

# EMBRACING DIGITAL TECHNOLOGIES IN ACCOUNTING EDUCATION



This document is best viewed  
with ADOBE®READER® software  
[Click here to download free](#)

*"Our aim is to enhance student learning outcomes by engaging them in curricula that reflects current technologies that inspire, excite, support and challenge."*

*Professor Kim Watty  
Project Lead / Associate Head of School  
Accounting, Economics and Finance  
Faculty of Business and Law  
Deakin University*

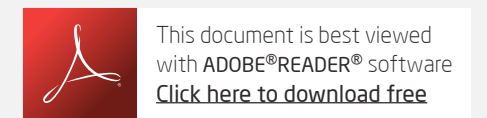


## THE TEAM:

**Professor Kim Watty, Dr Jade McKay, Dr Leanne Ngo, Deakin University, Melbourne Australia.**

We would like to acknowledge and thank CPA Australia for its support and funding of this project.

© To reference or distribute this resource, please be sure to attribute as follows:  
Watty, K., McKay, J. and Ngo, L. (2014). *Embracing Digital Technologies in Accounting Education*. [Interactive PDF]. Australia: Deakin University.



# ■ CONTENTS

■ WHAT ARE DIGITAL TECHNOLOGIES?	4
■ WHY USE TECHNOLOGY?	5
■ IMPACT ON ACCOUNTING EDUCATION	6
■ WHAT ARE THE BENEFITS?	7
■ WHAT ARE THE CHALLENGES?	8
■ TYPES OF DIGITAL TECHNOLOGIES	9
■ ASSESSING LEARNING OUTCOMES	11
■ WHAT THE STUDENTS SAY	12
■ PAST, PRESENT, FUTURE	13
■ EXEMPLAR VIDEOS [ INTERNET CONNECTION REQUIRED TO VIEW VIDEOS ]	14
■ WHAT THE FUTURE HOLDS	21
■ REFERENCES	22

This resource is designed to help you engage with digital technology in your teaching practice to enhance student learning outcomes.

Watch the videos

CLICK HERE



# ■ WHAT ARE DIGITAL TECHNOLOGIES?



Respondents indicated they are technologies which:



ENHANCE  
STUDENT LEARNING



ASSIST IN THE  
DELIVERY OF  
INFORMATION

"I suppose it's anything moving away from just your standard paper-based sort of text book and face-to-face methods. So whether it be eBooks, whether it be multimedia, social media, learning management systems, anything like that."



ARE A PART OF  
EVERYDAY TEACHING



CHALLENGE  
TRADITIONAL  
APPROACHES TO T&L

"I'm actually not quite sure how to define it because I think everything's merged and where the boundary lines are is becoming increasingly blurred."



ENABLE COMMUNICATION,  
COLLABORATION  
AND CONNECTION

Visit The Educause Website

CLICK HERE



# ■ WHY USE TECHNOLOGY?



## 1 STUDENT ENGAGEMENT

"...it's about trying to make...tedious subjects like company accounting interesting."



## 2 EFFICIENCY

"I mean, it took some development time to get it rolling but once it's up, I think it's saved us a lot of time."



## 3 WORK READY GRADUATES

"As soon as they walk out the door they are expected to be able to deal with technology every day and it's about us preparing them better."



## 4 STUDENT PARTICIPATION

"...we've got that level of participation...that level of interest."



## 5 HELP STUDENTS GRASP COMPLEX CONCEPTS

"...when you see that your students are really not grasping something, you just really want to do something to help them understand it and that's the impetus."



## 6 PERSONAL INTEREST IN TECHNOLOGY



## 7 24/7 TEACHING AND LEARNING



## 8 PERSONALISED LEARNING



## 9 SOMETHING WE MUST DO



## 10 IMPROVE COMMUNICATION



## 11 STUDENTS WANT IT

# ■ IMPACT ON ACCOUNTING EDUCATION



Adoption of digital technologies by accounting educators remains limited. The shift towards digital technologies has the potential to impact accounting education in the following ways:

*Academic staff play a key role in the underdeveloped state of eLearning in higher education... Academic staff define the (subject) curricula, they plan study programmes and individual courses, and they communicate and interact with students in teaching and learning scenarios... But does faculty have the competences to respond to these challenges?*

*(Schneckenberg 2009, p. 413)*

## ENGAGEMENT

"What I believe is the traditional learning methodology is not particularly engaging our students. So I see digital technology and electronic methodology as ways to engage."

## DEMYSTIFYING COMPLEX CONCEPTS

"Provides a platform to deliver content, and excellent for use re threshold learning concepts, that are important concepts that many students find difficult to understand."

