

TURNING ON THE BOOK IN HIGHER EDUCATION

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MY RESEARCH

Turning on the book: An investigation into factors that influence higher education teachers' adoption of digital textbooks



TURNING ON THE BOOK

PRESENTATION OVERVIEW

- ① What does good quality research look like?
- ② What is meaningful?
- ③ How can this research be put to good use?

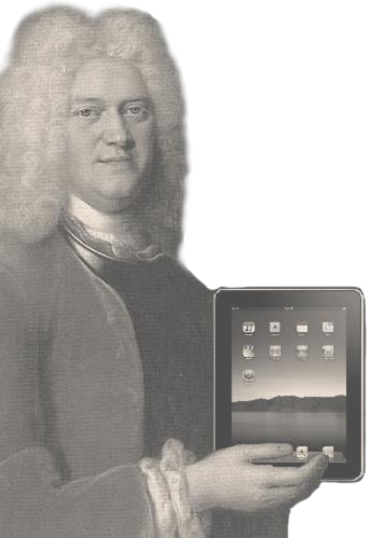


GOOD QUALITY RESEARCH

1

What does it look like?

- a. Identifies a gap in the literature
- b. Methodological rigour
- c. Theoretical framework





1a Gap in the literature

IDENTIFIES GAP IN THE LITERATURE

1a

Limited empirical research on teachers' attitudes and use of digital textbooks

Tendency to focus on first order barriers (convenience, cost, etc.)

Underlying factors (e.g. teacher beliefs)

How does this new medium fit into wider learning and teaching context?



TEACHERS MATTER

“Gatekeepers
for
technology
use in the
classroom”
(Gaffney, 2010)

Evidence of resistance

Low digital fluency of teachers is a significant challenge to advancement of teaching and learning (2014 Horizon Report)

Successful integration of technology
requires a shift in attitudes



1b Methodological Rigour



Research Design

Pragmatism
[Epistemology]

Mixed Methods
[Methodology]

Data Analysis

3 Phase Sequential — Methods

Phase 1
Semi Structured In-Depth Interviews

Multi-disciplinary participants from five Australian universities
Snowball sampling
n = 20-30

Qualitative data
Coding and thematic analysis [NVivo]

Phase 2
Refinement of UTAUT instrument to develop online survey questionnaire (open and closed questions)

Volunteer sampling
n = 250 - 500

Quantitative data
Descriptive and non-parametric analysis [SPSS]

Phase 3
Follow-up semi-structured interviews

Purposeful Sampling
n = 20 - 30

Qualitative data
Coding and thematic analysis [NVivo]

Interpretation of Overall Results
[Metainference]

1c

Using Theory



Diffusion of Innovations (Rogers, 2003)

Relative advantage
Social norms
Compatibility

Unified Theory of Acceptance and use of Technology (Venkatesh et al, 2003)

Performance expectancy
Effort expectancy
Social influence
Facilitating conditions

Technological Pedagogical Content Knowledge (TPACK) (Mishra and Koehler, 2006)

Complex teacher knowledge

Description-of-affordances model (PoIs, 2012)

Varying levels of knowledge required in order to perceive potential of an innovation





2

What is meaningful?

FROM THE LITERATURE

2

Confusion about what a digital textbook is

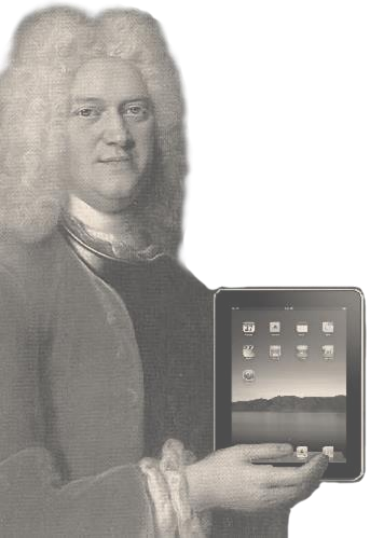
Preference for print

Tradition noted as barrier

Emotional responses

Cultural norms

**Interest in pedagogical potential of
enhanced ebooks**



INTERVIEWS: EARLY FINDINGS

Enthusiasm

“That is what ebooks should be, otherwise they are just PDF versions of a printed book”

“I have only seen one but Wow! That is an ebook”

Reservations

“Digital stuff tends to look like entertainment”

“I have some reservations because I remain to be convinced that the quality of learning would necessarily be improved”

Importance of planning for integration

“Potentially if you understand the technology and the abilities of the technology, there’s the potential for great change”

“If you understand the technology, that could be amazing, but it needs time and training and just being aware”

“I haven’t explored what all the opportunities are here and without dedicating some time to exploring it I would feel less comfortable promoting an e-version”

“A textbook should be integrated as a part of the learning experience”

Disappointment

“I feel there is a boat missed somewhere”



3 Putting it to good use

WHY DOES IT MATTER?

“Digital books and digital articles that mimic their print counterparts may be efficient, but they do not expand our imagination of what scholarship could be in an era of boundlessness, an era of ubiquity.” (Ayers, 2013)



Responding to digital disruption

Future learners

New pedagogies

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THANK YOU

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