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iPads and mlearning at Manchester Medical School

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iPad Pilot Project 2011/12

- 457 Students in Year 4 of the MBChB + 250 Dentistry (3G iPads)
- 16GB WiFi Only iPad 2's
- No tutor iPads were distributed
- ~ 1100 iPads to Years 3 and 4 MBChB 2012

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Why?

- Students distributed across a wide geographical area
- Widely differing experiences and access to resources
- Poor student feedback in NSS
- Harmonisation of experience and access to technology

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Why iPads?

- Portability
- Availability
- Reliability
- Security

How?

- Loaned iPads
- Replacement policy
- End of project - Purchase option
- 2 stolen (abroad) 8 broken (screen damage)

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Encryption and Security

MDM Software allows configuration so that:

- All data is encrypted
- Requires alphanumeric passcode
- Minimum passcode length
- 5 min before auto-lock
- Maximum number of failed attempts
- Data can be remotely wiped

Connectivity in the NHS

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Hospital	WiFi Dec 2011	WiFi Nov 2012
MRI*		
North Manchester		
Oldham		
Tameside		
Rhyl Hospital		
Wrexham Hospital		
Noble's Isle of Man		
Christies		
Hope Hospital*		
Royal Albert Edward		
Wythenshawe*		
Leighton		
Macclesfield		
Stepping Hill		
Preston Royal*		
Blackburn Royal		
Chorley Hospital		
Royal Bolton Hospital		
Burnley Hospital		

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mLearning: a definition

"Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies"

Clinical years

- Experiential learning
- Opportunistic
- Unstructured
- Distributed

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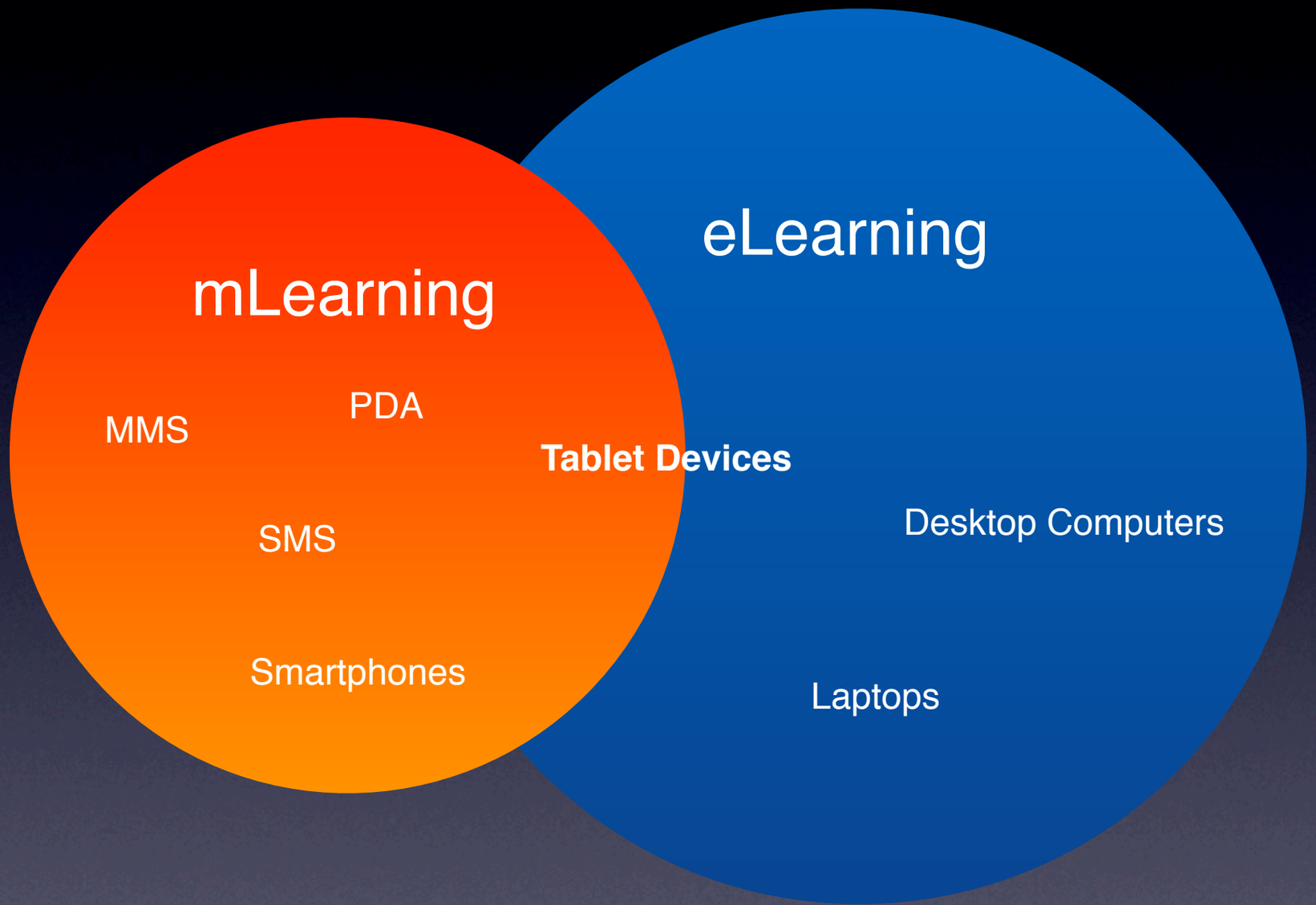

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Why m-learning?