## CREATING WORK READY GRADUATES

"Digital technology enables us to bring into the classroom more real life, real world experiences to help our students immerse themselves into what the profession and accounting and the discipline is all about."

## CHANGING TEACHING PRACTICES

"I can do more interactive exercises, I can do team based projects, I can have them work with their partner, we can do longer case studies and I can just cover more content than I could before I started using technology."

## OTHER THEMES THAT EMERGED INCLUDE:



ACCESSIBLE  
TO ALL  
STUDENTS



WILL CHANGE  
HOW ACADEMICS  
DESIGN  
COURSES



PERSONALISED  
LEARNING



24/7  
TEACHING  
& LEARNING



WILL BETTER  
CATER TO  
DIVERSE  
COHORTS

# ■ WHAT ARE THE BENEFITS?



## BENEFITS OF TECHNOLOGY IN TEACHING

RESPONDENT VIEWS



**ANONYMITY FOR STUDENTS**



**STUDENT ENGAGEMENT**



**PERSONALISED LEARNING**



**24/7 ACCESS TO TEACHING AND LEARNING**



**EFFICIENCIES FOR STAFF**



**FASTER DELIVERY OF INFORMATION**

"...it enables me to do more with a variety of learning styles. While it's still difficult to be able to design material for every different person, it gives me a bit more flexibility, gives the students a bit more flexibility on ways they can choose to learn."

## BENEFITS OF TECHNOLOGY IN ASSESSMENT

RESPONDENT VIEWS



**CREATIVE ASSESSMENT DESIGN**



**CAPTURE & ACCESS**



**INSTANT FEEDBACK**



**EFFICIENCY**



**FLEXIBILITY & 24/7 ACCESS**



**COLLABORATIVE GROUP WORK**

"I found it was more efficient for them and for us.."

# ■ WHAT ARE THE CHALLENGES?



## CHALLENGES OF TECHNOLOGY IN TEACHING

RESPONDENT VIEWS



STUDENT & STAFF  
**CAPACITY**



STAFF  
ENGAGEMENT



RELIABILITY OF  
TECHNOLOGY



SUPPORT



SETTING  
BOUNDARIES

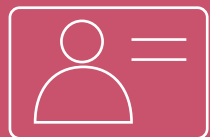


TIME VS  
BENEFITS

"Just finding the right technology fit. So there are loads of different software options, there are loads of different things out there which do things similarly but not quite the same."

## CHALLENGES OF TECHNOLOGY IN ASSESSMENT

RESPONDENT VIEWS



AUTHENTICATION



ASSESSING  
HIGHER  
ORDER  
THINKING



RISK OF  
TECHNOLOGY  
FAILURE



ALIGNING  
TECHNOLOGY  
WITH LEARNING  
OUTCOMES



ISSUES WITH  
USEABILITY



FACILITIES NEEDED  
TO SUPPORT  
TECHNOLOGY

"I should really be doing it online. But...I just want to get a little bit more confident that the technology is not going to let me down."

"Yes, that's the only problem with digital technology: you've got no guarantees of who's actually doing it at the other end."

[Read the report](#) CLICK HERE





# ■ TYPES OF DIGITAL TECHNOLOGIES



## LEARNING MANAGEMENT SYSTEMS (LMS)

Moodle

Blackboard

Desire2Learn

Online Homework  
Systems  
(Pearsons  
AccountingLab)

