



# School of Architecture, Building, Engineering

## Mobile ePortfolio for assessment



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NZ department of statistics 2014

Using apps for social contact on their most preferred device were Female 83% Male 73%

Owning or having access to a Smartphone

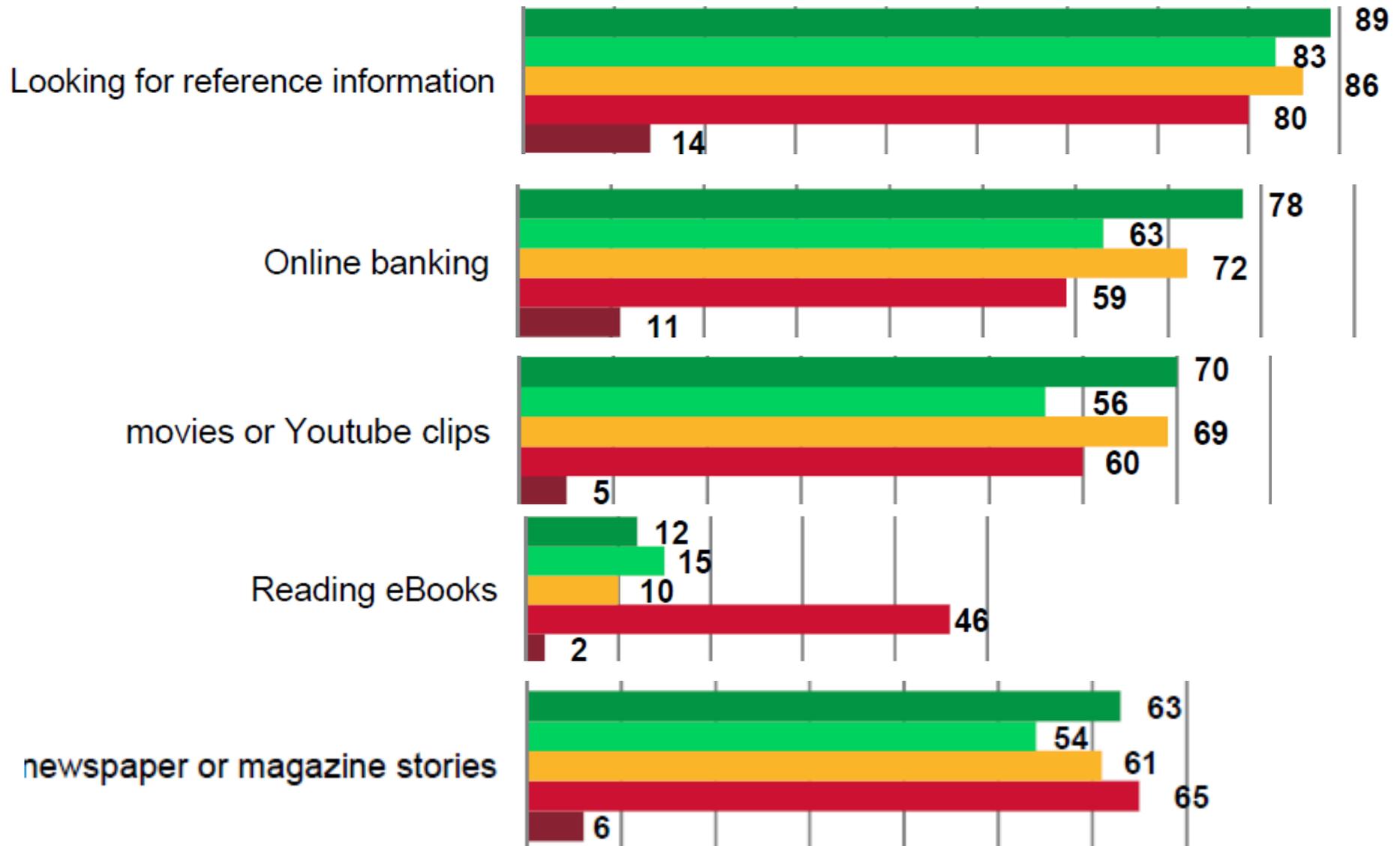
- 82% 18-34 year olds
- Maori and Pacifica 70% compared to 55% NZ European

