



Smart Learning

**Furthering skills in learning and teaching
with smart learning technologies**

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Smart Learning



Integrating your apps and learning design

Choosing the right learning design and apps for your learners

Facilitating smart learning

Assessing smart learning

Smart Learning

apps and learning design

Integrating your apps and learning design

- Tasks, interactions, functions
- Matching digital literacy to learners
- Matching stages of your design with use of apps
- Avoiding confusion!

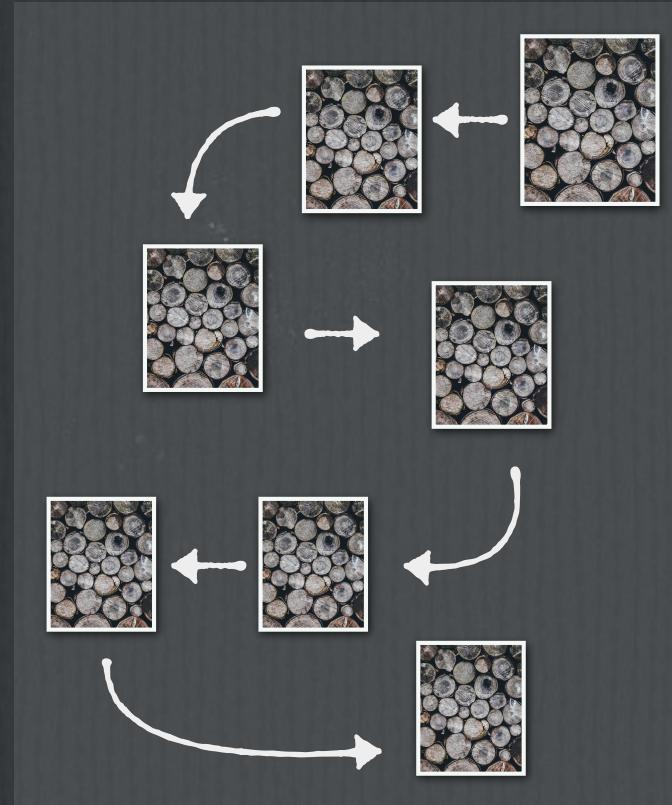


Smart Learning

apps and learning design

Integrating your apps and learning design

- Tasks:** making notes, taking photos, commenting, asking questions, uploading photos or video, answering questions
- Interactions:** selecting navigation choices, typing into form fields, using app camera, clicking upload or share buttons...
- Functions:** file uploads, image display, folders, forums, groups, classes, favourites or bookmarks



**Every task has
interactions & functions**

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apps and learning design

- Tasks: What you are asking learners to do**
 - to achieve learning outcomes and goals
 - to develop their skills in achieving those goals
 - to develop their understanding of the purpose of the learning goals
- Interactions: What learners need to do to achieve your tasks**
 - how learners need to interact with 'the systems'
 - what learners need to DO in relation to the apps and technology
- Functions: What technology needs to be able to do to achieve the interactions required by the tasks**
 - the 'affordance' of the technology functions
 - can the apps actually provide the functions you need?
 - how do the apps provide these functions - ease of use, efficiency, security

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apps and learning design

- **Tasks: asking your learners to make notes, take photos, upload photos or video, comment, ask questions, answer questions**

- ▶ for each task you set
- ▶ what is required technically
- ▶ how that can be achieved
- ▶ resulting outcomes