- Blended learning
- “just-in-time” learning
- Learning in the workplace
- Supporting learning rather than being integral to it
- Re-engages students

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Evaluation Data

- 88% : improved learning experience
- 85% : Positively affected learning
- 78% : Make use of time previously wasted
- 90% : Easy to use and intuitive
- 80% : Developing new ways of learning
- 65% : Printing less

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Student iPad Demos

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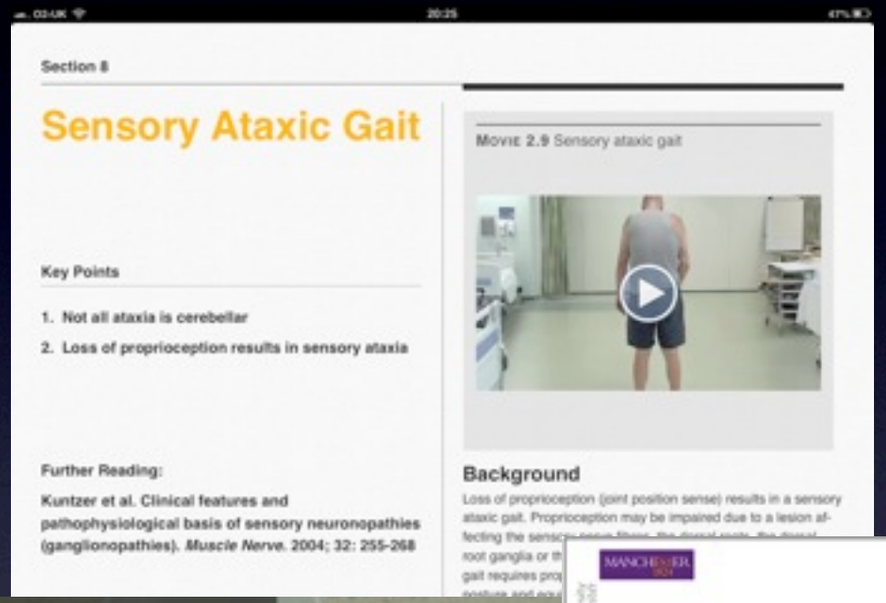
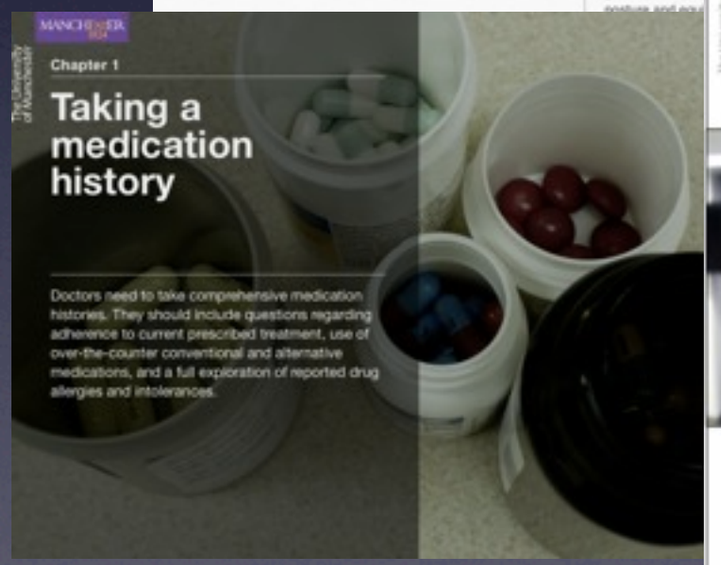
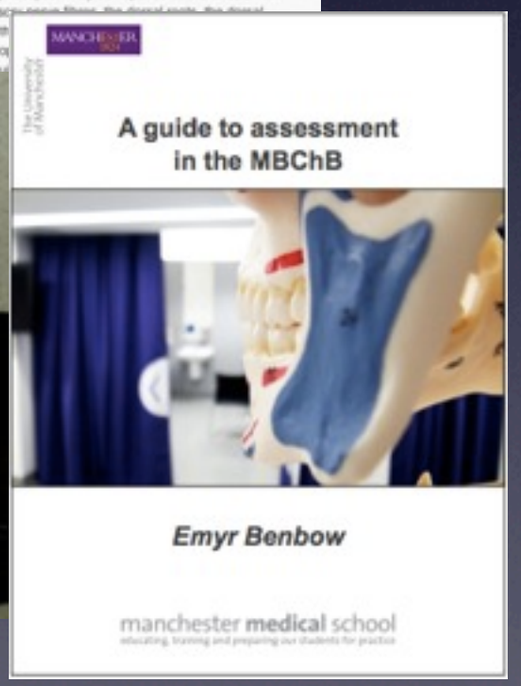
iBooks