## SOCIAL MEDIA / COLLABORATIVE TECHNOLOGIES

Blogs

Wikis

Twitter

Facebook

YouTube

Scoop.it

Google Drive

Dropbox

## COMMUNICATION

ASYNCHRONOUS    SYNCHRONOUS

Online  
Discussion  
Boards

Email

Skype

Collaborate /  
Elluminate Live

Google Hangout

Adobe Connect

## SIMULATED LEARNING SYSTEMS - INSTITUTIONAL CUSTOMISED DEVELOPMENT

SCAM

FINESSE

Intelligent Tutoring  
System

Net Present Value

The Normalised Game

## LEARNING STYLE / APPROACH / CONCEPT

Flipped Classroom

Gamification

Blended Learning

Mobile Learning

Distance / Online  
Learning

TYPES OF DIGITAL TECHNOLOGIES CONTINUED >

# ■ TYPES OF DIGITAL TECHNOLOGIES

## MOBILE TECHNOLOGIES

Tablet computer

Tablets i.e. iPads

Smartphones

Mobile Apps  
i.e. iOS, Android

## ASSESSMENT / EVALUATION TECHNOLOGIES

Online quiz,  
test and exams

Online assignment  
submission / paperless  
assessment

Turnitin

**SELF/PEER  
REVIEW**

Spark / Spark  
PLUS

REVIEW

PRAZE

**POLLING**

Polleverywhere

minteract

GoSoapBox

## PRESENTATION AND LEARNING RESOURCE CREATION TOOLS

**SOFTWARE**

AudioByte

Adobe  
Presenter

Voice  
Recognition  
Software

Microsoft  
Powerpoint

Adobe  
Captivate

Screen Capture  
i.e. Jing,  
Camtasia

Prezi

SmoothDraw 3

**HARDWARE**

Drawing tablet  
i.e. Wacom

Microphones i.e.  
portable, wireless  
or built-in

In-class Document  
Reader

Lecture Capture  
technologies i.e.  
Echo 360

Smartphones

## LEARNING OBJECTS / RESOURCES

eBooks

Lecture notes / slides

Narrated PowerPoint  
slides

Podcasts - audio and  
video

Video lectures

Instructional videos

Annotated video  
drawings

## COMMON ACCOUNTING TOOLS

ATO eTax software

Microsoft ACCESS

Microsoft Excel

MYOB

Quickbooks

SAS Enterprise Guide

Internet Evidence  
Finder Forensics

# ■ ASSESSING LEARNING OUTCOMES



Measuring learning outcomes in relation to digital technologies can be difficult and challenging. Respondents shared the following examples:

HOW CAN YOU EFFECTIVELY GAUGE LEARNING OUTCOMES IN ACCOUNTING EDUCATION?

Recommended Reading:

Cheng, J., & Swanson, Z. (2011).  
**An Examination Of The Effects Of Web-based Tutorials On Accounting Student Learning Outcomes.** *Review of Higher Education & Self-Learning*, 3(10).

