Tensions between best practice e-learning and scalable, cost-effective accounting education

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Overview

Tensions in e-learning design: a focus on pedagogy in the case of GradDip(CA)

• Background – context
• Outline of ‘best practice’
• Issues relating to best practice design for learning
• Model for efficient e-learning

➢ tensions
Context – organisation

A little about Chartered Accountants Australia and New Zealand

- CA ANZ is an Australian higher education provider
  a not-for-profit professional member body
- One accredited program
  Graduate Diploma (Chartered Accounting)
- Large student base
  16,000 students enrolled; approximately 3,000 per subject
- Students located across Australia and New Zealand
- Students all working full-time; studying part-time
  Working in accounting positions with CA mentor
Context - program

A little about Graduate Diploma (Chartered Accounting)

The program comprises 5 subjects delivered in blended format
4 technical subjects (12 weeks) and a capstone (16 weeks)

Technical subjects:
- online course material
- online discussion forums
- interactive webinars
- printed materials
- online assessment (x 3)
- final written exam

Capstone (integrative):
- online course material
- online discussion forums
- printed materials
- 3 face-to-face workshops (including assessment)
- final written exam
Best practice in e-learning

Some core ideas and options driving high quality online learning experiences

- Educating ‘online’ presents a transformative opportunity. Educating online should not simply be attempting to replicate f2f.

- Effective technology-enhanced education can provide:
  - Greater flexibility in time, place and pace
  - A variety of ways to motivate and engage students
  - Support for collaboration and reflection
  - Improved assessment and feedback
  - Authentic and multi-modal learning possible
Best practice in e-learning

Key concerns developing technology-enhanced learning

Unfortunately, the development and implementation of effective technology-enhanced learning typically requires:

- large budgets,
- expertise from educational developers and media producers, and
- particularly enthusiastic teachers.
Levels of technology-enhanced learning

SAMR Model (Puentedura, 2010; Godsk, 2014)

**Substitution**
Educational technology acts as a direct substitute, with no functional or educational improvement

**Augmentation**
Educational technology is used for enhancing activities or transforming components

**Modification**
Technology is used for transforming entire activities

**Redefinition**
Complete transformation or reinvention of course into online learning
E-learning design issues

Key concerns when designing an online program

- Fit for purpose
  need to limit whistles and bells to useful purpose
- High investment upfront (and potentially ongoing)
  design, develop, systems, software etc
- Different expertise required
  educational developers v accounting (academic) expertise
- A ‘robust’ design can restrict flexibility in real time
  design can limit input from educators during the teaching period
- Online program design often ignores the ‘big picture’…
E-learning design issues

The ‘big picture’: elements of efficient learning design

- Whether it provides students with new possibilities that can improve learning

- Whether it is operational for the educators

- How the design fits into the institution’s digital strategies and whether it is sustainable

Godsk (2014) illustrates this in his efficient learning model…
Efficient e-learning design
The intersection of the three perspectives (Godsk, 2014, p.184)

Institutional perspective
- Implementation of digital strategy
- Cost-effectiveness
- Sustainability
- Politics (e.g. completion time)

Student perspective
- Improved learning:
  - Better performance
  - Increased flexibility
  - Increased satisfaction

Educator perspective
- Practicable/adoptable
- Worth the effort/impact teaching
- Increased flexibility (i.e. more time for research)

design focuses on pedagogy
Efficient design

Tensions arise in efficient learning design

Effective design meets the design parameters

Efficiency measures the extent to which time, effort, and/or expense is used for the intended task or function

Design parameters that are to meet an efficiency standard will create tensions (resulting in a trade-off):
addressing one requirements will detract from another
Tensions in e-learning design

**Designing for e-learning**

Efficient learning design takes into account student, educator and institution.

**Student**
- **flexibility** re-timing, location and approach to study
- **contact** with expert teacher
- timely **feedback**
- **equality** in learning experience
- printed material

**Educator**
- focus on technical **content**
- appropriate **learning** activities
- valid, reliable and secure **assessment**
- timely professional development
- **practical** solutions

**Institution**
- **cost-effective**, **relevant** program
- **quality assurance**
- **seamless** student administration
- **sustainable** solutions
Designing for e-learning

Tensions faced in GradDip(CA) design

Tensions arise within and between each stakeholders requirements. For example:

Students want more flexibility

This could be achieved with asynchronous activities

…but students also want interaction with the educators

[actually need ‘cognitive presence’ not necessarily interaction]

A larger number of e-moderators/facilitators could be utilised to ensure student access to an educator

…but this raises high risk of inconsistency/inequity

[could reduce risk with ongoing professional development and performance management but high cost and admin]
Designing for e-learning

Tensions faced in GradDip(CA) design

Consistent quality learning opportunities could be provided with increased **automated learning** activities

…but this will require new skills, a different approach [and potentially reduce interaction with educators!]

And so it goes on....
Designing for e-learning

Providing **consistent quality** learning opportunities in the GradDip(CA)

Cost effective e-learning design creates equity-efficiency tensions and impact assessment:

- design rigor v agility
- personalised v personal
- flexible v simple

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Equity-efficiency tensions

Cost effective e-learning design: design rigor or agility?

Design rigor:
• changes require long lead time
• original design can be high cost (can be ongoing)
• often foregrounds technology over educators
• often increase e-moderators, decrease educators

CA trade-off – incorporated adaptive e-lessons with real-time analytics to allow for some personal adjustment/contact
Smart Sparrow Adaptive Lesson

This is an Adaptive Lesson

An Adaptive Lesson is an online lesson that changes based on how a student interacts with it. An Adaptive Lesson is made up of Screens that contain information or questions. Screens can include interactive elements and even simulations.
Equity-efficiency tensions

Cost effective e-learning design: personalised or personal?

‘Personalised’ learning:

- very difficult to maintain equality across cohort
- best achieved with increased automation
- can be high cost (if rigorous design, as above)

CA trade-off — blended learning delivery model to allow for some personal contact and interaction amongst peers
Equity-efficiency tensions

Cost-effective e-learning design: flexible or simple?

Flexible design:

- usually requires options \(\rightarrow\) complexity and increased costs
- more difficult/costly to offer timely educator contact
- more difficult for students to connect each other in real time
- requires students to be more self-directed

CA trade-off – minimal synchronous online tools, optional and recorded to allow for some flexibility
Equity-efficiency tensions

Cost effective e-learning design: valid, reliable and secure assessment

- Assessment for learning requires timely formative assessment and closed feedback loops
- Assessment of skills not all demonstrable online or may require additional technology and or skills of learner to do so
- Students need learning resources appropriate for the format of the assessment eg online readings not useful in written (open book) exam
- Assessment online poses security risks

CA trade-off – mix online and traditional assessment to maximise validity, reliability and security
Balancing the tensions

Cost effective e-learning design

**Students**
- Managing expectations

**Educators**
- Managing changes in academic work

**Institutions**
- Managing resources

**Expectations**: technology, learning outcomes, educator interaction

**Changes in work**: e-learning design program aims using technology

**Resources**: academic governance, prof development, technology platform

→ **READINESS**
→ **EXPERTISE**
→ **INFRASTRUCTURE**
Summary

Programs need to be (re-)designed for efficient e-learning

“A quality educational experience is the dynamic integration of content and context created and facilitated by a discipline expert and pedagogically competent teacher.”

(Garrison & Anderson, 2003, p. 54)