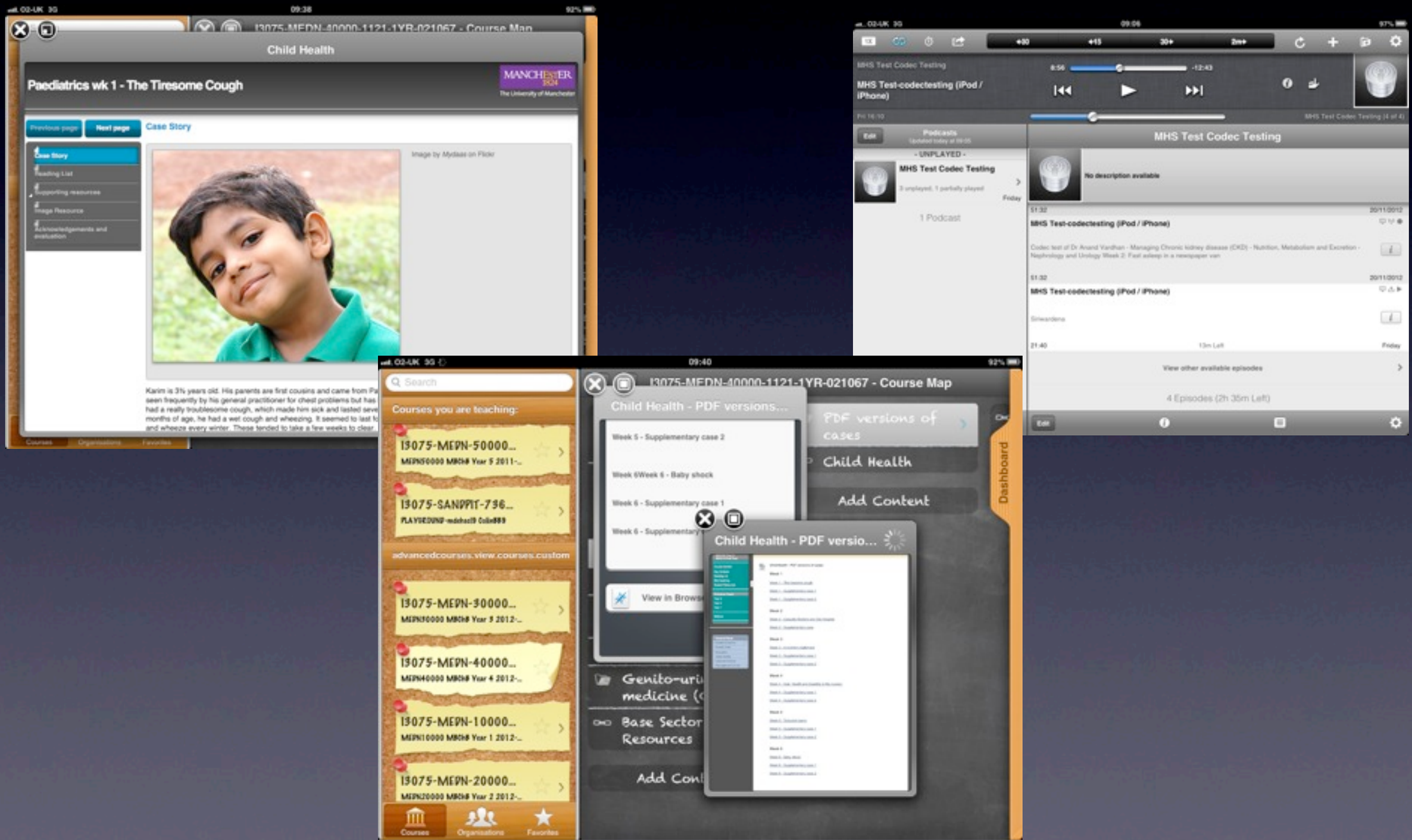
- Course Handbooks
- Module Handbooks
- Prescribing skills and formulary
- iTunesU