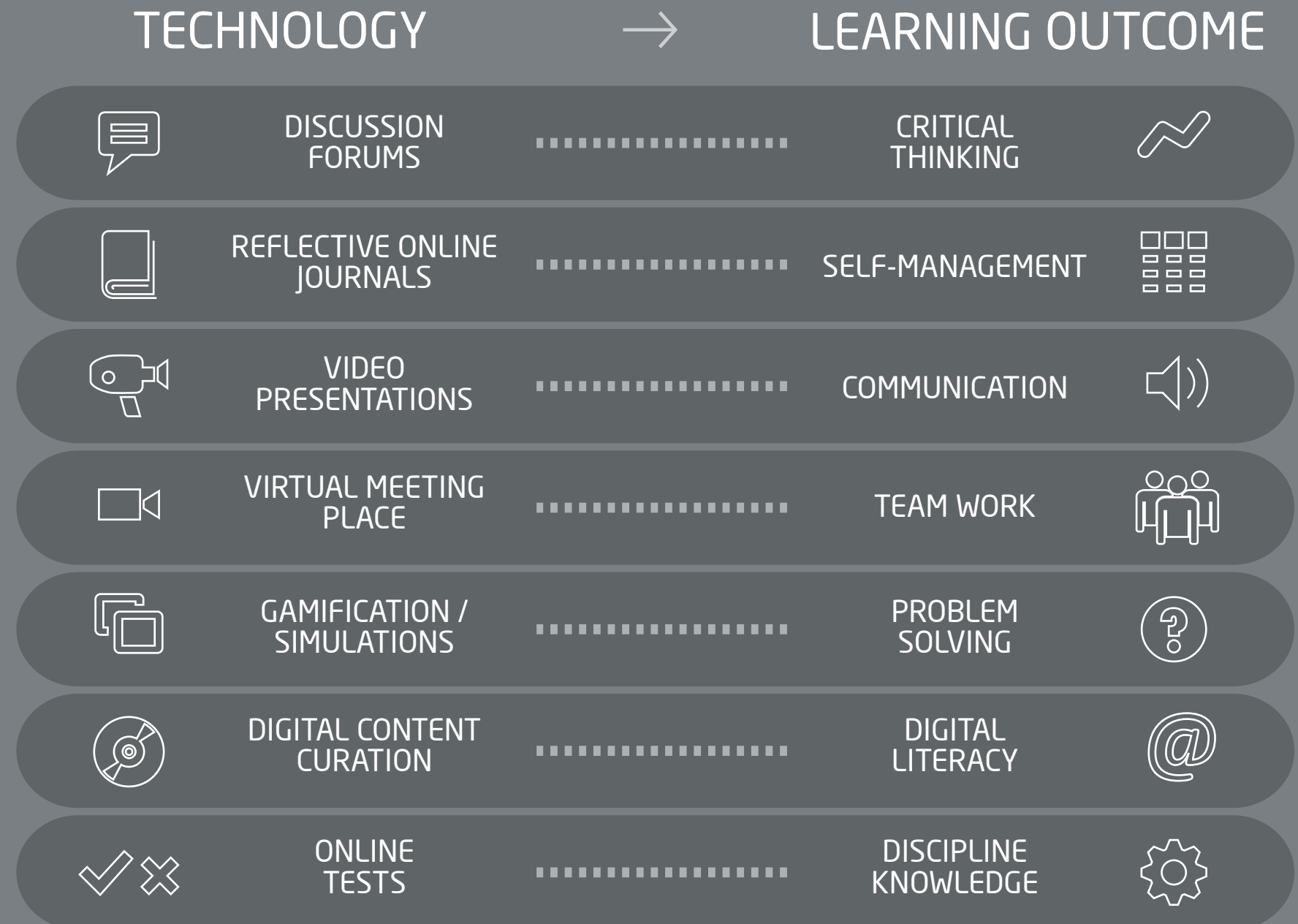
[Read](#) CLICK HERE >

Potter, B. N., & Johnston, C. G. (2006).  
**The effect of interactive on-line learning systems on student learning outcomes in accounting.** *Journal of Accounting Education*, 24(1), 16-34.

[Read](#) CLICK HERE >

Dowling, C., Godfrey, J. M., & Gyles, N. (2003).  
**Do hybrid flexible delivery teaching methods improve accounting students' learning outcomes?** *Accounting Education: An International Journal*, 12(4), 373-391.

[Read](#) CLICK HERE >



# ■ WHAT THE STUDENTS SAY

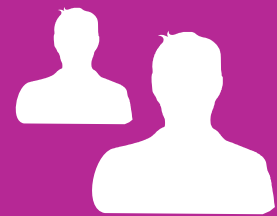


According to respondents, students value technology in their learning for the following reasons:

MAJOR THEMES IN STUDENT EVALUATIONS



**USING  
THEIR OWN  
DEVICES**



**LEARNING  
FROM OTHERS**



**ABILITY TO REWIND AND RE-WATCH  
VIDEOS, SHORT BURSTS  
OF INFORMATION**



**ENGAGEMENT**



**24/7  
FLEXIBILITY  
& LEARNING**



**INSTANT  
FEEDBACK**



"I like technology and I like this way of learning...I like mobile phones, I like my iPads, I don't like listening to you raving on for two hours in a lecture."

"The content when they want it, when they need it...they don't have to wait for me to get back to them or...wait for class to come around...they can get their questions answered immediately by using the technology. So that immediate feedback...students relish."



# ■ PAST, PRESENT, FUTURE

## 1950s - 1960s

The IBM 650 becomes the 1st commercially available digital computer at the price of \$500,000

First handheld calculator

## 1970s

Apple begins selling the first PC (the Apple II)

The first PCs enter higher education classrooms

## 1980s - 1990s

Start of WWW

The first digital natives are born

Student Response Systems/Clickers introduced

The first wiki developed

First webcam introduced

The internet starts to enter higher education institutions

Google (changes research and T&L)

Interactive whiteboards introduced

## 2000s

Web 2.0 era begins (Linkedin, Skype, Flickr, Tumblr, Facebook, YouTube, Twitter)

Digital curation and aggregation (Scoop.It, Pinterest, Digg.it, FlipBoard, De.li.cious)

SecondLIFE virtual real-time rich eLearning

Podcasts

LMS taken up in HE

Cloud computing

Tablets and smartphones

Increased broadband makes way for rich media resources

Interactive mobile apps

Personalised adaptive learning systems

Learning analytics

Games and gamification

Massive Open Online Courses (MOOCs)

Digital badging and micro credentialing

## Future

Web 3.0 - Semantic web

Robots/computers teaching

Voice recognition and gesture based technologies as virtual assistants, virtual reality field trips and classroom

Wearable technology as self-quantifiers to measure how environment changes improve learning outcomes

3D printing for education to enable authentic exploration of objects that may not be readily available to higher education.





INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE



# ■ EXEMPLAR VIDEOS

Each of the following videos feature an accounting academic identified in our study as exemplary in their use of innovative digital technologies in their teaching practice.



