

# Fostering digital skills and competencies through discursive mapping of information landscapes

Andrew Whitworth (& Lee Webster)  
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# Digital competencies



From the DigCompEdu framework...

# Transferable skills

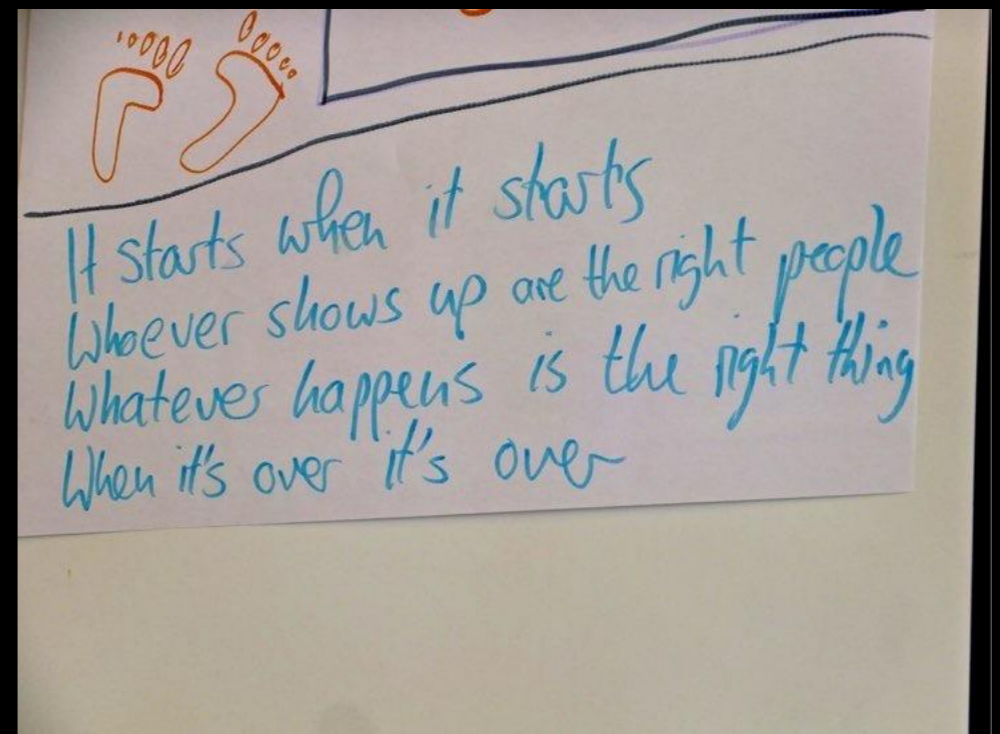
Writers such as Lloyd (2010) are very clear that information and digital literacies can only be developed in a relation to a particular context

How can HE educators bridge the contextual gap between university and the workplace?



What pedagogical approaches exist, and how can their effectiveness be evaluated?

# Workplace learning v HE learning



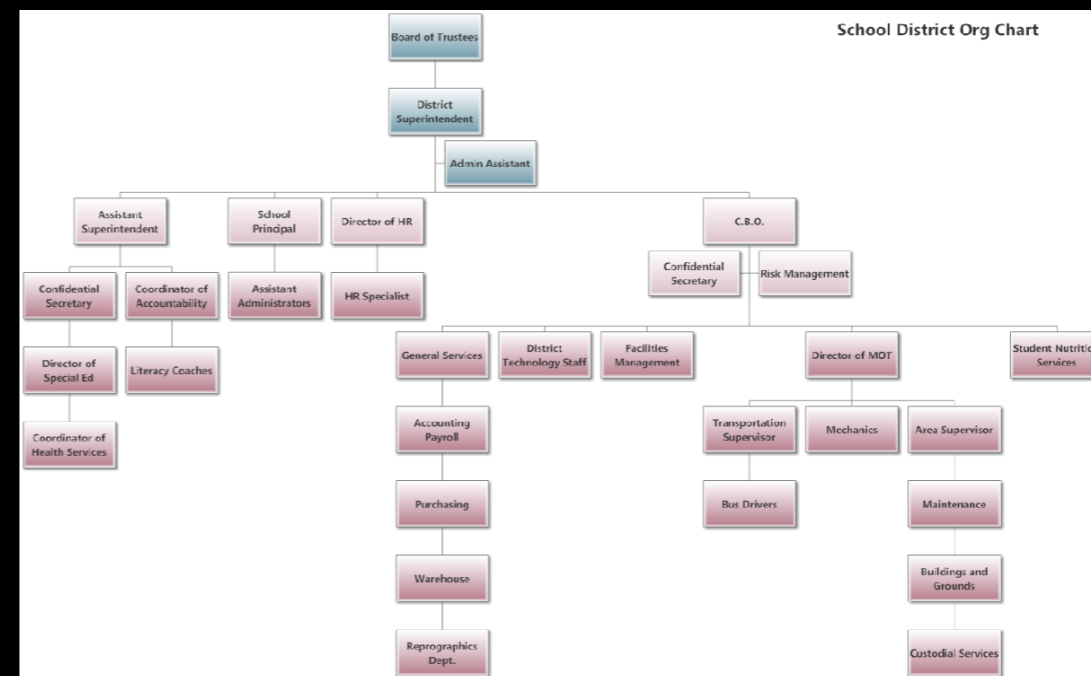
HE: *generally*, more formal, more individual, regulated learning outcomes, stable, predictable