Course Materials



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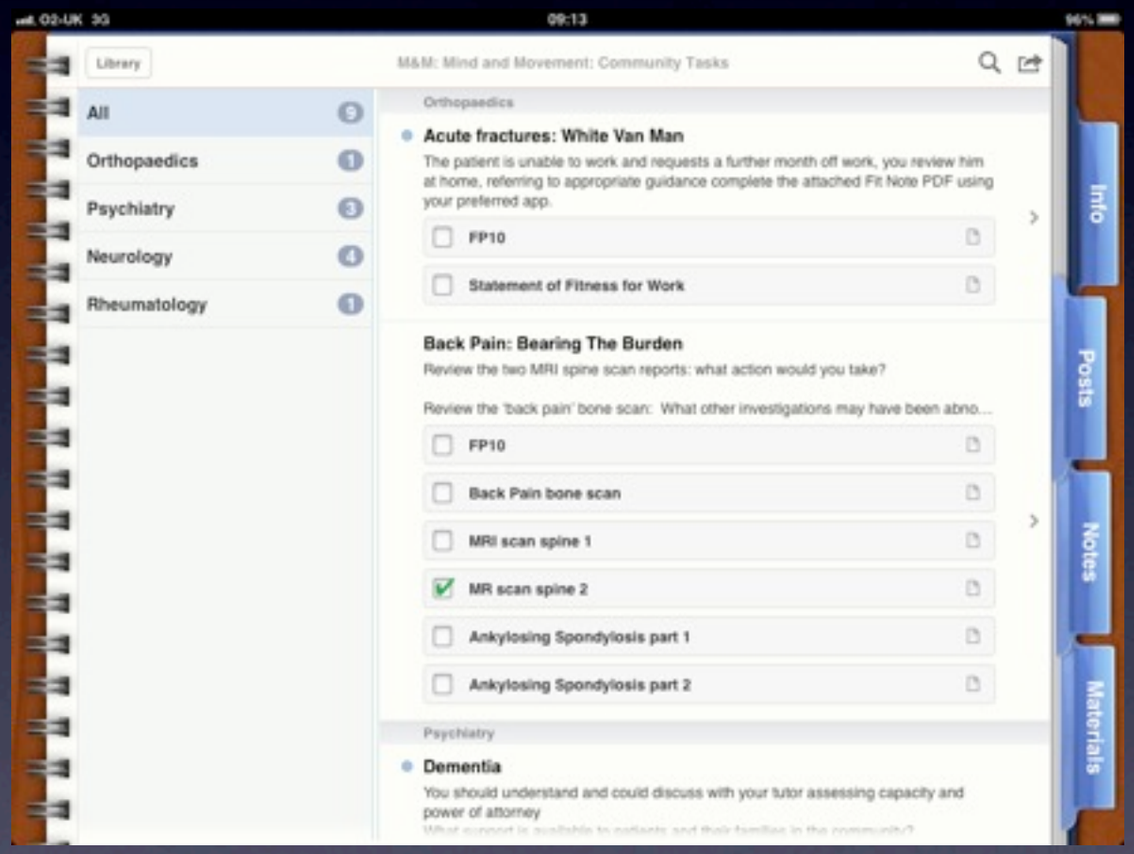
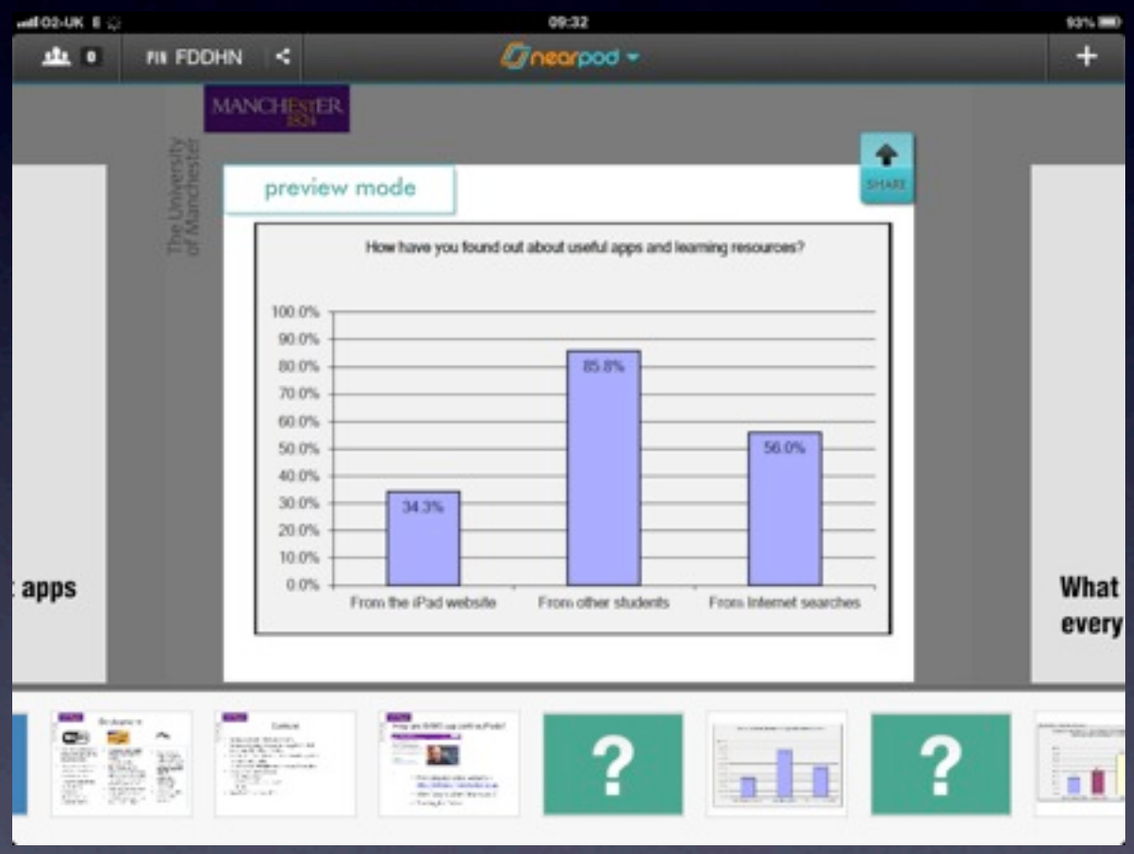
Teaching and learning





Note-taking and Portfolio

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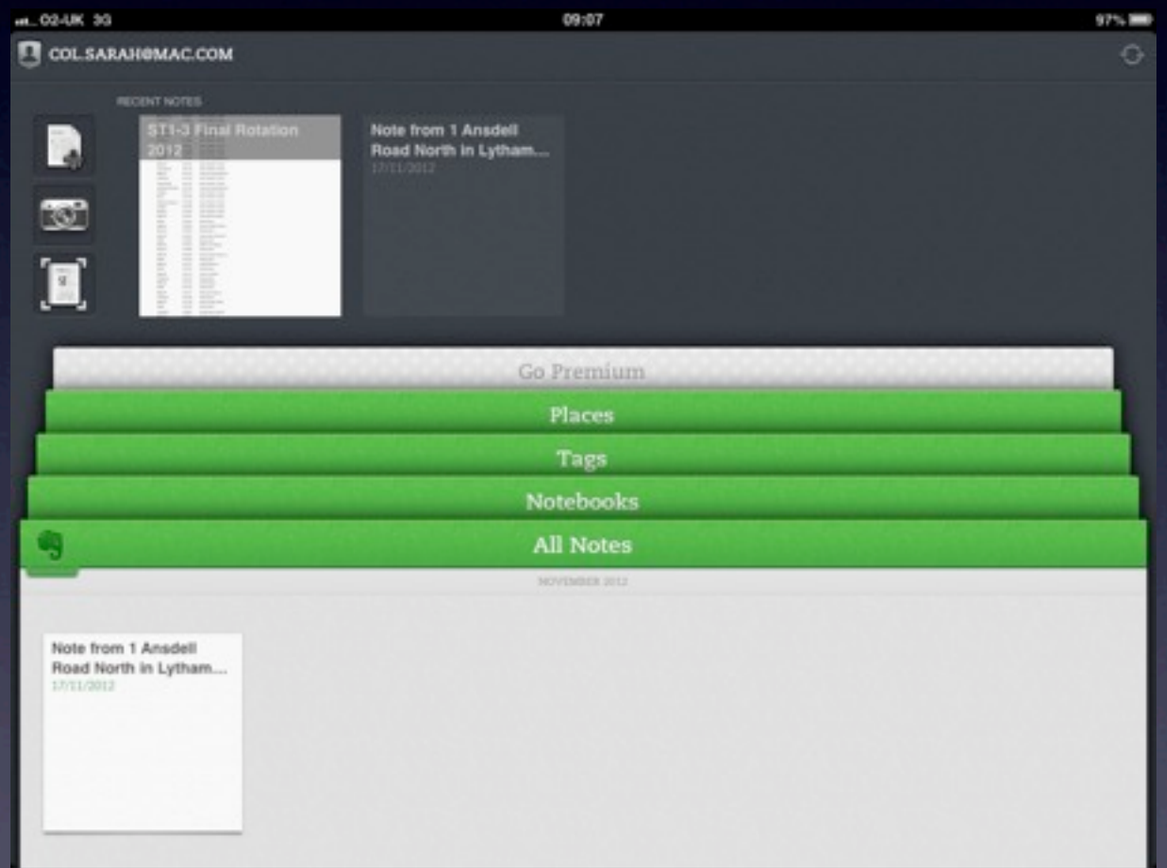