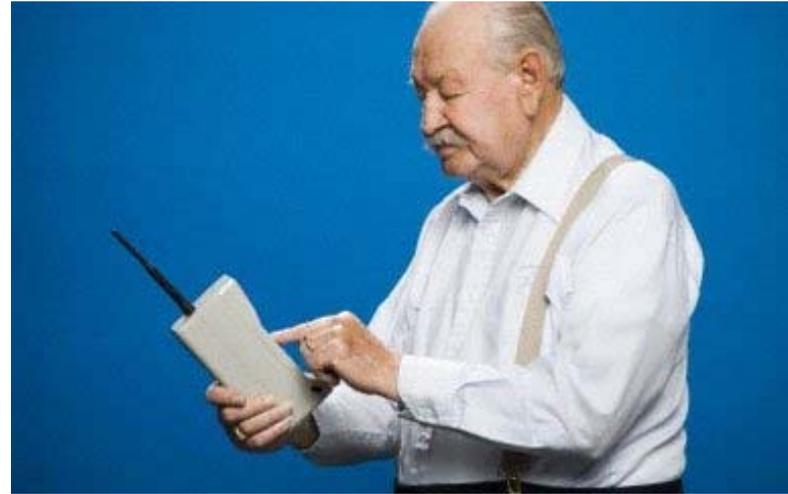
92% of 18 – 34 year olds use smart device every day

*A Report on a Survey of New Zealanders' Use of Mobile Electronic Devices 2014*

[http://www.researchnz.com/pdf/Special%20Reports/ResearchNZ%20Special%20Report%20-%20NZrs\\_Device\\_Use\\_09-04-14.pdf](http://www.researchnz.com/pdf/Special%20Reports/ResearchNZ%20Special%20Report%20-%20NZrs_Device_Use_09-04-14.pdf)