**Kar-Ming Chong**

08.14

The flipped classroom:  
Personalising the  
learning

Watch VIDEO



**Jonathan Tyler**

05.53

Clicker technology:  
Engaging students in  
active learning

Watch VIDEO



**Amanda White**

11.45

Social media: connecting,  
communicating and  
collaborating

Watch VIDEO



**Nicholas McGuigan & Thomas Kern**

07.27

iCFS: An intelligent  
tutoring system for  
adaptive learning

Watch VIDEO



**Sherrena Buckby**

04.57

Instant response tools:  
Fostering critical  
thinking

Watch VIDEO



**David Bond**

08.42

Video learning  
resources: Open access  
for all

Watch VIDEO





INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE



# ■ KAR-MING CHONG

His integrated and embedded approach shows how various web 2.0 technologies can be used to change how valuable face-to-face time is spent with students.

*"...students are now learning by doing rather than just sitting and listening to me and... I think this is the better approach... it's a more personalised approach to student learning."*

Kar Ming Chong

CA | Senior Lecturer, School of Accounting | Australian School of Business | University of New South Wales



## NAVIGATE THROUGH VIDEO:

- ▶▶ **Question 1**  
Why is technology important in accounting education?
- ▶▶ **Question 2**  
Why did you introduce the flipped classroom?
- ▶▶ **Question 3**  
How is it used?
- ▶▶ **Question 4**  
What's in it for the students and what is their feedback?
- ▶▶ **Question 5**  
And the impact on student learning is...?

## Resources

- ▶ **"FLIPPING" A CLASS. CENTER FOR TEACHING AND LEARNING, UNIVERSITY OF TEXAS AT AUSTIN WEBSITE**  
[http://ctl.utexas.edu/teaching/flipping\\_a\\_class/what\\_is\\_flipped](http://ctl.utexas.edu/teaching/flipping_a_class/what_is_flipped)
- ▶ **USING CAMTASIA TO CREATE VIDEOS TO HELP FLIP YOUR CLASSROOM**  
<http://www.techsmith.com/education-flipped-classroom.html>
- ▶ **7 THINGS YOU SHOULD KNOW ABOUT... "FLIPPED CLASSROOM"**  
<https://net.educause.edu/ir/library/pdf/eli7081.pdf>
- ▶ **TUCKER, B., 2012. THE FLIPPED CLASSROOM: ONLINE INSTRUCTION AT HOME FREES UP TIME FOR LEARNING. EDUCATION NEXT. PG 82 - 83** [http://educationnext.org/files/ednext\\_20121\\_BTucker.pdf](http://educationnext.org/files/ednext_20121_BTucker.pdf)



INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE



# ■ JONATHAN TYLER

Jonathan uses clicker technology for polling and incorporates a screen task assignment designed to engage students in active learning.

*"...it's not just about understanding a theory and reproducing the theory. So we've got to get that level of participation, that level of engagement, that level of interest."*

Jonathan Tyler

CA | Senior Lecturer and Deputy  
Head, School of Accounting |  
University of Technology, Sydney



## NAVIGATE THROUGH VIDEO:

- ▶▶ **Question 1**  
Why is technology important in accounting education?
- ▶▶ **Question 2**  
Why do you use clicker technology in your first year accounting class?
- ▶▶ **Question 3**  
How is it used?
- ▶▶ **Question 4**  
What's in it for the students and what is their feedback?
- ▶▶ **Question 5**  
And the impact on student learning is...?

## Resources

- ▶ **HOW TO USE JING - SHORT VIDEO TUTORIALS**  
<http://www.techsmith.com/tutorial-jing.html>
- ▶ **GETTING STARTED WITH YOUTUBE**  
<http://www.youtube.com/yt/about/getting-started.html>
- ▶ **USING YOUTUBE FOR EDUCATION**  
<http://www.youtube.com/yt/creators/education.html>
- ▶ **USING JING - COGS**  
<http://www.screencast.com/t/roh1y1XjuLX>
- ▶ **USING YOUTUBE ADJUSTING ENTRIES**  
<http://www.youtube.com/watch?v=xFZxdfZAg5Q&feature=youtu.be>





INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE



## ■ AMANDA WHITE

Amanda uses social media technologies to effectively deliver content, engage with students and ensure the latest news in the discipline is at their fingertips.

*"I think it [technology] has a really important impact in terms of communicating with students in a manner that they're familiar with, and that they use frequently."*

Amanda White

PhD | Lecturer, Accounting  
Discipline Group | UTS Business  
School | University of Technology,  
Sydney



### NAVIGATE THROUGH VIDEO:

- ▶▶ **Question 1**  
Why is technology important in accounting education?
- ▶▶ **Question 2**  
Why do you use social media extensively in your curriculum design?
- ▶▶ **Question 3**  
How is it used?
- ▶▶ **Question 4**  
What's in it for the students and what is their feedback?
- ▶▶ **Question 5**  
And the impact on student learning is...?