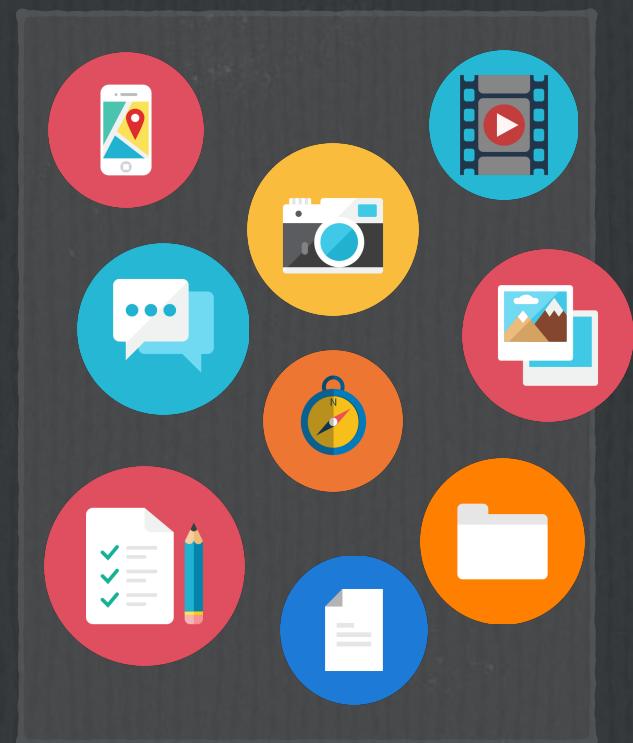
- ▶ think about the interactions required
- ▶ think about the easiest and best technology to provide these interactions
- ▶ specify technology AND task action to the learner

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apps and learning design

- Interactions:** can your learner select navigation choices, type into form fields, use the app camera, find and click upload or share buttons...

- Understandable menus
- Use of metaphor with icons
- Compare apps for examples & ideas
- Provide simple instructions
- Provide help links
- Always consider digital literacy



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apps and learning design

- **Functions: file uploads, image display, folders, forums, groups, classes, favourites or bookmarks**

- *What technology needs to be able to do to achieve the interactions required by the tasks*

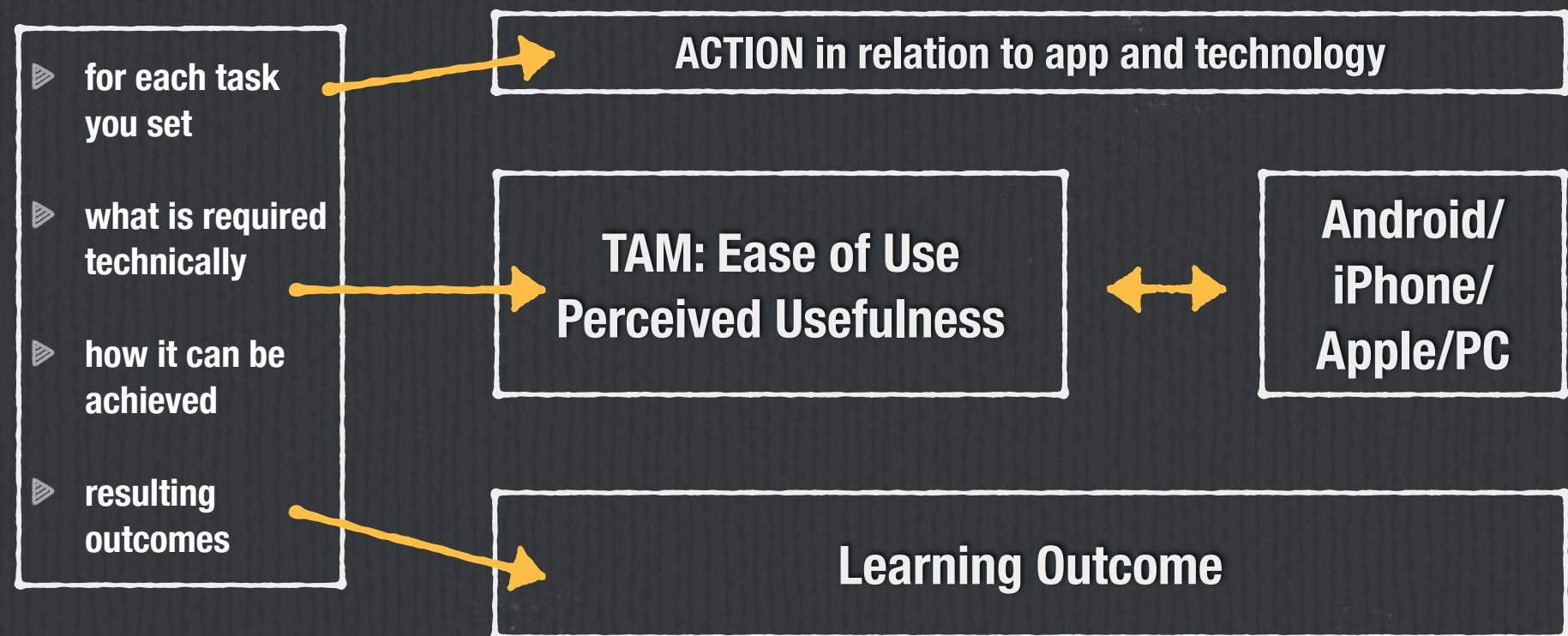
- Can apps provide the functions you need?
- How do they provide these functions - ease of use, efficiency, security
- Relevance to learning outcome
- One app with lots of functions, or several with one or two?



