



SMART LEARNING

SESSION 2: INTRODUCTION TO SMART LEARNING TECHNOLOGIES

PEN LISTER, MA MSC MBCS FHEA

SMART LEARNING

SESSION 2

A. THE TECHNICAL REQUIREMENTS FOR SMART LEARNING

- *Place*
- *People*
- *Purpose*

B. EXPLORING APPS AND TECHNOLOGIES

- *Google Maps*
- *HP Reveal Studio and app*
- *Edmodo*
- *DB Pedia Places and Geoflow*
- *Other technology of note: GPS, other apps, scripts, etc.*



SMART LEARNING REQUIREMENTS

THE TECHNICAL REQUIREMENTS FOR SMART LEARNING

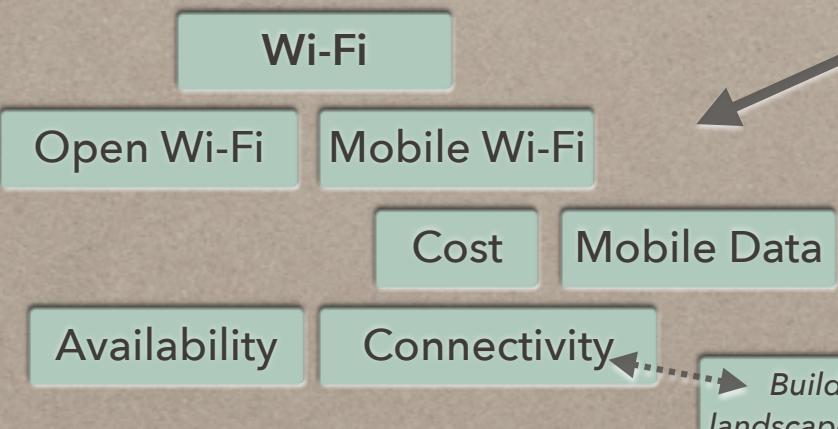
1. Place - the location, the available technical infrastructure, any problems or issues
2. People - the personal devices and the available apps, plus the digital literacy
3. Purpose - the topic(s), tasks and any desired outcomes



SMART LEARNING REQUIREMENTS

1. Place - the location(s)

- The available technical infrastructure
- Any problems or issues



SMART LEARNING REQUIREMENTS

2. People - the learners

- Their personal devices
- Available apps
- Digital literacy

What kind of apps are available for the tasks and interactions

How to use apps

training or how-to videos

What kind of smartphones do they have

Are we allowed to ask them to use their own phones

BYOD

Does everyone have a similar device?

iPhone, Android, Windows, other

SMART LEARNING REQUIREMENTS

3. Purpose - What is being learned, and how it's being learned

- The topic(s)
- Tasks
- Interactions
- Desired outcomes

Is topic suitable for location learning?

Are there any formal learning outcomes?

Are there any formal assessment criteria?

Find the right apps or platforms to achieve the tasks and interactions

Choose tasks and interactions

SMART LEARNING REQUIREMENTS

SOLUTIONS CAN ONLY BE SIGNED OFF WHEN YOU HAVE SELECTED AND **TESTED** THE TECHNOLOGY AND RESEARCHED OTHER ASPECTS (LEGAL, DEVICE AVAILABILITY, DIGITAL LITERACY LEVEL, ETC)

PLANNING IS EVERYTHING, KEEP A WORKING RECORD OF WHAT YOU'RE DOING



TESTING!

SMART LEARNING TECHNOLOGIES

EXPLORING APPS AND TECHNOLOGIES

1. Maps
2. Augmented Reality (AR)
3. Collaboration
4. Location (GPS)
5. More...



SMART LEARNING TECHNOLOGIES

1. MAPS *Google My Maps*

- *Create clear location markers*
- *Indicate different location types*
- *Display information*
- *Display instructions*
- *Display Route*



SMART LEARNING TECHNOLOGIES

1. MAPS

Google My Maps

The screenshot shows a map entry for "Leadenhall Market". The title bar says "Leadenhall Market". Below it, there's a "name" field containing "Leadenhall Market" and a "description" field with the following text:
LEARNING STOP: Leadenhall Market, mentioned in Defoe. Designed by Sir Horace Jones 1880-1, restored 1990-1. Note the 19th c. shutters and spiked racks for game. First market in 1321 for foreigners to sell poultry... (Image to focus on with Aurasma.)
A red box highlights the "Aurasma:" section, which contains four numbered steps:

1. Zoom in close
2. Use the map icon
3. Use the icon guide
4. Click on the icon

Below this, another red box highlights the "Edmodo:" section, which lists three items:

- Use Edmodo to upload photos and video of the area. (You can take photos using the Edmodo camera.)
- Take notes to record ideas.
- Everyone in the group can share and discuss content to work on their assignment.