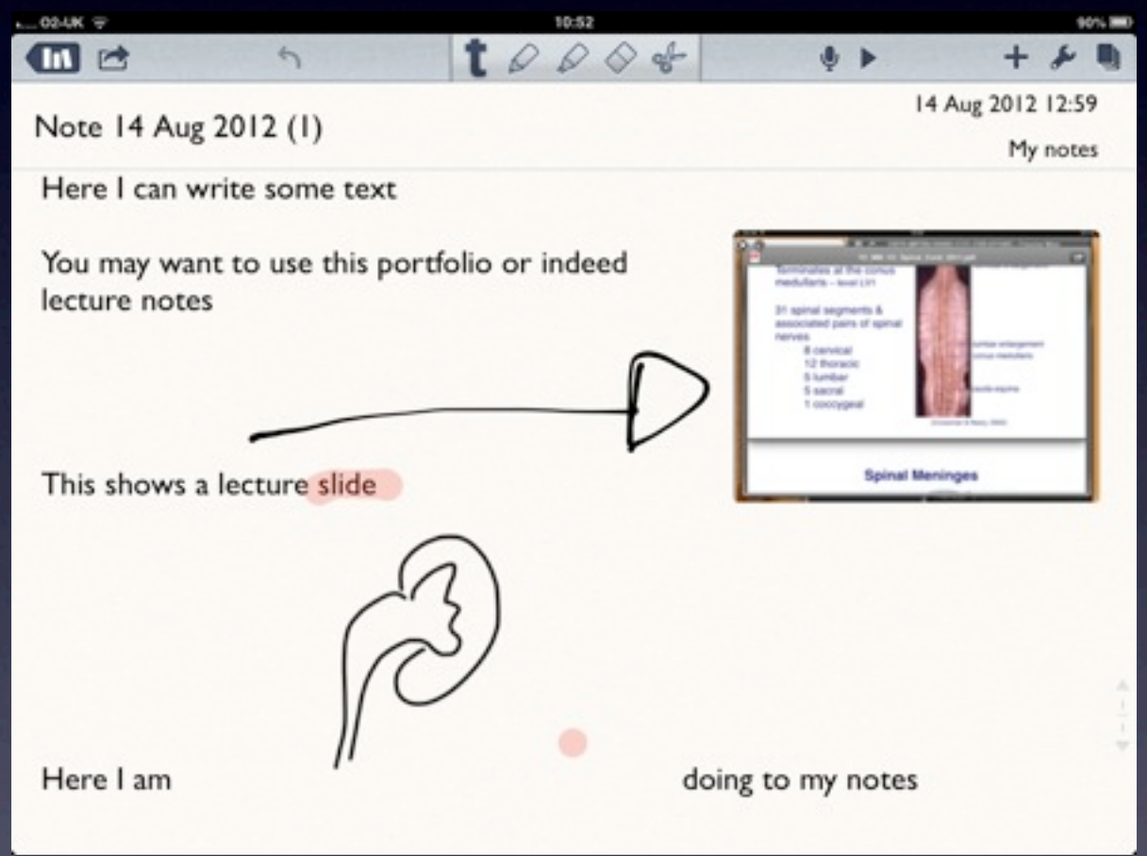

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