### Resources

- **7 WAYS TEACHERS USE SOCIAL MEDIA IN THE CLASSROOM**  
<http://mashable.com/2013/08/18/social-media-teachers/>
- **EDUDEMIC CONNECTING EDUCATION AND TECHNOLOGY - SOCIAL MEDIA**  
<http://www.edudemic.com/social-media/>
- **THE TEACHER'S GUIDE TO USING YOUTUBE IN THE CLASSROOM**  
<http://www.edudemic.com/youtube-in-classroom/>
- **GUIDE TO USING TWITTER IN YOUR TEACHING PRACTICE**  
<http://blogs.kqed.org/education/how-to-use-twitter-in-your-teaching-practice/>
- **100 (UPDATED) WAYS TO USE FACEBOOK IN THE CLASSROOM**  
<http://www.edudemic.com/100-updated-ways-to-use-facebook-in-your-classroom/>

- **AMANDA'S YOUTUBE CHANNEL**  
<http://www.youtube.com/user/AmandaLovesToAudit>
- **FOLLOW AMANDA ON TWITTER**  
<http://www.twitter.com/AmandasAudit>



INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE

# ■ NICHOLAS MCGUIGAN & THOMAS KERN



iCFS is able to profile student work, providing varying degrees of assistance and feedback and progress at a level of difficulty suited to the individual learner.

*"We just don't feel... that we engage our students as best we could, and that's because we don't reach them on their level."*

Mr Nick McGuigan  
Senior Lecturer, Accounting and  
Corporate Governance |  
Macquarie University



## NAVIGATE THROUGH VIDEO:

- ▶▶ **Question 1**  
Why is technology important in accounting education?
- ▶▶ **Question 2**  
Why did you introduce the Intelligent Tutoring System?
- ▶▶ **Question 3**  
How is it used?
- ▶▶ **Question 4**  
What's in it for the students and what is their feedback?
- ▶▶ **Question 5**  
And the impact on student learning is...?

## Resources

### iCFS AND ITS USER INTERFACE DESIGN NARRATIVE

Kern, T., McGuigan, N., Mitrovic, A., Najjar, A.S., and Sin, S. (May 2014)



### iCFS: DEVELOPING INTELLIGENT TUTORING CAPACITY IN THE ACCOUNTING CURRICULUM

<http://ijlhe.cgpublisher.com/product/pub.260/prod.71>

*The International Journal of Learning in Higher Education*,  
Volume 20, Issue 3 pp.91-103. Published online: May 6, 2014



INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE



## ■ SHERRENA BUCKBY

Each week students are asked to respond to questions to critically reflect on the week's work using GoSoapBox a web based instant response tool.

*"I just think it's about being more efficient and flexible for students. So it offers student's flexibility. It offers us efficiencies and I just think it's the way forward."*

Sherrena Buckby  
Senior Lecturer, QUT Business  
School Accountancy | Accounting  
Systems and Technologies |  
Queensland University of  
Technology



### NAVIGATE THROUGH VIDEO:

- ▶▶ **Question 1**  
Why is technology important in accounting education?
- ▶▶ **Question 2**  
Why do you use an instant response tool like GoSoapBox in your teaching?
- ▶▶ **Question 3**  
How is it used?
- ▶▶ **Question 4**  
What's in it for the students and what is their feedback?
- ▶▶ **Question 5**  
And the impact on student learning is...?

### Resources

- ▶ **GOSOAPBOX CLASSROOM RESPONSE SYSTEM ENGAGES STUDENTS**  
<http://www.educause.edu/ero/article/gosoapbox-classroom-response-system-engages-students>
- ▶ **7 THINGS YOU SHOULD KNOW ABOUT OPEN-ENDED RESPONSE SYSTEM**  
<http://www.educause.edu/library/resources/7-things-you-should-know-about-open-ended-response-systems>
- ▶ **GoSoapBox**  
<http://www.gosoapbox.com/>
- ▶ **SOCRATIVE**  
<http://www.socrative.com/>
- ▶ **POLL EVERYWHERE**  
<http://www.poll Everywhere.com/>



INTERNET CONNECTION REQUIRED  
TO VIEW VIDEOS ON YOUTUBE



## ■ DAVID BOND

Using various social media and video learning resources to ensure open access for all, this innovative use of different types of videos are embedded as part of David's unit design.

