

Smart-device Potential for Student Learning.

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A silver smartphone with a black screen. The screen displays the Sheffield Hallam University logo in the top left corner, followed by the title 'Smart-device potential for student learning' and the authors 'Ben Woodcock, Matt Armstrong, Anne Nortcliffe and Andrew Middleton'. The phone has a silver bezel and a circular home button on the right side.

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**Smart-device potential for
student learning**

***Ben Woodcock, Matt Armstrong,
Anne Nortcliffe and Andrew Middleton***

| Why?

Smart devices are having an impact on people's commercial practice (Chen et al, 2010, Durbin, 2011, Lin and Brown, 2007):

- what people work with
- who people work with
- how people work
- where people work
- when people work

So potential/need to change student learning practice?

Category	% Freq. 10/11	% Freq. 11/12	Examples
1.Productivity	21%	1%	Word processing, notes
2.Reading	8%	0.6%	PDF readers, newspapers
3.Browsing	21%	26%	Internet, Wikipedia
4.Media Capture	3%	6%	Voice record, camera
5.Managing learning	22%	0.5%	Blackboard, timetable
6. Social media	3%	0.2%	facebook, twitter,
7.Communications	8%	1%	Email, txt
8.Data manipulation	12%		Calculators, conversion
9.Subject specific tools	14%		Periodic tables,
10. Other	9%		Job sites, memory training

Smart learners (purposefully download apps for learning) survey respondents:

- 72 in 10/11
- 254 in 11/12

Because

- **Disruption** - change to engagement: who, when, where, what and how (consistent with Traxler, 2009) and Sharples *et al.* 2009
- **Accessibility** - consistent with Kang *et al.*, 2011
- **Learner autonomy** - consistent with Camargo *et al.*, 2011



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Everything I need is in my pocket.
*Every minute of my day ...when
I'm on the tram or in Uni' ...do it
then and there ... or make a note
and do it later.*

| Which Apps?

- Qualitative/Quantitative Dec'-Feb'2011 identified apps
- Qualitative Study in March'12 and Apr'12
- Students want apps with:
 - Simple Usability
 - Practical Functionality
 - Interoperability
 - Cost up to £5
 - Suitability for student use

However students:

- Typically focus on entertainment
- Limited awareness of apps for learning
- Lack of app marketing recommendations
- Current marketing through friend recommendations



Conclusion

- Trending increase student smart device ownership
- Smart device for learning
 - Some students actively harnessing potential
 - Majority students have limited use (i.e surfing)
 - Students are not adventurous
 - General lack of student awareness
 - University's role in promoting the potential?

| Recommendations

Apps for learning to be developed to fulfil:

- Ubiquity
- Efficiency
- Reliability
- Accessibility
- Richness
- Flexibility
- Security
- Interactivity

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