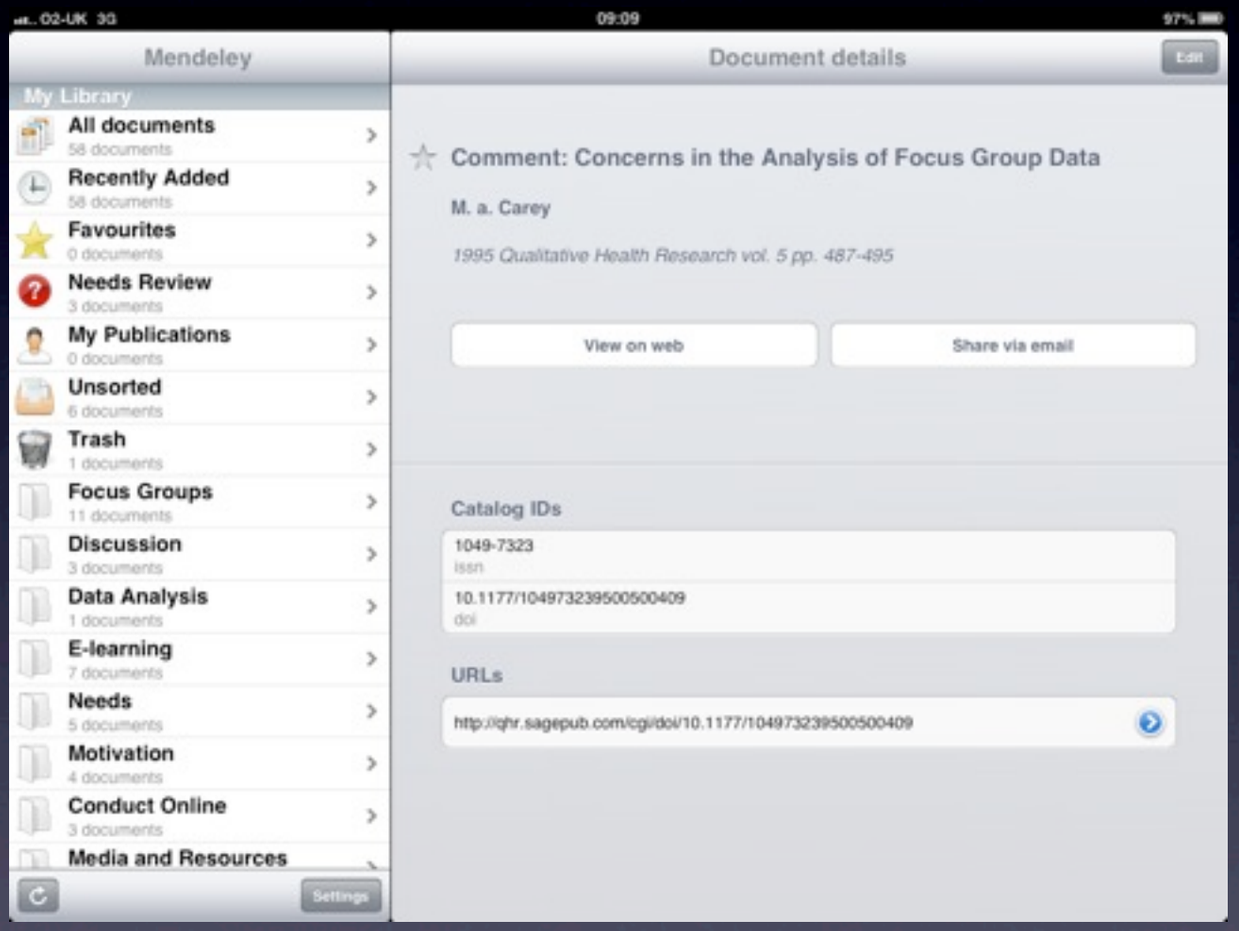
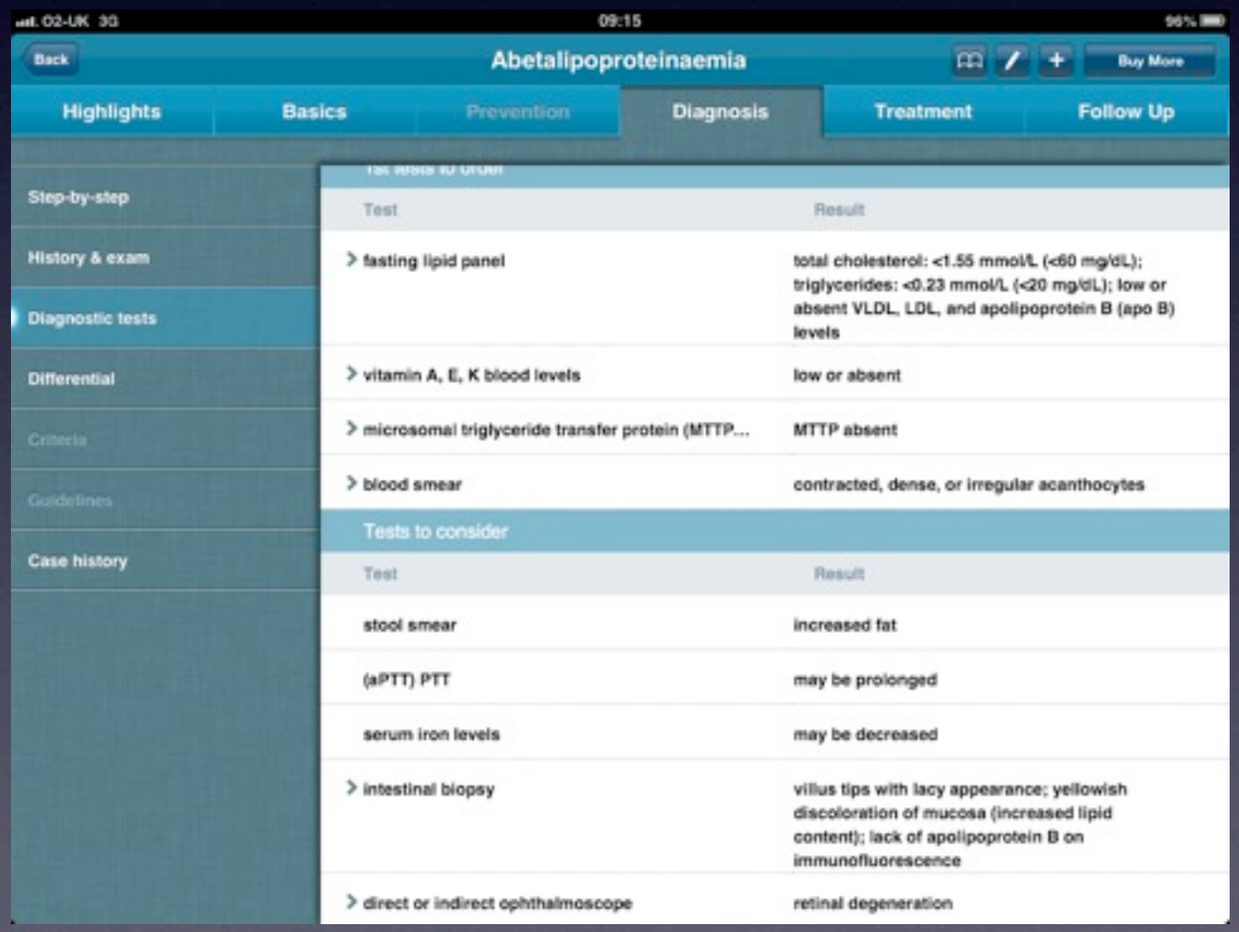
Reference Materials