■ Laptop 
 ■ Smartphone 
 ■ PC 
 ■ Tablet 
 ■ Other mobile phone

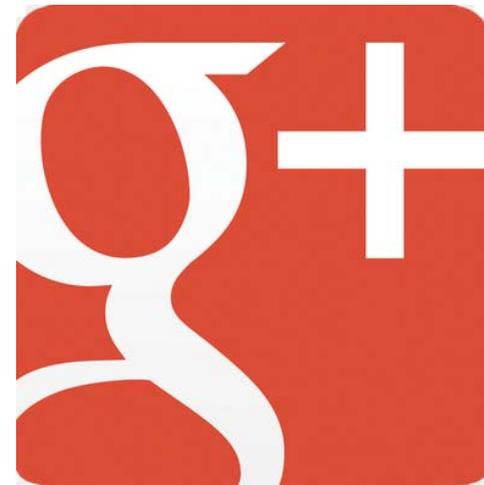


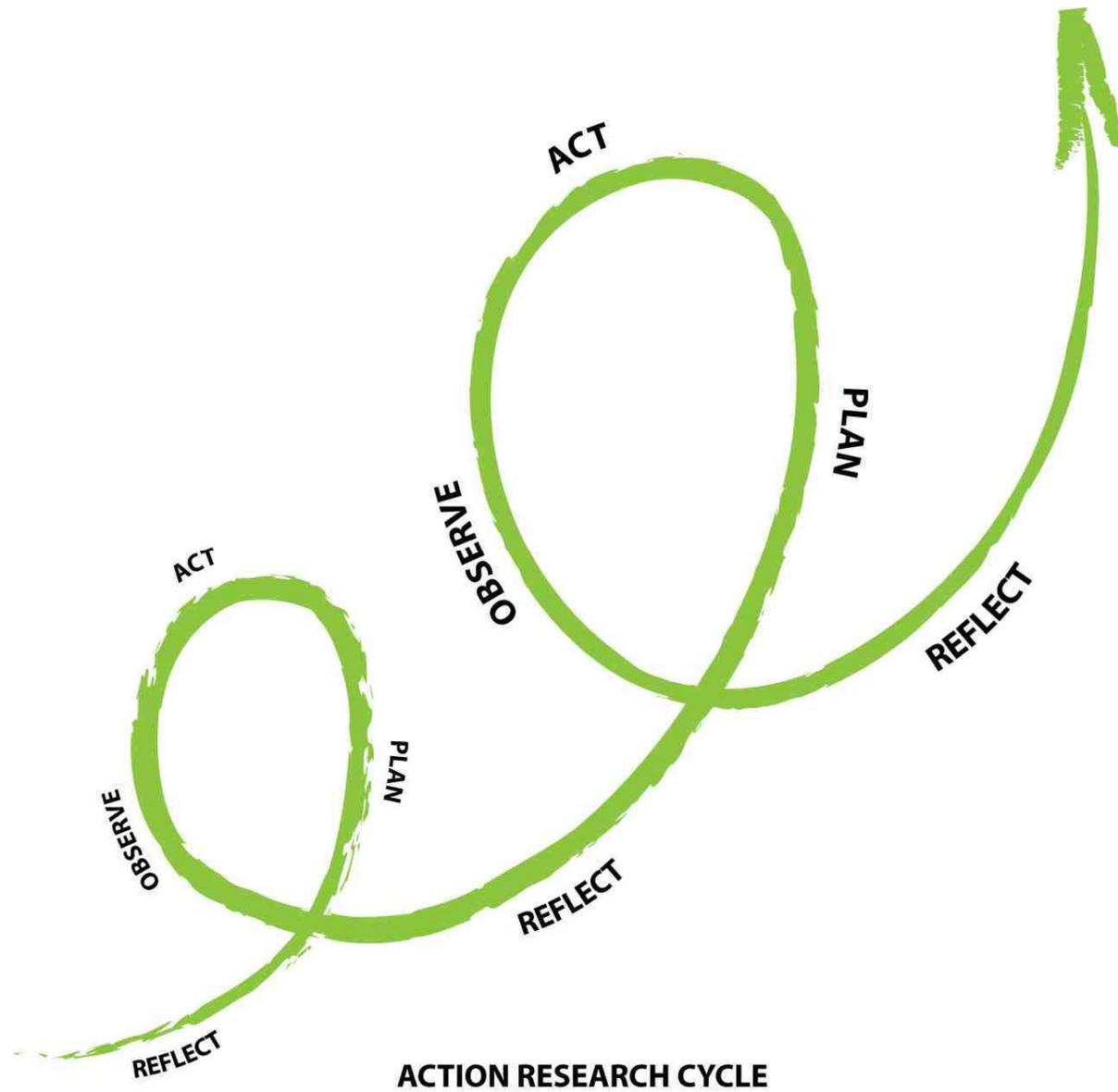


what do you use?

# Methodology

- Students could try out different mobile applications (apps) using their personal wireless mobile device.
- Survey the students during and after use
- consider feedback and observations





Source : <http://www.kaytejudge.com/wp-content/uploads/2011/05/action-research-diagram.jpg>



Work posted to group page.

Group work

Simple exercise.

 **Mitchell Frear**  
August 7

- 1- holding e staff
- 2- looking through dumpy level held up by tripod
- 3- recording measurements
- 4- working out the reduced level
- 5- finished field work sheet



Like · Comment

✓ Seen by 12



 August 29

Done and dusted



[Like](#) · [Comment](#)

✓ [Seen by 10](#)

 August 15

Work experience. Took out floor to roof window, added framing for a smaller window and dog door. Took off rotten weatherboards and replaced some batts, put on new weatherboards, no after pictures for that my bad.



Like · Comment

✓ Seen by 11



**Eddie Acerbic Stewart**

August 4

T & G ceiling - i done on work exp.