Work: more informal, more collaborative, fuzzier learning outcomes, less stable, less predictable

# Mapping a landscape?

Lloyd mentions this several times....

*As settlers move between these phases they begin to identify the activities and refine the spaces that are created by people who co-participate in a field of practice. As people journey and through these landscapes they engage with site specific information. This engagement allows them to map the landscape, constructing an understanding of how it is shaped. It is through this engagement that people situate themselves within the landscape. (2010, p. 2)*



- Boundedness — framed
- Elements extracted from the landscape and plotted on the map
- Representations — relations

But whether or not a graphical map is produced...

Mapping is a *practice*...

... thus, a *social site*



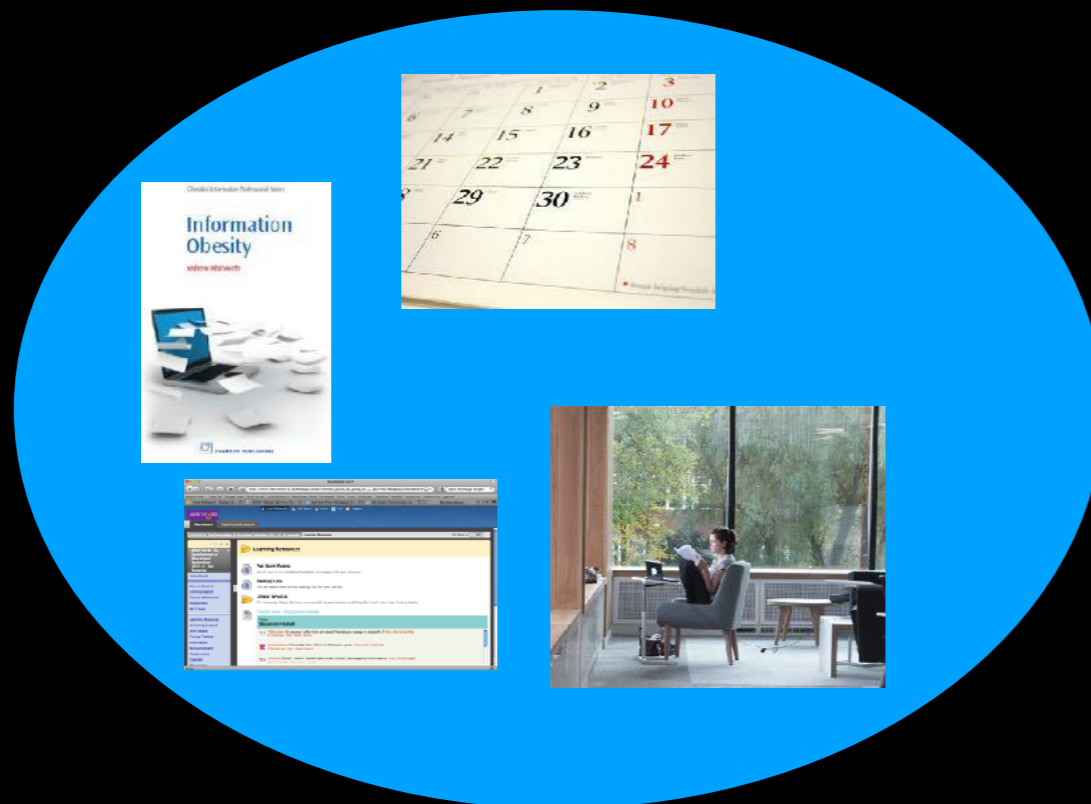
...and as Lloyd implies, a site for *learning* to make judgments about information and other resources

# Our study

- Content analysis of postings on discussion boards across an academic year
- 20 small groups of 5-6 students each
- Three assessed discussion tasks for each group [authentic shared goals at one level]

# Defining boundaries

Groups begin with a 'starter' landscape defined by the tutor....



