University of Southern Denmark
Odense,
7 November, 2017

Teaching for a digital age:
why blended learning is so important

Dr. Tony Bates
Distinguished Visiting Professor
Chang School of Continuing Education,
Ryerson University

1

Overview

1. Key forces of change

2. Current trends

3. Implications for teaching and learning

4. Conclusions

2

---

1. KEY FORCES OF CHANGE (affecting university teaching)
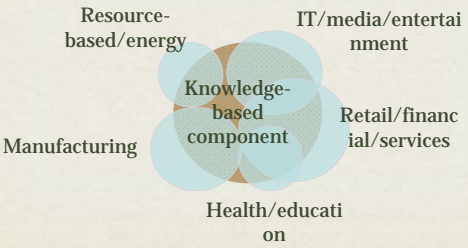

3

---

1. Key forces of change

- Changing workforce; new work and new knowledge/skills

- Changing students; more diversity

- Need for more individualized learning (personalization)

- New modes of delivery: blended, online, OERs, MOOCs

- New technologies: video, social media

4

---

1. Key forces of change: a. Demands of a digital economy

Where will the jobs be?

Resource-based/energy

IT/media/entertainment

Knowledge-based component

Manufacturing

Retail/financial/services

Health/education

---

1. Key forces of change b. the need to develop 21st century skills

communication skills

independent learning

ethics/responsibility

teamwork and flexibility

thinking skills (critical thinking, problem-solving, creativity)

IT skills embedded in subject area

knowledge management

6

1. Key forces of change: c. changing students

- More diversity: prior knowledge, cultures, motivation, language ability, more employed/part-time
- Digital natives: comfort with technology
- Need for recognized qualifications (degrees, certificates, badges, competencies) that meet diverse learning needs
- Increasing importance of lifelong learning

7

1. Key forces of change: d. Need for more personal learning

- Need to provide teaching and learning in ways that allow for the diversity of students
- = different approaches/routes for different students?
- But how?
- Learning design + technology

8

1. Key forces of change e. New modes of delivery
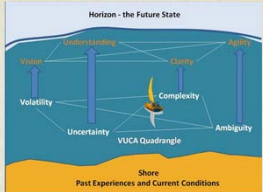

blended

fully online

face-to-face **classroom aids** **flipped** **hybrid** **(distance)**

no technology **(mode of delivery)** **all technology**

9

Questions

- Do you feel that world is changing around you? If so, how is it affecting your teaching?
- Does a greater focus on skills and learning outcomes undermine or reinforce the academic endeavour?
- Is the diversity of students a challenge for your teaching?

The future:
- Volatile
- Uncertain
- Complex
- Ambiguous
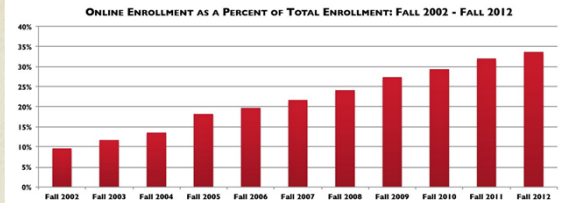
10

2. Trends

11

2. Trends: a. for-credit online learning: USA

Online Enrollment as a Percent of Total Enrollment: Fall 2002 - Fall 2012

Source: Seaman and Allen, 2014

Online enrollments growing 5 x faster than campus enrolments

2. Trends:
a. for-credit online learning: Canada

First national survey, 2017

All 203 public universities and colleges in Canada

Response rate:

- 69% of institutions covering
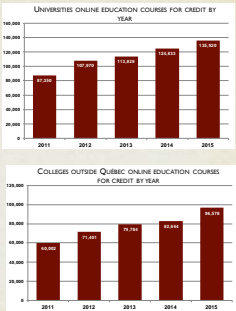
- 78% of all student enrolments

Voluntary

13

2. Trends:
a. for-credit online learning: Canada

- 98% of Canadian universities and 94% of colleges outside Québec offer fully online courses

- Growth between 2011-2015:
  - Universities: 10% per year;
  - Colleges: 15% per year

- Estimate of all credit course enrolments fully online in 2015:
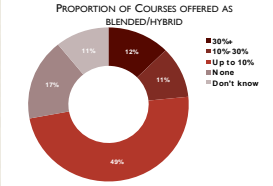 - Universities: 16%
  - Colleges: 12%

Course completion rates (80-85%)

14

2. Trends
b. hybrid learning

- Definition: some reduction in face-to-face teaching

- Many (75%) institutions in Canada offer some hybrid

- BUT few courses (60% with less than 10% hybrid)

- Hybrid = innovative teaching; better use of limited space

PROPORTION OF COURSES OFFERED AS BLENDED/HYBRID

15

2. Trends:
b. hybrid learning
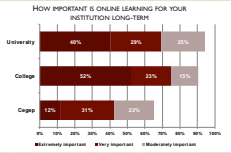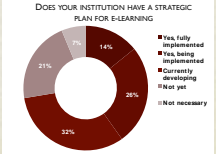
- Last 2 years: big move to hybrid learning (in Canada)

- Probably 50% of all classes will be hybrid by 2020

- 'Flipped' teaching: BUT: it can be so much more - move towards re-design

- What is the best use of face-to-face time? What is the right mix?