Spreadsheets

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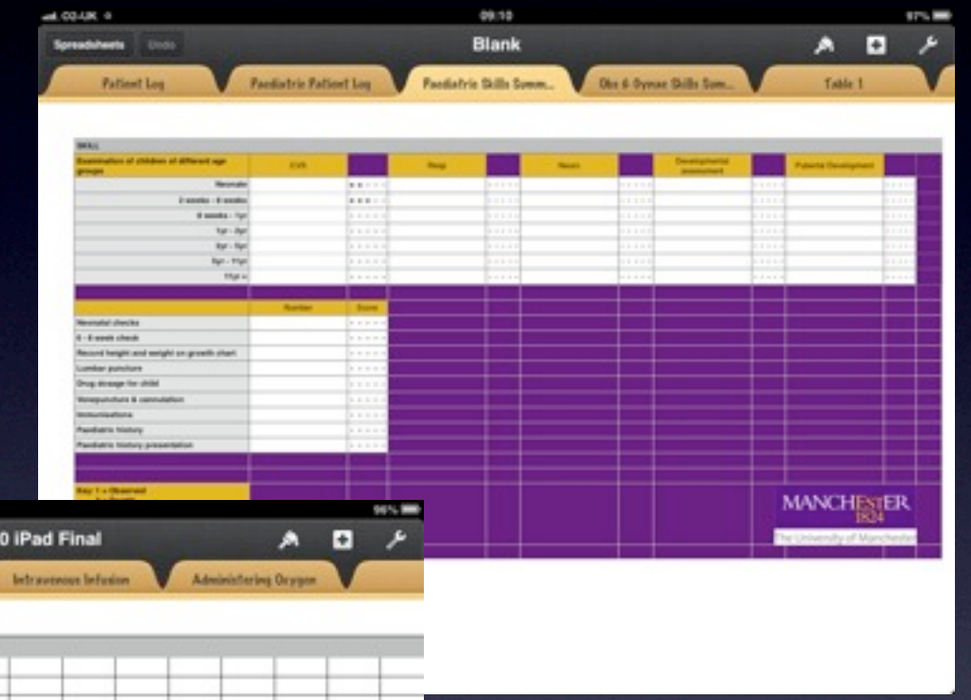
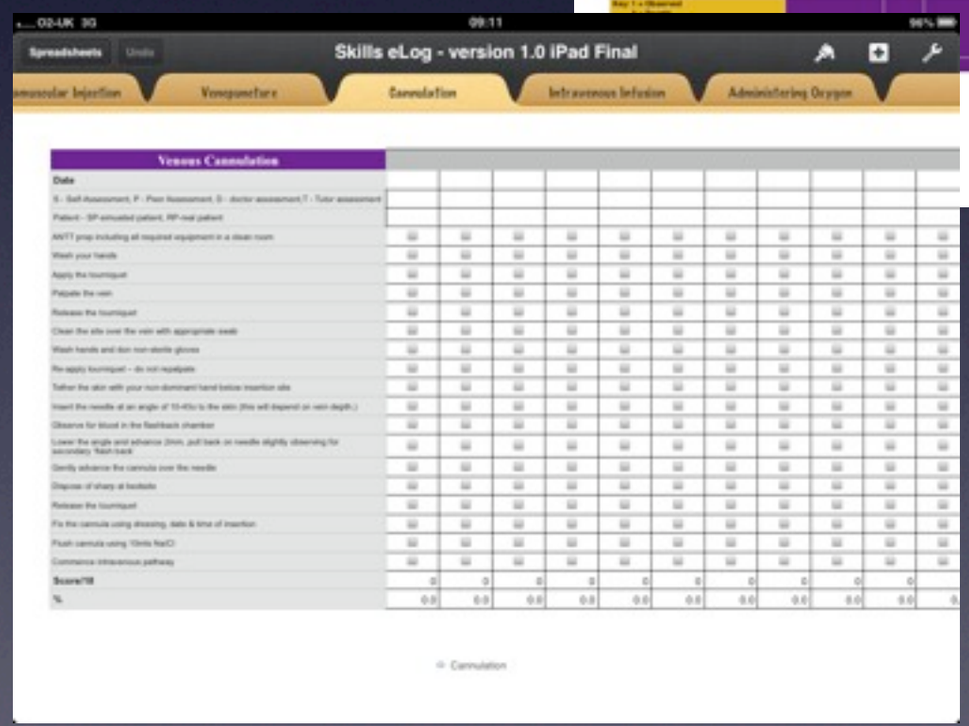
- Clinical Skills Logbooks
- Patient Logs
- Audit
- Research
- VPP