It includes informational & technological resources....

...and also a structure, predefined pathways through the landscape

# Including elements

However, these resources are not enough for the groups to complete the tasks they are set.

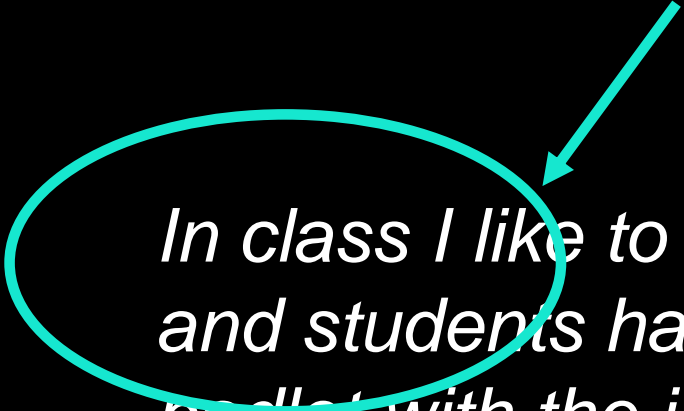
They must bring in  
'their own' information...



... most groups also choose  
to introduce new spaces to  
the landscape.

These judgments are not just made  
intuitively...

[B] here bases his judgment on his experience of this tool as a teacher....



*In class I like to use padlet.com to create discussion boards and students have even used it to do group work. I've created a padlet with the information. It's a huge poster board where we can all add information.*

Decisions are made to filter out some solutions, as well as include them...

*The main problem I find with LinkedIn is that it's overrun with recruitment agents, so I rarely use it. Twitter is OK for some stuff, but because it's so transient I find I miss things a lot and it feels like a lot of effort to keep up with it.*

# Defining relations

The new resources are slotted into an evolving structure that helps the groups fulfil the tasks they have been set.



Groups establish for themselves the *pathways* and *practices* that are relevant for their particular information landscape.

The boundaries of the landscape change: and this happens differently for each group.

*Me, [Y] and [S]... have already discuss on how we should form our thread in this forum so that it'll better organized than our previous discussion (Hehehee.. we think it was pretty cluttered).*

*Me, [D] and [S] just had a Skype planning meeting to think things over; here's a summary of the discussion and what we will be doing*

# Making judgments using the map

In each group, what is emerging is a set of shared assumptions about the landscape, and ways of navigating it.



Can we identify points at which this agreed-upon, discursive map of the group's information landscape is then used as the basis for judgments?

Consider the second task, a role-playing simulation

Groups are provided with a scenario about a fictional HE institution, “Mackenzie College”



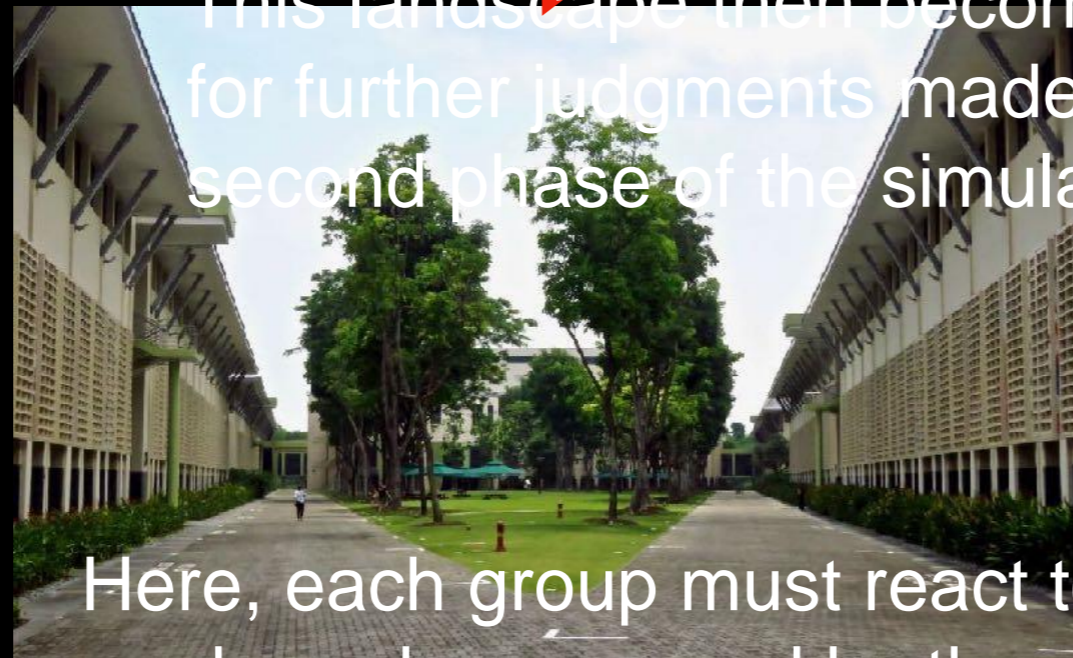
(the picture is of  
Nanyang Technical  
University, Singapore))

