival



(TONY) BATES • ALBERT SANGRA

#### Six examples of innovation in ODL

- 1. Learning analytics at the UK OU
- 2. Scientific argumentation at SFU
- 3. Soil sciences at UBC
- 4. Dog's anatomy at UPEI
- 5. Emergency response training JIBC
- 6. Law practice at Toronto Metropolitan University



## 1.Learning analytics at UK OU

- Bart Rientes (2016): Analysed relationship between:
- Student performance (SP)
- Learning design (LD)
- Student satisfaction (SS) Results:
- No correlation between SS and SP
- High correlation between SP and LD



## 2. Using online learning for skills development

- Simon Fraser University biological sciences
- Students expect a 'right' answer for every scientific question
- Poor skills at scientific argumentation
- Simple web-based tool



#### Scientific argumentation



#### Scientific argumentation



3. Using online learning for skills development: soil identification

- Skill: Soil identification + view the forest ecosystem in an integrative and interactive manner.
- University of British Columbia: Soil Sciences, Dr. Maja Krzic
- Designed as a 'quest': guides and asks questions (gamification)



4. Using online learning for skills development: anatomical science

- Veterinary science, University of Prince Edward Island (Canada)
- One plastinated model of dog's heart for class of 30
- Mobile phone to record naming, dismantling and replacing parts
- Video accessed by QR code



#### 5. Emergency response training at JIBC

Real-time emergency response training at Justice Institute of BC

Dispersed learners; responses recorded/analysed afterwards

Decision-making; problem solving; communication skills

Improved procedures to eliminate conflict/errors

Team-building (collaboration)





#### 6. Law practice at TMU

- The practice of law (vs the law itself)
- Partnership with Ontario Bar Association
- Lawyers as mentors: 4 months practicum + 14 weeks online
- 'Virtual' law firm with real cases to manage: 4 students + lawyer



### Changing pedagogy and media: small steps



#### Changing pedagogy and media: small steps



#### Strategies to support innovative teaching

- 1. Think holistically
- 2. Multiple visions for teaching and learning
- 3. Strategic goals/plan for digital learning
- 4. An academic planning process that includes support for innovation
- 5. Funding to support innovative teaching



#### Conclusions

- 1. Constant innovation essential for ODL
- 2. It's not difficult but needs to be consciously planned and encouraged
- 3. Innovation needs to be driven by the learning outcomes needed in a digital age
- 4. All stakeholders (students, instructors, dept. heads, administrators) need to be involved





) X, A

# • Why change teaching methods at HKMU? Is it necessary?

• How are you innovating in your own teaching? Why are you doing this?

• What is HKMU's administration doing to encourage innovation in teaching and learning?

• Other questions/comments

#### Further resources

- Teaching in a Digital Age: <u>https://opentextbc.ca/teachin</u> <u>ginadigitalage/v2</u>
- Blog: <u>http://www.tonybates.ca/</u>
- E-mail: tony.bates@ubc.ca