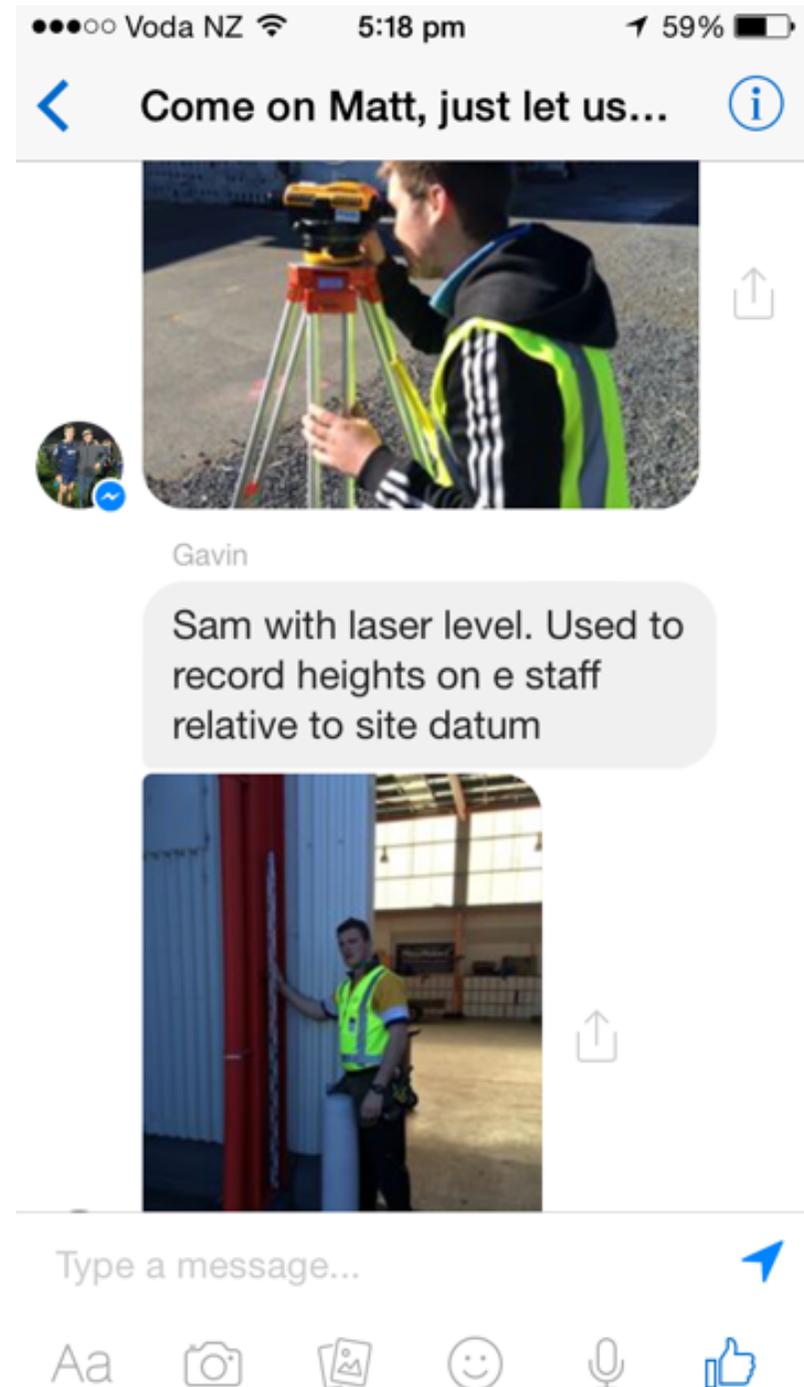


Like · Comment

✓ Seen by 13



- Positive feedback 
- Completion rate 
- Additional uses 
- other malarkey 





Social connectivity

Simplistic

Groups worked well

Confident users

I stuffed up

More faith in students

Try new approach

Set higher goals

Individual focus

Community was important

Showed example beforehand

Gave them time to learn new app

Worked with individuals



# EVERNOTE

Evernote is a place to store and gather everything. Clip web articles, capture handwritten notes, lists, snap photos and voice memos

The screenshot displays the Evernote web interface. On the left is a sidebar with sections: Shortcuts (a drag-and-drop area), Notebooks (listing 'All Notes (39)', 'ABE Development (1)', 'Blog Entries (6)', 'Eportfolio forum (5)', 'Mobile learning Project (16)', 'School Board (2)', 'Student ePortfolio (9)', and 'Trash (29)'), and Tags (listing 'e learn mobile learning (1)', 'hamilton', 'mobile users (1)', and 'research (1)'). The main content area is titled 'All Notes' and shows a list of notes: 'mobile eportfolio' (6 minutes ago) with an Otago Polytechnic logo; 'Note from 105 Forth Street' (4 days ago) about academic workload; 'mobile phone use 2014' (2 weeks ago) with a PDF thumbnail; a URL note 'http://evernote.com/webclipper/ios/' (2 weeks ago); '20x20 sesssion' (3 weeks ago) about Sonography; 'Stephen Bright' (3 weeks ago) about software usability; and 'Image Note created in Skitch' (3 weeks ago) with a photo thumbnail. At the bottom right, it says 'View Options ▲' and '1-8 of 39 notes'.



# EVERNOTE

- Notes (73)
- Notebooks
- Tags
- Atlas
- Market
- Premium

-  Exterior cladding ePortfolio
-  Time to learn
-  Popular with some
-  No peer marking

Student ePortfolio ▾   ▾

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**Wall frame day 1**  
24/10/2014  
Dunedin City, Otago, New Zealand  
2 attachments, 4.1MB 

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**Sam Paris, Cladding**  
8/10/2014 Cavity battens were installed over the top of each stud to provide a drainage and ventilation to the outside of the house. Cavity closer at the botto... 

---

**Nick Barth, Cladding**  
24/08/2014 Here we were cutting the weather boards. Correct blade had to be used as it is a fibre cement board. Also dust mask ear muffs and glasses had to ... 

---

**Modular scaffold**  
25/06/2014 kwikstage 

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**hazard and control**  
25/06/2014  
45°52'10 S 170°31'11 E  
IMG\_0185.JPG, 1.9MB 