16

2. Trends:
b. for-credit online learning: Canada

- Over two-thirds rated online learning very important for future

- Most (72%) have or are developing a strategy or plan for online learning

HOW IMPORTANT IS ONLINE LEARNING FOR YOUR INSTITUTION LONG-TERM

DOES YOUR INSTITUTION HAVE A STRATEGIC PLAN FOR E-LEARNING

17

2. Trends:
c. MOOCs

- cMOOCs (Siemens, Downes, Cormier): different instructors; web conferencing; students use social media; massive 'communities of practice'; **connectivist**

- xMOOCs: Coursera; edX; FutureLearn; lecture capture; peer review, computer testing; massive online broadcasting: **behaviorist**

18

2.Trends:
c. MOOCs

- Driven by Stanford, Harvard, MIT

- Attempts at accreditation but assessment a massive challenge

- BUT: useful for non-credit continuing education

- No MOOC mania in Canada: less than 20% of institutions

19

2.Trends:
d. Open education

- open textbooks

- open research

- open educational resources (OER)

- content will be free, abundant and all online

- teaching + learner support key quality differentiator

- **the real game-changer**

20

2. Trends:
e. Open publishing

- Free, online, open textbooks

- Bccampus Open Textbook project

- 165 books: reviewed/adapted/designed by local instructors

- Adopted in 21 of 25 HE institutions

- Saved students $2 million so far

- My book: 40,000 downloads; 8 languages

21

2. Trends:
f. multi-media

- Print and talk historically dominant; abstract, linear

- Knowledge now represented through many different media: text, audio, video, computing, virtual reality

- Research shows learning enhanced by multiple representations of knowledge

22

2.Trends:
f. multi-media

- Importance of recording: stop/start/repeat

- Allows learners to work at their own pace

- Facilitate move from concrete to abstract and reverse

- Meets individual preferences for learning

23

Questions

- Do you see these trends as significant or just passing fancies?

- Have you adopted any of these trends in your teaching? How?

- What teaching issues could one or more of these trends address?

24

4

3. Implications for teaching and learning

25

3. Implications for teaching and learning
a. What kind of course?

blended

fully online

face-to-face classroom aids flipped hybrid (distance)

no technology (mode of delivery) all technology

26

3. Implications for teaching and learning
a. What kind of course?

- where on the continuum should my course or program be?
- Mode of delivery should be driven by needs of students
- high school leavers/full time = campus + blended
- Part-time undergraduate students: blended
- Lifelong learners: fully online
- Multiple modes for same course?

3. Implications for teaching and learning
b. content and skills

- Content = facts, ideas, principles: 'knowing'
- Skills = understanding, analysing, evaluating, applying: 'doing'
- Both necessary in today's society
- BUT: content has been the traditional priority in HE

28

3. Implications for teaching and learning
b. content and skills

We know a lot about how to teach skills:

- Context-specific
- Learners need lots of practice
- Small steps
- Regular feedback from expert
- Develop over a program rather than one course

29

3. Implications for teaching and learning
b. content and skills

- How do you develop skills? What teaching methods?
- Relationship between content and skills
- What role can technology play in developing and assessing skills?
- What do we assess – and how?

30

3. Implications for teaching and learning
c. What teaching methods for skills development?

- Discussion, social learning for testing and developing ideas
- Problem-based learning
- Experiential learning: learning by doing
- Communities of practice
- Competency-based learning
- Knowledge management

31

3. Implications for teaching and learning
d. New teaching approaches

- from information transmission to knowledge management
- skills development + content
- lecture-based courses replaced by student projects, problem-based learning, collaborative learning
- goodbye written exams: replaced by e-portfolios demonstrating student's knowledge/skills

32

3. Implications for teaching and learning
e. 'advanced' online course design

- core skill: knowledge management
  - how to find, analyze, evaluate and apply information
- open content within a learning design
- student-generated multimedia content: online project work
- assessment by e-portfolios
- just one example: new designs needed

33

3. Implications for teaching and learning
f. New faculty roles

- Teaching performance will be a major competitive advantage
- Instructors need pedagogical knowledge + technology skills
- Requires pre-service + in-service training + tenure/promotion reward
- Learning technology support (instructional designers + media designers) + team-work

34

Questions

- Are you convinced of the need for change in your teaching?
- What is the most relevant of these developments for your teaching?
- What are the main barriers you face in changing your teaching?

35

Conclusions

- Digital economy requires high-level intellectual skills
- Teaching methods must include opportunities for skills development
- Technology enables more flexible delivery and ways to practice skills
- But all within a specifically designed learning environment that supports learners

36

- Teaching in a Digital Age:
  https://opentextbc.ca/teachingina
  digitalage/

- Blog: Online Learning and
  Distance Education Resources:
  http://www.tonybates.ca/

- E-mail: tony.bates@ubc.ca
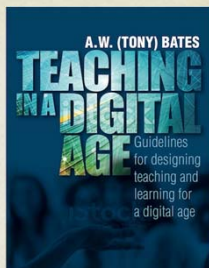
37

Exercise

- Choose a course or (new?) program

- Redesign it to give more emphasis to skills development/knowledge management/independent learning

- Choose moderator + reporter

- Report back (course details; why the change; the new design)

38