*"We work a strategy document around our social media that we put together for our subject about how we're going to use it, what the purpose of it is, even some of the logistics behind it."*

David Bond

CA | Senior Lecturer, Accounting  
Discipline Group | Accounting  
Standards and Regulation |  
University of Technology, Sydney



### NAVIGATE THROUGH VIDEO:

- ▶▶ **Question 1**  
Why is technology important in accounting education?
- ▶▶ **Question 2**  
Why do you create short video clips for students?
- ▶▶ **Question 3**  
How are they used?
- ▶▶ **Question 4**  
What's in it for the students and what is their feedback?
- ▶▶ **Question 5**  
And the impact on student learning is...?

### Resources



#### CHECK OUT DR DAVID BOND'S YOUTUBE CHANNEL

[www.youtube.com/drdavebond](http://www.youtube.com/drdavebond)



#### ACCOUNTING FOR JOINT VENTURES - PART 1 - 7 (PLAYLIST)

<http://www.youtube.com/playlist?list=PLJasGkrJ0EXc-MME7tGKPquhtmODHak0Z>



#### INTRODUCTION TO BUSINESS COMBINATIONS

[http://www.youtube.com/watch?v=nLY3H\\_LEGek](http://www.youtube.com/watch?v=nLY3H_LEGek)

#### TECHNOLOGIES TO HELP YOU CREATE SHORT VIDEOS FOR TEACHING AND LEARNING

**Devices:** iPads, Android tablets, computers, smart mobiles, digital video cameras and portable digital recorders; Interactive pen and digital drawing mouse pads (e.g. Wacom pad). **Software:** mobile apps for video creation (e.g. Docrer, iMovie, Magisto, Viddy, Splice); computer software for video and annotation production (e.g. Camstudio, iMovie, SmoothDraw), Publishing video (e.g. YouTube, Vimeo)

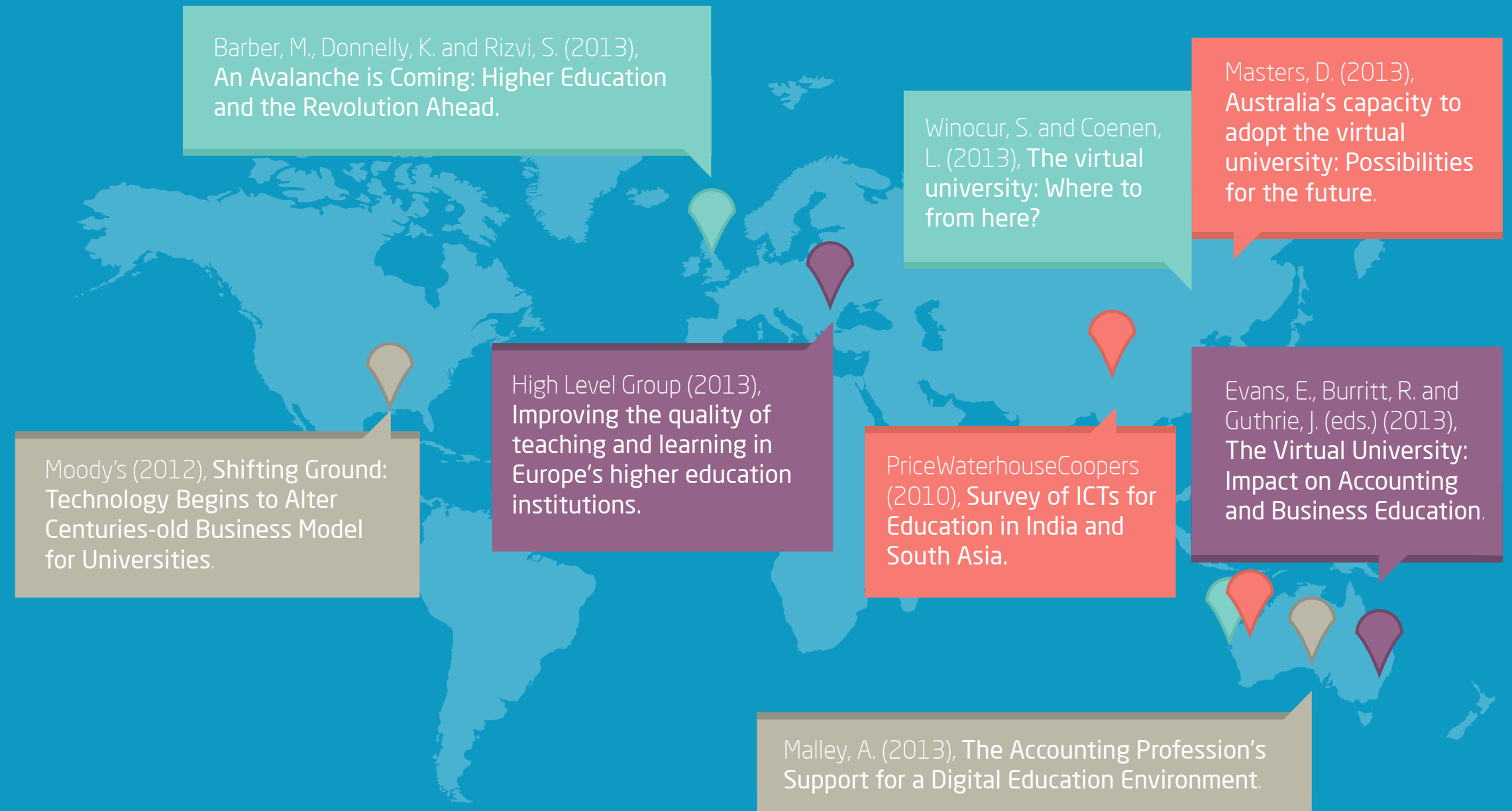
# ■ WHAT THE FUTURE HOLDS...