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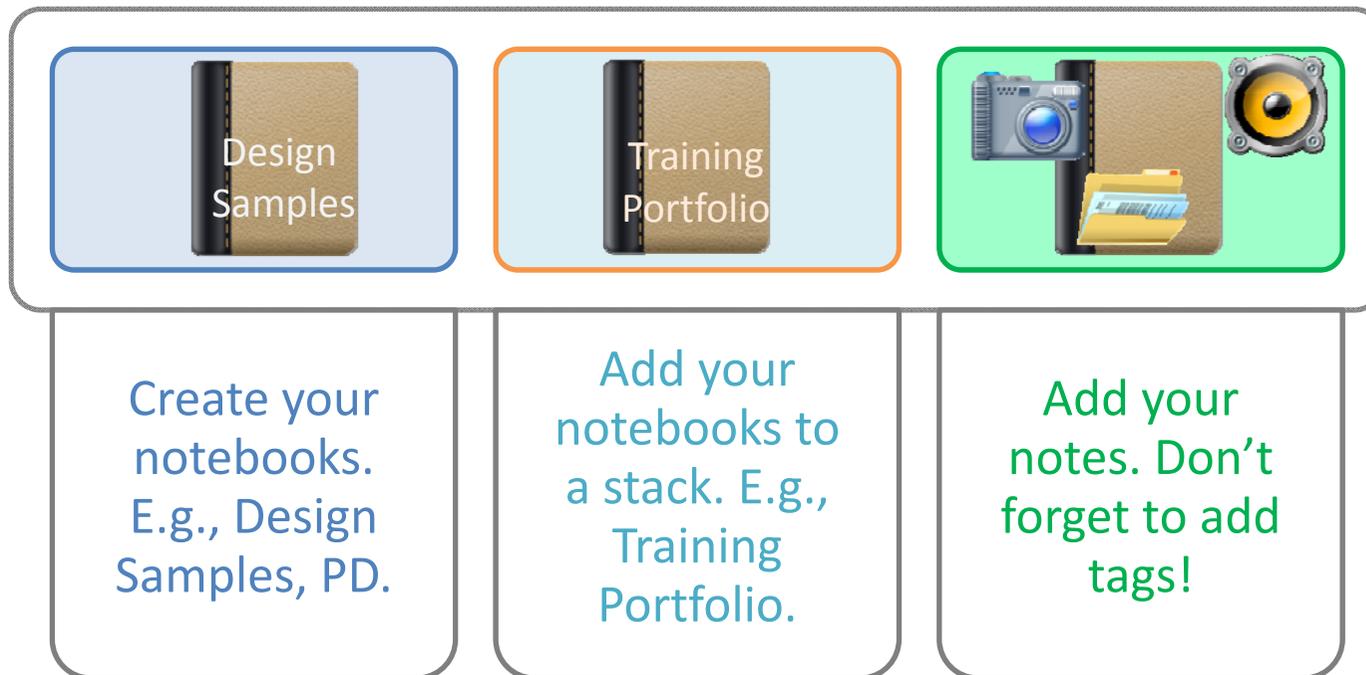
**mobile scaffold**  
25/06/2014  
45°52'11 S 170°31'11 E  
IMG\_0211.jpg, 2.8MB 

---

**Assembly**  
19/06/2014  
45°52'11 S 170°31'12 E  
Evernote Camera Roll 2014060... 2.0MB 



# EVERNOTE



Evernote is a freemium, free form note taking application. It is referred to as 'platform agnostic' because it is available across many platforms including Mac, PC, iOS and Android as well as a web-based version.

# Evernote results



No sharing  
Feedback positive  
Flipped classroom  
Skitch  
Wi-fi problems

# Action research



Little collaboration  
better quality than previous  
working harder

Time well spent instructing  
My work load lessened  
Student took more  
responsibility for themselves

Create a social time to learn app

Used evernote as a teaching  
platform to show others how  
it can be used better.  
  
Talked to two experts about  
using it again next year.



- Second largest social networking site
- More than social networking
- 540 million monthly active users
- Early adopters of [Google+](#) in mid-2011 were mostly male (71.24%), and the dominant age bracket (35%) was between 25 and 34



- Student were asked to upload their learning material for wall linings.

[Student findings](#)

- [Students portfolio](#)



A profile card for Edsta Stewart on Google+. It features a circular profile picture of a man with a red turtleneck. Below the photo, the name "Edsta Stewart" is displayed in white. Underneath, it says "Lives in Dunedin". A white box contains a red icon and the text "Carpentry Class 2014". At the bottom, it shows "1 follower | 621 views".

**Edsta Stewart**

Lives in Dunedin

 **Carpentry Class 2014**

1 follower | 621 views



Google+

Search for people, pages, or posts



+Matt



People

Find people

Have you in circles

Your circles

Discover



### Carpentry Class 2014 (16)

Relevance

Actions

Type a name

- |                  |              |                 |                 |               |             |
|------------------|--------------|-----------------|-----------------|---------------|-------------|
|                  | Add a person | rafael ortmeier | billy walker    | Edsta Stewart | Sam Brouwer |
| mitch frear      | Simon McCaig | Jeremy Bruce    | Rhys Rutherford | Nick Barth    |             |
| Kimberley Young. | Gavin Stark  | Chris Drummond  | Chris McLean    | Madoc Ogden   |             |

Drag people to your circles to follow and share





## Community

**maurc Uyuen**  
Shared privately - Sep 19, 2014

- 1- making sure there are no holes in insulation for pre-line inspection
- 2- putting glue on rondo for fizzaing it to ceiling and then put stews in after.
- 3- putting up the gib cove
- 4- 13mm gib
- 5- 10mm gib
- 6- make sure all screws are just below flush for post line inspection
- 7- storage of gib and when handing it make sure it is up right and not on flat other wise you risk damaging the board
- 8- screwing patten for the bracing sheets
- 9- aqua-line gib



9/19/14  
8 photos

+1



Add a comment...