The Information & instructions



<http://bit.ly/literary-london-map>

SMART LEARNING TECHNOLOGIES

2. AUGMENTED REALITY

Needs

- *Signs or features to augment*
- *High quality trigger images*
- *Plan for what to add as augmentations*
- *Geofencing*

Apps

- *HP Reveal*
 - *HP Reveal Studio*
 - *HP Reveal mobile app*
- *Blippar*
 - *Blippar Builder*
 - *Blippar mobile app*



SMART LEARNING TECHNOLOGIES

2. AUGMENTED REALITY

HP Reveal (formerly Aurasma)

- Signs or features to augment
- High quality trigger images



SMART LEARNING TECHNOLOGIES

2. AUGMENTED REALITY

HP Reveal (formerly Aurasma)

- Icons or other trigger 'overlays'
- Augmentations - content sources
 - Webpages
 - Videos
 - Audio
- Geofencing?



SMART LEARNING TECHNOLOGIES

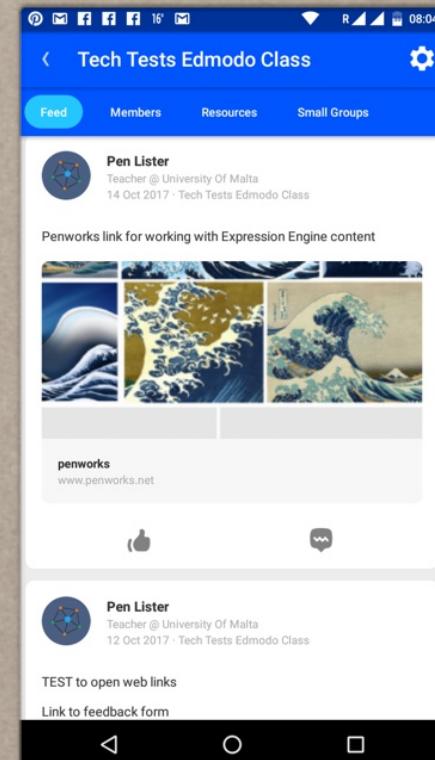
3. COLLABORATION

Needs

- *Collaboration online in teams*
- *Discussion, questions, answers*
- *Finding or creating content*
- *Contributing content or comments*
- *Safe, secure and private*

Apps

- *Edmodo*
- *Moodle or Blackboard*
- *Wordpress blogs*
- *Disqus or Livewire*
- *Slack or Hipchat*
- *Social Media*
 - *Facebook*
 - *WhatsApp*