This is an imaginary context: but the groups come to discuss it as if it were real — at least, it becomes the basis for judgments made

Different groups play the roles of different stakeholders in this institution/scenario



Each group must establish its position both with reference to its own discussions and reading... but also by finding out information from other groups



This landscape then becomes the basis for further judgments made in the second phase of the simulation.

Here, each group must react to decisions made and announced by the management group.

In the first phase, each group has developed a collective, discursive map: that is, an agreed-upon interpretation of the context....

...against which they can then make *authentic* judgments of the relevance of information in the second phase.

*Have the management integrated the librarians, the students want this and we do too. How is the new situation an improvement for us? Will it make any difference to our teaching and delivery of our courses and our research? I think we need more support from the management and more recognition.*

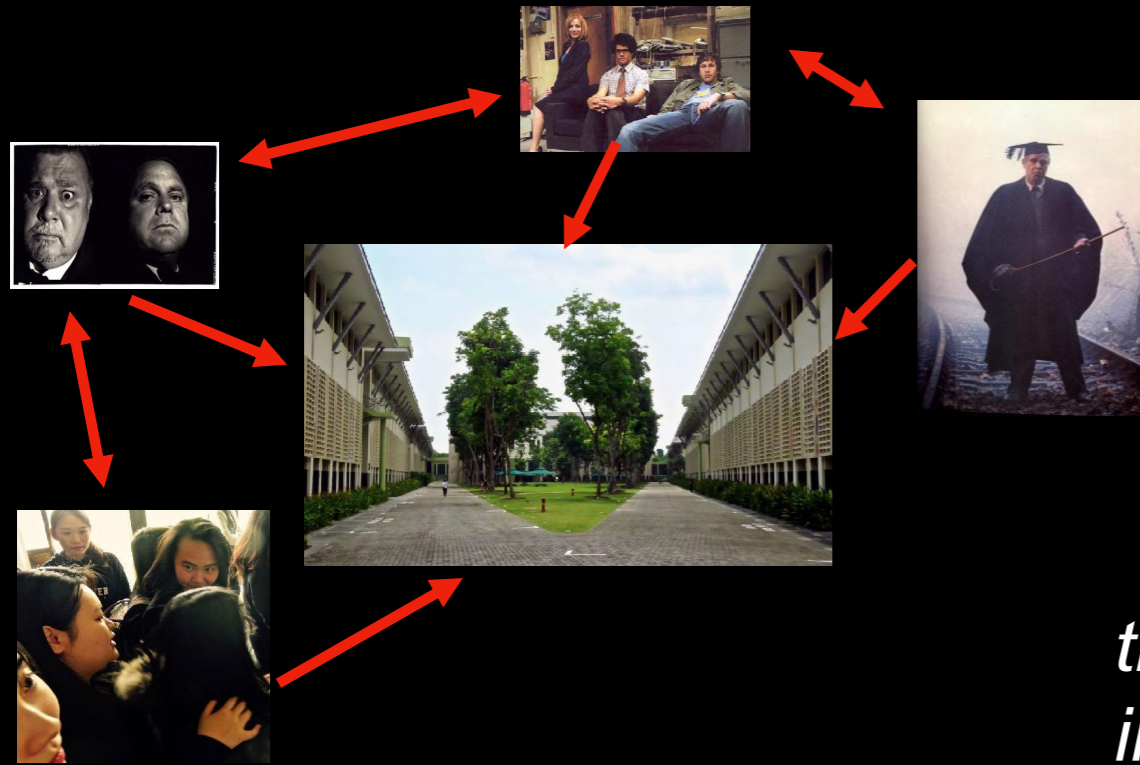
[discussion continues...]