Technology is here to stay, it is ever-changing and if institutions and academics wish to stay relevant and competitive, they will embrace the changes afforded by new technologies.

*We must seek to explore and to incorporate all of the available technologies but in a way that adds value. This is the key challenge for the universities and the business schools of the future.*

*(Evans, Burritt and Guthrie 2013, p. 5)*



# ■ SELECTED REFERENCES



Barber, M., Donnelly, K. & Rizvi, S. (2013).

*An Avalanche is Coming: Higher Education and the Revolution Ahead.*

Institute for Public Policy Research, London, UK.

---

Cheng, J. & Swanson, Z. (2011).

*An Examination Of The Effects Of Web-based Tutorials On Accounting Student Learning Outcomes.* Review of Higher Education & Self-Learning, 3(10).

---

Dowling C., Godfrey, J. M. & Gyles, N. (2003).

*Do hybrid flexible delivery teaching methods improve accounting students' learning outcomes?* Accounting Education, 12(4), pp. 373-391.

---

Evans, E., Burritt, R. & Guthrie, J. (eds.) (2013).

*The Virtual University: Impact on Accounting and Business Education.*

Institute of Chartered Accountants Australia, New South Wales.

---

High Level Group (2013).

*Improving the quality of teaching and learning in Europe's higher education institutions.* Report to the European Commission, available at:

[http://ec.europa.eu/education/library/reports/modernisation\\_en.pdf](http://ec.europa.eu/education/library/reports/modernisation_en.pdf)

---

Malley, A. (2013).

*The Accounting Profession's Support for a Digital Education Environment.*

Academic Leadership Series, 4, pp. 53-56.

---

Masters, D. (2013).

*Australia's capacity to adopt the virtual university: Possibilities for the future.* Academic Leadership Series, 4, pp. 30-33. Australia.

---

Moody's (2012).

*Shifting Ground: Technology Begins to Alter Centuries-old Business Model for Universities.* Moody's Investor Services, 12 September. USA, New York City.

---

Potter, B. N. & Johnston, C. G. (2006).

*The effect of interactive on-line learning systems on student learning outcomes in accounting.* Journal of Accounting Education, 24(1), pp. 16-34.

---

PriceWaterhouseCoopers (2010).

*Survey of ICTs for Education in India and South Asia, Dehli, India.*

Available at: [http://www.infodev.org/infodev-files/resource/InfodevDocuments\\_828.pdf](http://www.infodev.org/infodev-files/resource/InfodevDocuments_828.pdf).

---

Schneckenberg, D. (2009).

*Understanding the real barriers to technology-enhanced innovation in higher education.* Educational Research, 51(4), pp. 411-424.

---

Winocur, S. & Coenen, L. (2013).

*The virtual university: Where to from here?* Academic Leadership Series, 4, pp. 70-74.

---





Deakin University is engaging in a range of teaching and learning innovations using digital technologies such as revamping traditional lecture recordings to interactive and engaging cloud video concepts, e-Portfolios for evidencing student learning, simulated assessments, and more. For more information refer to Deakin University's Learning@Deakin website: **[www.deakin.edu.au/learning](http://www.deakin.edu.au/learning)**

If you would like to provide feedback or have any queries about the iResource, please contact: Project Leader, Professor Kim Watty at **[kim.watty@deakin.edu.au](mailto:kim.watty@deakin.edu.au)**