**Matt Thompson**  
Shared privately - Sep 4, 2014

nowyoukno originally shared:



**Kimberley Young.**  
Shared privately - Sep 17, 2014



Polytech- Wall linings and trim

+1



**Kimberley Young.** - Sep 17, 2014  
13mm standard gib on ceiling and 10mm on the wall.

Add a comment...



**Simon McCaig**  
Shared only with you - Sep 4, 2014

Hey mate

+1



Add a comment...



Fixing gib to ceiling using screws. The



Cutting gib with



Cornice 55mm joint and sealed by GIB cove bond



Preparing a room for inspection



## Results

Clunky

Hard to annotate photos

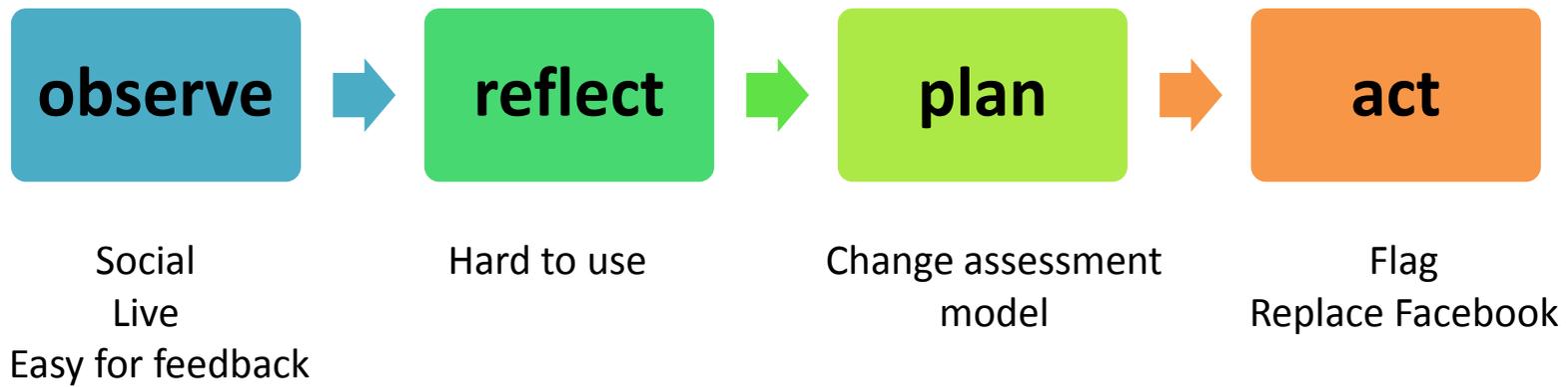
Community

My favourite

Overall experience was not positive.



# Action research





# Own choice

students chose a platform

Facebook  
Google +  
Evernote  
Notability  
Tumblr  
Google docs

Hand tools	EP98	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Machinery	EP99	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Powertools	EP00	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Setting out	EP04	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Levelling	EP05	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Piles	EP80	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Formwork	EP08	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Floor framing and flooring	EP81	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Wall framing	EP82	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Roof framing	EP83	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Alt. Roof framing	EP84	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Scaffolding	EP16	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Exterior Cladding	EP17	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Joinery	EP85	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Roofing	EP19	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Insulation	EP86	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Lining and trim	EP88	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Hardware	EP23	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Stairs	EP89	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Adhesive and Sealants	EP28	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Formwork	EP29	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Alterations and Additions	EP92	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Beams	EP34	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Waterproof Detailing	EP11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

Colour denotes portfolio tool



Your choice



F F F F F F F F F F F F F F DNF F F

Result	
12	Pass



# Results

Students discovered better ways of recording their learning

Created time

84% students thought it was easier on a mobile device than desktop.



Good.