[A] brings in information from the starter landscape (the provided scenario) to integrate it into the mapping (the quote indented below), then builds on it to make judgments about what is best for, and what 'happens' within, this simulated context:

*we already have long experience with this issue because we manage to teach distance learners. In other words, our expertises have formed as a respond to learning process which is distance learning.*

*" Mackenzie's distance learning programmes are highly rated and are led by a team of academics/researchers who are internationally regarded as innovators in the teaching of History at a distance. "*

*So, I suggest to contact with managers team to discuss the idea of introduce our experience to other colleagues either IT team or other academic team?*



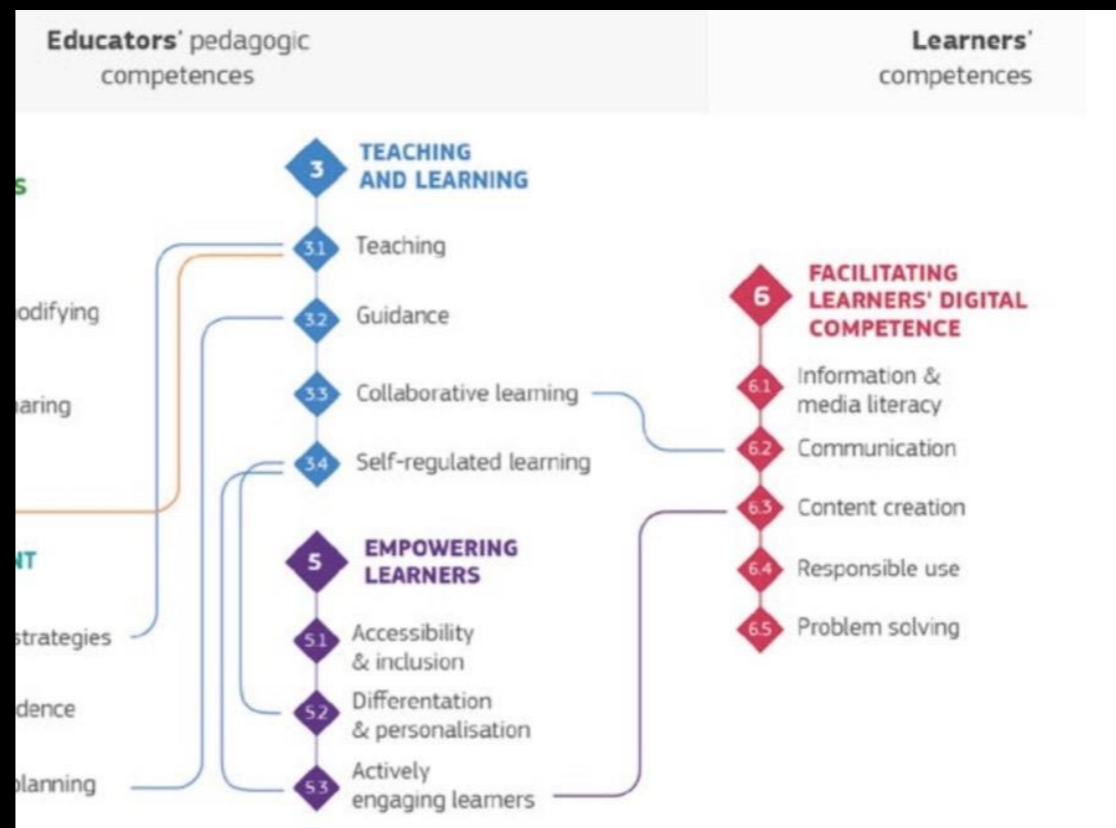
*this could be a good opportunity for us to improve our profile at the university and therefore to get some recognition for the quality of teaching we deliver in the department.*

The configuration of informational resources developed by this group has:

- become *an agreed-upon basis for action*
- that does not need to be renegotiated
- and can serve as the basis for *group judgments of relevance*

# DigComp principles...

- The group members are displaying and developing their digital and information literacy as they construct around them the information landscape they need to work on the problems.
- Collaboration and student-to-student communication are central to this process



# Conclusion

- Through making a series of *informed* judgments about information and technology, these students are learning how to build and navigate an information landscape
- They then use this landscape as the basis for further judgments.
- This is an in-depth way of examining how they negotiate digital and information literacy.

*thank you*

[drew.whitworth@manchester.ac.uk](mailto:drew.whitworth@manchester.ac.uk)

[lee.webster@manchester.ac.uk](mailto:lee.webster@manchester.ac.uk)

