



UNIVERSITY OF  
LIVERPOOL



# Digital Fluency: a C2021 graduate attribute

Kate Evans  
Ben McGrae  
Tünde Varga-Atkins  
Centre for Innovation in Education



## Session Outcomes

You will be able to:

- express the purpose and nature of digital fluency with respect to your module design in your educational disciplinary context.
- Communicate the significance of digital fluency as a course design principle to peers within your subject area.
- Critically evaluate, select and apply appropriate developmental activities of digital fluency to your current programme and/or module.

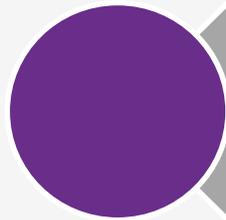


## Session Outline

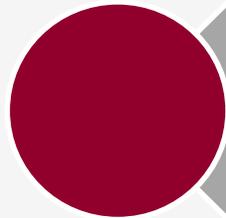
- What is Digital Fluency?
  - JISC's Digital Capability Framework
  - Some practical ideas & examples
- Developing DF: programme & module outcomes (skills)
  - Disciplinary digital capabilities
  - Enhancing students' digital fluency
  - Considerations



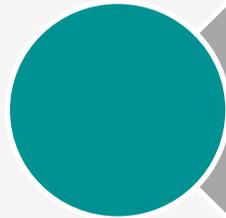
## Hallmarks



Research Connected  
Teaching



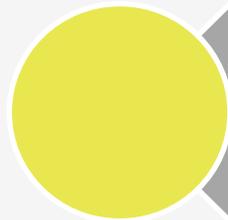
Active Learning



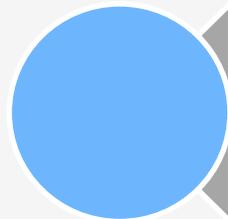
Authentic Assessment



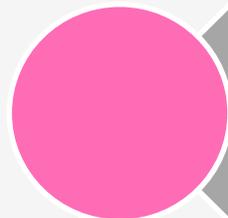
**Attributes**



Confidence



Digital Fluency



Global Citizenship



## Principles

1. All students undertake a capstone research- or enquiry-based project, which may be synoptic (allowing them to draw on a wide range of elements from the modules they have taken)
2. All programmes include applied enquiry-led learning in at least one required module each year (UG only).
3. The use of authentic assessment is built up progressively and maximised across all programmes.
4. Formative assessment and feedback/feedforward are used to engage students in active learning in all modules.

### **5. Students' digital skills are developed progressively.**

6. All students can undertake a substantial work placement and/or experience a period of study abroad.



## Your feelings about technology?





I must create a  
system or be  
enslaved by another  
mans;  
I will not reason and  
compare: my  
business is to create.  
(1804)

Trust  
your  
inner  
William  
Blake



# Digital fluency

Digitally fluent graduates think critically about the information they find, use and generate, developing their ability to use digital platforms to problem-solve, create, collaborate, and communicate.



# Digital fluency (skills < capabilities)

What does it mean in your subject / programme / module?



cc: Jirka Matousek - <https://www.flickr.com/photos/28415633@N00>

# First things first: your graduates' attributes

Subject/programme:

Module:

My field of expertise in a tweet

A successful X in my area is:

6. Digital identity and wellbeing

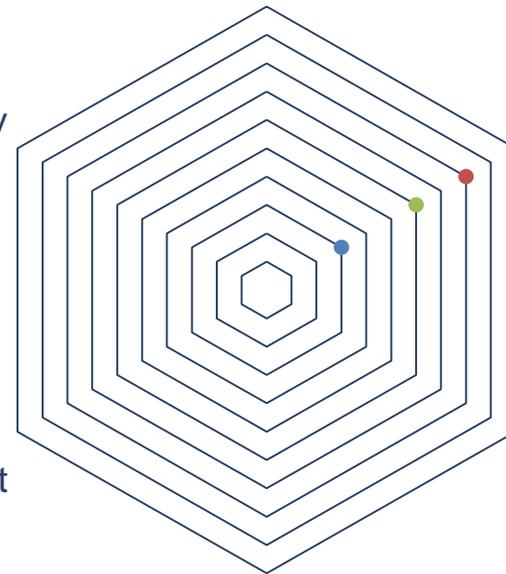
5. Digital learning/development

1. ICT proficiency

2. Info/data/media literacy

3. Digital problem-solving, creative production

4. Digital collaboration/communication



**Which subject is this?**

# Which subject is this?

We open boxes. Pull things apart.  
Bikes, trimmers, spark plugs, cars.  
We simulate and model with graphs  
Solve problems with applied maths.