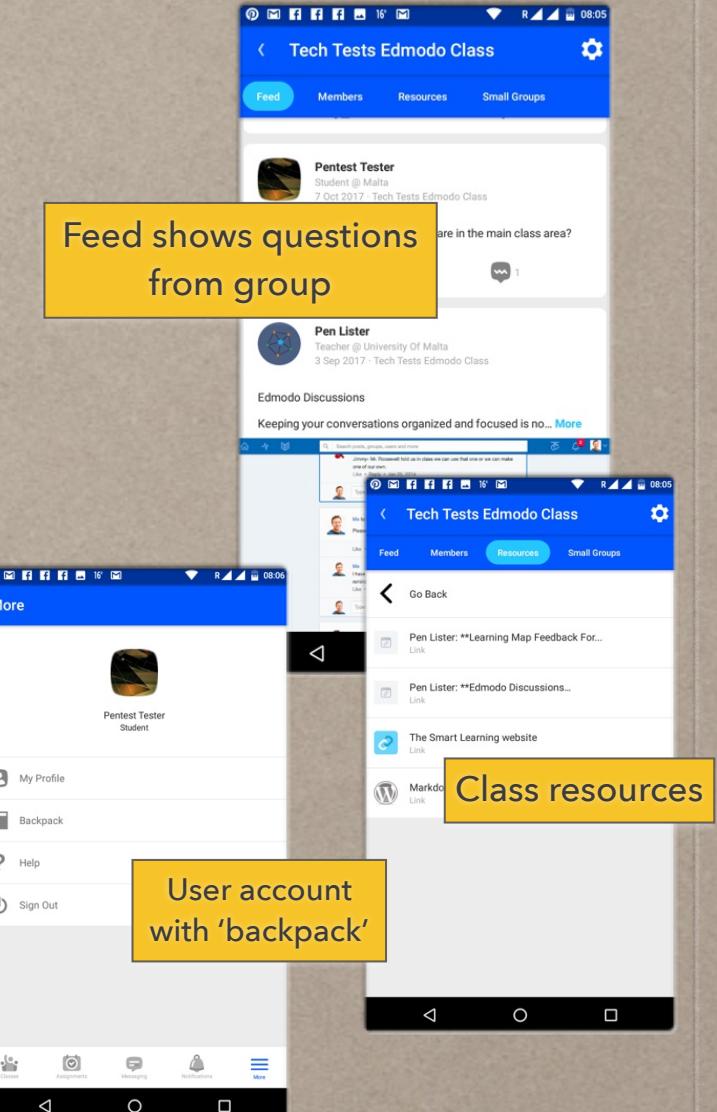


SMART LEARNING TECHNOLOGIES

3. COLLABORATION

Example: Edmodo

- *Safe, private and secure*
- *Consistent mobile experience*
- *Desktop version*
- *Interactive & creative*
- *Classes and small groups*
- *Camera uploads*
- *Multiple image uploads*
- *User experience is very similar to Facebook*



SMART LEARNING TECHNOLOGIES

4. LOCATION (GPS)

Apps or Platforms

- *DBpedia Places (Android)*
- *Geoflow (iOS & Android)*
- *ThunderMaps (or similar alert reporting apps, iOS & Android)*
- *PlantNet*
- *Skyview*
- *Jotform forms (web forms with location function)*

Functions

- *GPS uses*
- *Call up/find location based content*
- *Submit learner locations for feedback or reporting*
- *Show what other learners have been doing in the area (anonymously) - the learning networks*

SMART LEARNING TECHNOLOGIES

5. OTHER FREE APPS & TECH

Apps or Platforms

- *OpenStreetMap*
- *Maps.me*
- *Majjistral app*
- *Taxxien Temples app*
- *Cyberparks app*

Uses and ideas

- *Other mapping techniques*
- *Location based 'tour' apps for how to present experiences and content*
- *Different ways and types of augmentation*
- *Indoor, outdoor*
- *Subject area ideas?*

SMART LEARNING

SUMMING UP

- *Test, test, test again*
- *Try to think of all the possible problems*
- *Always give good instructions and guidance*
- *Check the legal things*
- *Keep a record of requirements, plan and solutions*



SMART LEARNING LINKS

Apps & Tech

- **Google Maps**

- <https://itunes.apple.com/app/id585027354>
- https://play.google.com/store/apps/details?id=com.google.android.apps.maps&hl=en_GB

- **HP Reveal**

- <https://hpreveal.studio.com>
- <https://itunes.apple.com/gb/app/hp-reveal/id432526396>
- <https://play.google.com/store/apps/details?id=com.aurasma.aurasma>

- **Blippar**

- <https://itunes.apple.com/us/app/blippar/id410604563?mt=8>
- <https://play.google.com/store/apps/details?id=com.blippar.ar.android>

- **Edmodo**

- <https://itunes.apple.com/us/app/edmodo/id378352300?mt=8>
- <https://play.google.com/store/apps/details?id=com.fusionprojects.edmodo&hl=en>

SMART LEARNING LINKS

Web links

- **Guide to Using Aurasma**
<http://smartlearning.netfarms.eu/guide-to-using-aurasma/>
- **Designing a learning journey**
<http://smartlearning.netfarms.eu/designing-a-learning-journey/>
- **Example of smart learning feedback maps**
<http://smartlearning.netfarms.eu/scl-learner-feedback-map/>

Additional apps

- **Moodle Mobile** Android & iOS
- **DBpedia Places** Android
- **Geoflow** Android & iOS