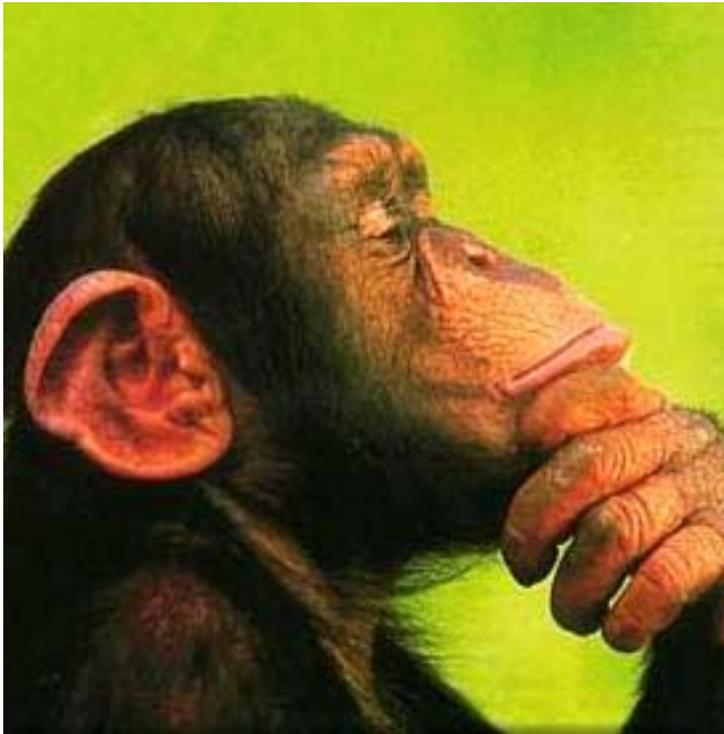


Bad

Better connections with others

Some thought it was disruptive

## Conclusion and Recommendations



Spend time learning app  
Expect the unexpected  
Use others to look at results  
Evernote a good option for the future  
Best option is to let them decide

# Learners and Mobile Devices

## Increasing student engagement in constructivist learning at Otago Polytechnic

Project Team: Samuel Mann, Elise Allen, Rachel Byars, Hillary Jenkins, Glenys Ker, Matt Thompson

*Keywords: mobile, constructivist, engagement, project-based learning*

*This poster describes an approach for the development of social and mobile educational technology resources for the support of constructivist learning in applied tertiary education. It describes five case studies where innovative teaching is challenging traditional support structures.*

#### BACKGROUND

Numerous authors have described the benefits of learning within a social constructivist paradigm. Learning is based upon the premise that knowledge should not be acquired passively, it should be actively constructed by cognition, and that cognition involves the context of operation. The contribution of this research described by this poster is that it attempts to implement the earlier work of McKewen and Mann (2013) in supporting learning that is project, problem and group-based, is experiential, and involves reflective learning. The question for this research, is what are appropriate educational technologies to support such a learning environment?

#### CASE STUDIES

The use of online resources such as wikis, shared cloud storage and social media facilitate the development of group and project management skills, while other digital resources can aid personal time management and similar professional skills.

The biggest challenges in the introduction of mobile devices to the educational context involve the transfer of mobile digital literacies developed by learners in a social context to the use of the same devices in a professional and educational context. This includes a stigma around the use of personal devices such as mobile phones in the classroom which comes from more traditional educational environments. The transfer of digital communication skills from the social realm to a professional mode is another example of a challenge to be met.



#### TOURISM

For the past six years Tourism have been using Wikilocutor (an open platform) to deliver their courses. Continuing practice and research for further development has been progressing, with the use of mobile devices, into areas to support this platform such as: ePortfolios, weblogs (for learning activities and assessment), micro blogging (shortened postings), Wikibooks as resources (can be used with any platform open or closed), and the use of travel and tourism apps.

Challenges including copyright issues, lack of subject-related wiki resources and the incorporation of eBooks are being investigated.



#### APPLIED MANAGEMENT

How are mobile devices used to stay connected during a student's Internship/Industry Project semester?

The project aims to provide a snapshot in time of how students in industry placement utilise their mobile devices to stay connected with their academic supervisor, academic resources and their peers. Students have been encouraged through their studies to bring their own device and utilise them within a classroom setting, however, the challenge is how they use them to stay connected, reflect on their internship project practice and whether are utilised to remain engaged with the academic material and resources. The project will also aim to explore the challenges of using mobile technology within their host workplaces.



#### WORK-BASED LEARNING

The generic area of work-based learning sees students negotiating a set of learning outcomes and a pathway to achieve those in association with their usual employment. The challenge is the appropriate prompting of collection of what seems to the student as 'everyday' but is actually useful evidence of learning and opportunities for reflection. The potential includes immediacy, narrative and the creation of a community of practice amongst learners.



#### CARPENTRY: MOBILE EPORTFOLIOS

Using a variety of social media and note taking mobile applications to record students work to create an ePortfolio. The artefacts in their ePortfolio are curated by them to form a reflection of their work and their learning.

Challenges include: students learning how to use new software, convincing students that it will save them time in the long run, finding inventive ways of giving the students timely feedback, and ensuring that students' devices could all use the same software.

Opportunities include: learning with students gives staff a better understanding of the demands placed on them, using devices to enhance students' learning that may have been opposed in the past, peer marking on social media, and learning about all the devices that my students were using.