We collaborate from day one,  
On all things complex and human.  
we draw on global resources,  
join forces,  
Just like in the real world.

[Play audio](#)

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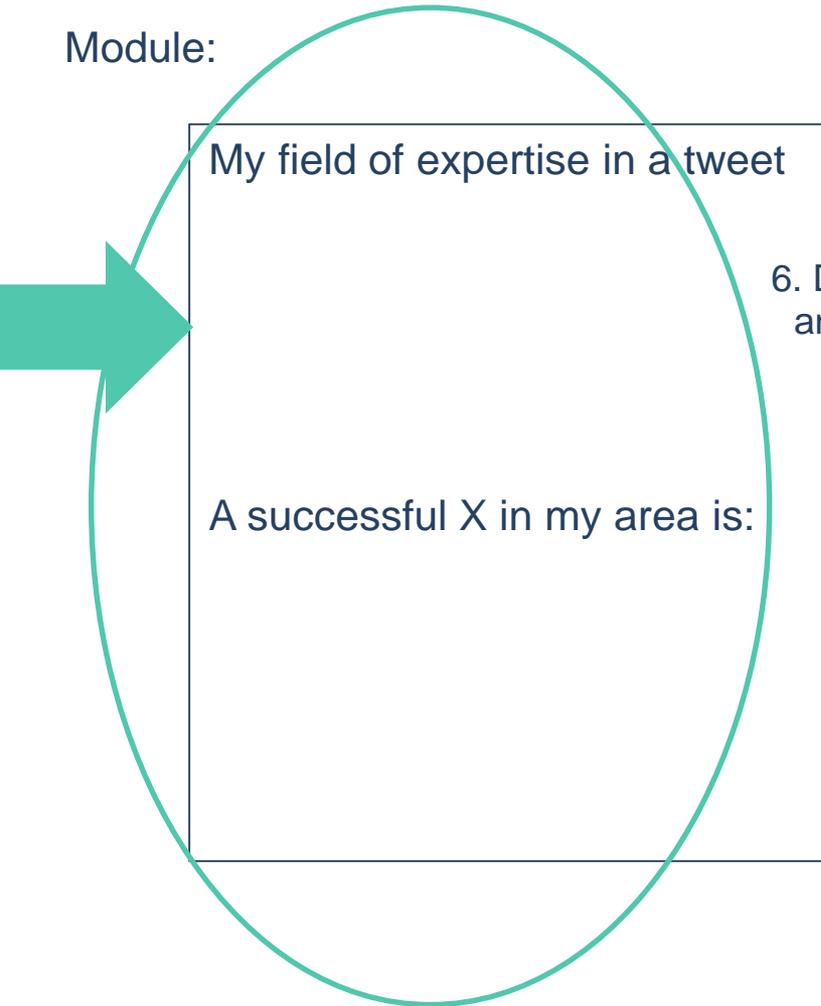
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Although, CREO, CAD, Rivet are core.  
You don't need to be the master-of-all.  
After baptism by a 5-day Wildfire,  
Fight your way through the digital mire,  
Armed only with wit and the need to enquire.  
Just like in the real world.