Smart Learning

choosing the right apps

Choosing the right learning design and apps for your learners



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choosing the right apps

Choosing the right learning design and apps for your learners

1. Learning design:



2.

Who are your learners?

Level of digital literacy

Level of self confidence and determination

3.

What is the task?

What is the interaction?

What is the function?

Refine learning design, select app or apps



Smart Learning

choosing the right apps

- Choosing the right learning design and apps for your learners**
 - Simplicity and clarity**
 - Less tasks rather than more**
 - Less apps rather than more**
 - Apps should be reliable**
 - Every learner should be able to achieve every task**
(technically and digital skill level)

Smart Learning

facilitating and assessing smart learning

- Facilitating smart learning**

Making sure
learners are
happy and active

- Monitoring**

Supporting
communication

- Supporting**

Supporting
discussion

- Providing social presence***

*Garrison & Anderson, 2003, *E-Learning in the 21st Century, A Framework for Research and Practice*. chapter 5.

Providing
feedback

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facilitating and assessing smart learning

Assessing smart learning

- Providing clear assessment criteria & guidance
- Making sure systems are reliable
- Assessing participation as well as content

What is
being tested?

Can you rely on
the technology?

Giving marks
for taking part

Badges or
gamified awards

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Resources for creating and hosting content

- Pixabay - free high quality images**
- Flickr Commons - free high quality images**
- Iconfinder - free high quality icons**
- Wikimedia - free content of all kinds**
- The Internet Archive - free content of all kinds**

- Wordpress.com - free blog or website**
- Blogger for free blog or website**
- Google Sites for free website**

- Vimeo for professional video hosting and content**
- YouTube!**
- Free Music Archive**
- Soundcloud for creating podcasts**

Check out Creative Commons licences

Check the copyright for any content you use

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Further reading

- **Choosing technology for learning and teaching**
 - Considerations for choosing technology for teaching, Simon McKintyre (DOP likely before 2010)
[https://www.academia.edu/610394/Considerations for choosing technology for teaching](https://www.academia.edu/610394/Considerations_for_choosing_technology_for_teaching)
 - General tips for choosing technology in a classroom, The Instructional Innovations Blog, the Office of Instructional Consulting, School of Education, Indiana University (2013)
<https://icoblog.wordpress.com/2013/04/19/general-tips-for-choosing-technology-in-a-classroom/>
- **Icons and visual design**
 - Tips for using icons in interface design, Martin LeBlanc (2010)
<https://blog.iconfinder.com/tips-for-using-icons-in-interface-design-e1cb65549a49>
 - Icons And Interfaces, Sébastien Désbenoit, 2013,
<https://medium.com/@desbenoit/icons-and-interfaces-bcc8e0257bc8>

Smart Learning

Finally: just what *IS* Smart Learning?

SMART LEARNING is concerned with context-aware ubiquitous learning. Contexts include the interactions between learners and environments. Therefore, smart learning environments can be deemed technology-supported learning environments that implement adaptations and provide appropriate support in the right places and at the right time on the basis of individual learners' needs. These needs may be determined by examining learning behaviors, performance, and the online and real-world contexts in which learners are situated.

SMART EDUCATION, a term used to describe learning in the digital age, has gained the attention of many researchers. The goal of smart education is to foster smart learners to meet the needs of the work and life in the 21st century. The term "context-aware ubiquitous learning" is often used to describe a learning approach that employs mobile, wireless communication, and sensing technologies to enable learners to interact with both real-world and digital-world objects. With smart learning students are learning from the real world by using digital resources.

<https://www.igi-global.com/dictionary/smart-learning/51597>