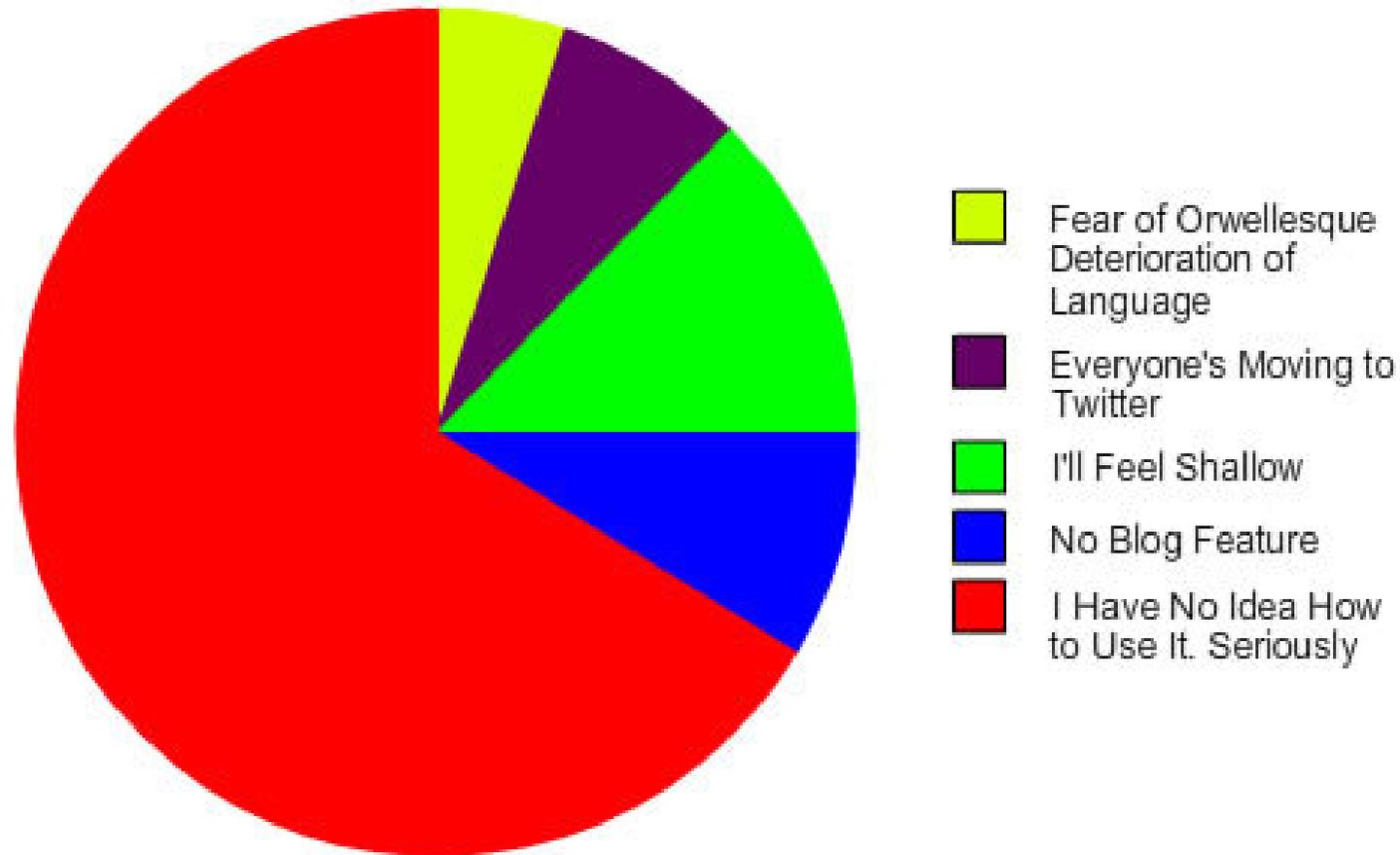
The five case studies described have several features in common. The challenge of supporting such learning is that all of these features factor against traditional support structures – both traditional instructive teaching, and well-developed educational technology supports such as the course management system. Further, each case study increases the challenges in particular ways – for one it is an already embedded use of wikis, for another it is students in cooperative education placements immersed in the workplace but isolated from each other. Rice and Wilson (1999) argue that it is important that technology is not a vestige of direct instruction. But neither is the student-led learning an excuse for not providing that knowledge construction environment. Just because the learning may seem ill-structured, it is not an excuse for "sink or swim in ill-structured environments" – what Karagorji and Symeonu (2005) call "an abdication of responsibility."

#### REFERENCES

- Mann, S., & McKewen, K. (2013). ePortfolios in constructivist tertiary vocational education: developing the use of mobile devices to increase student engagement. Paper presented at the Research and Development in Higher Education: The Place of Learning and Teaching, Volume 26.
- Rice, M. L., & Wilson, E. K. (1999). How technology aids constructivism in the social studies classroom. *The Social Studies*, 80(1), 28-33.
- Yasemin, K., & Symeonu, L. (2005). Translating Constructivism into Instructional Design: Potential and Limitations. *Journal of Educational Technology & Design*, 8(1), 104.



# Reasons Why I Don't Have a Facebook Yet



**Seriously. Stop Asking Me.**