Communications

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Supervision

- More evidence to support supervision
- Flexibility in support
- Custom ePortfolio

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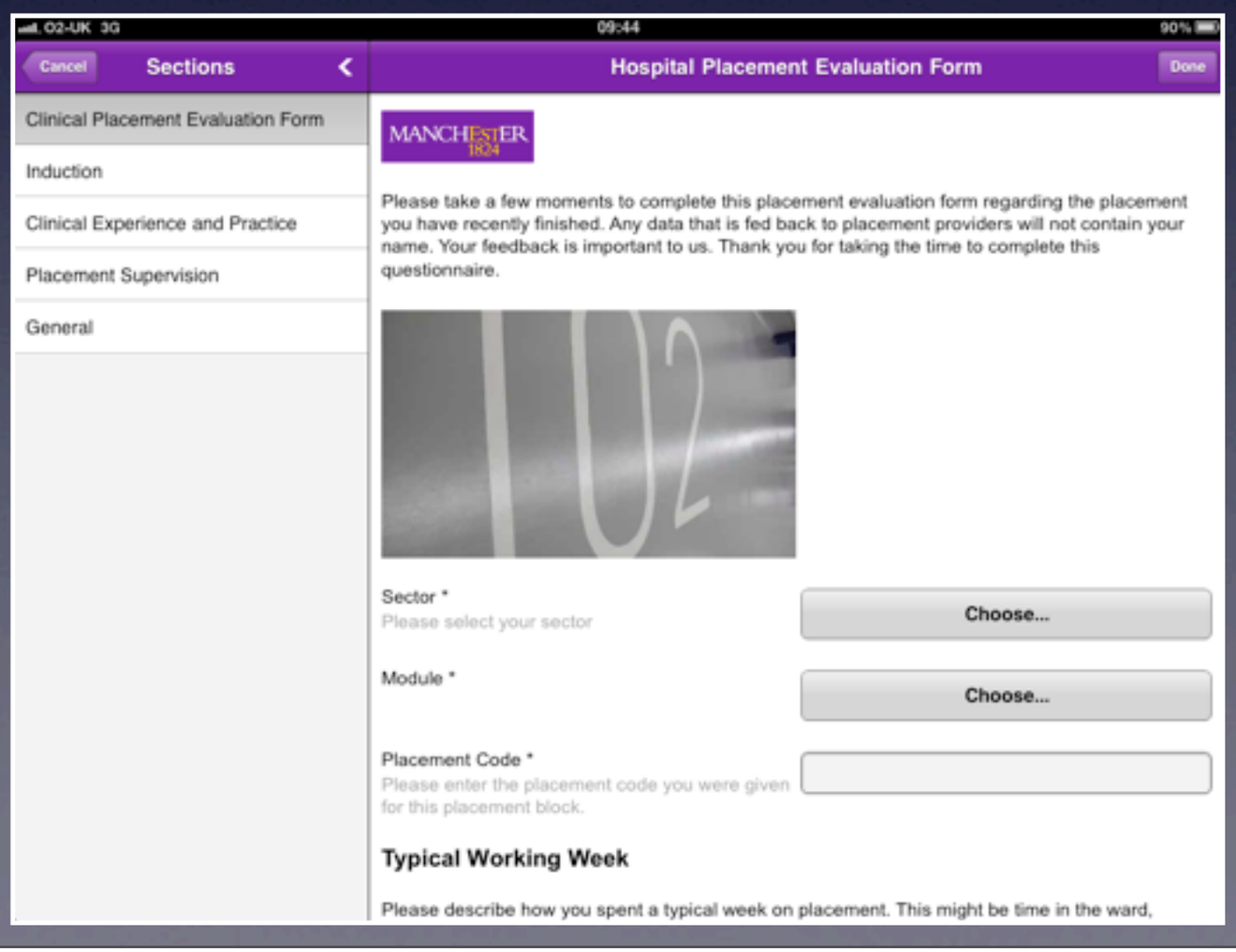
Course Management

- Feedback
- OSCE Marking and feedback
- Year 5 Student Assistantships
- UPSA assessments
- Placement evaluations

eForms

- Web based form authoring
- Forms organised and distributed by groups



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"I'm finding it the most useful in the gaps between teaching sessions. Reading through this weeks PBL notes or adding to a patient log is very convenient - not to mention how much more organised I can be now with the calendar"

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“I've been using the ipad on the bus, train and in between. It's been hugely useful so far. It takes me about 1.5 hours to get to hospital, so I can't imagine going without!”

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"the iPad and apps are very helpful and advanced. Congratulations. I'm proud to tell people that MMS is giving us iPads and creating apps for us to study with"

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You don't understand what an iPad is for until you have one!

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It's not about the technology!

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Productivity appears to be the single biggest gain seen

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Digital natives don't exist ... yet?

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Research Questions

- How do students construct learning in the mobile environment?
- What part do tablets play in facilitating this and how does it link into their current learning practices?
- What part does social media play in learning?

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Research Questions

- Are we narrowing or widening the digital divide?
- How do mobile technologies affect examination performance?
- Do we need to modify our curriculum to meet the needs of students with mobile devices?
- Will this project produce better doctors?

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Questions?