# Activity: attributes of a successful X [=your profession]

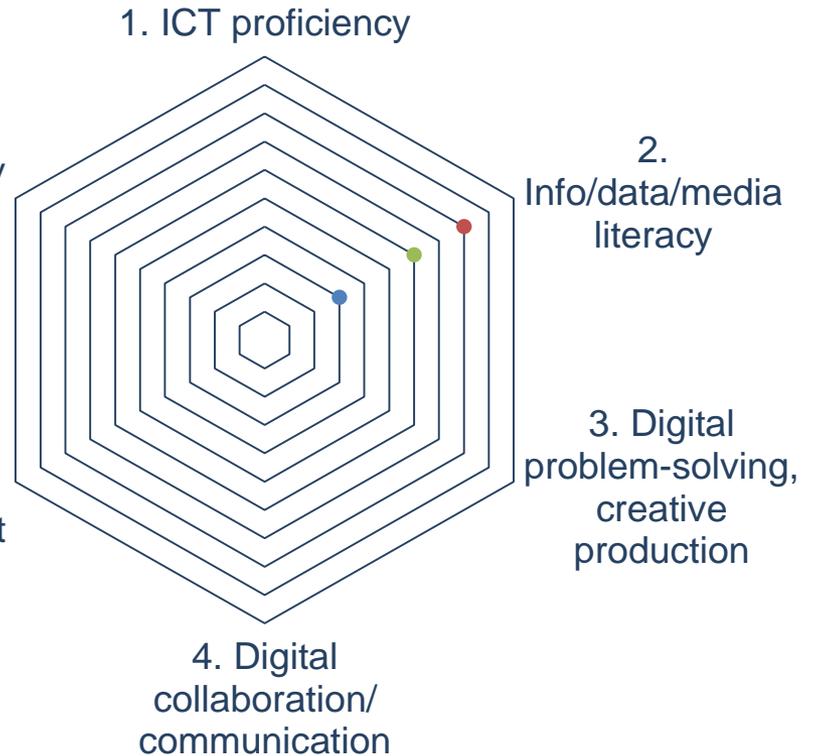
Subject/programme:

Module:



6. Digital identity and wellbeing

5. Digital learning/development





# Defining a digitally fluent professional in X

To what extent is **digital fluency** currently embedded in my/ discipline teaching?

How are digital skills/capabilities designed in learning (& skill) outcomes, via learning & teaching and assessment methods?

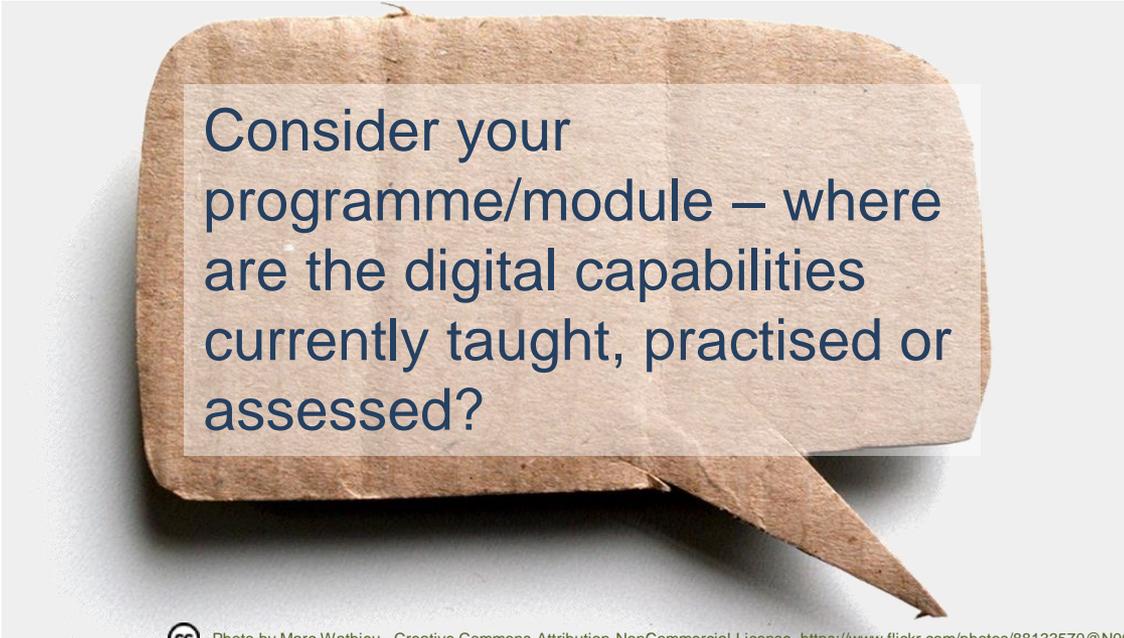


Consider your  
QAA subject benchmarks,  
professional body requirements,  
programme and module specifications



# Activity: Digital fluency: 6 capabilities

Using the radar diagram,  
**think-pair-share**



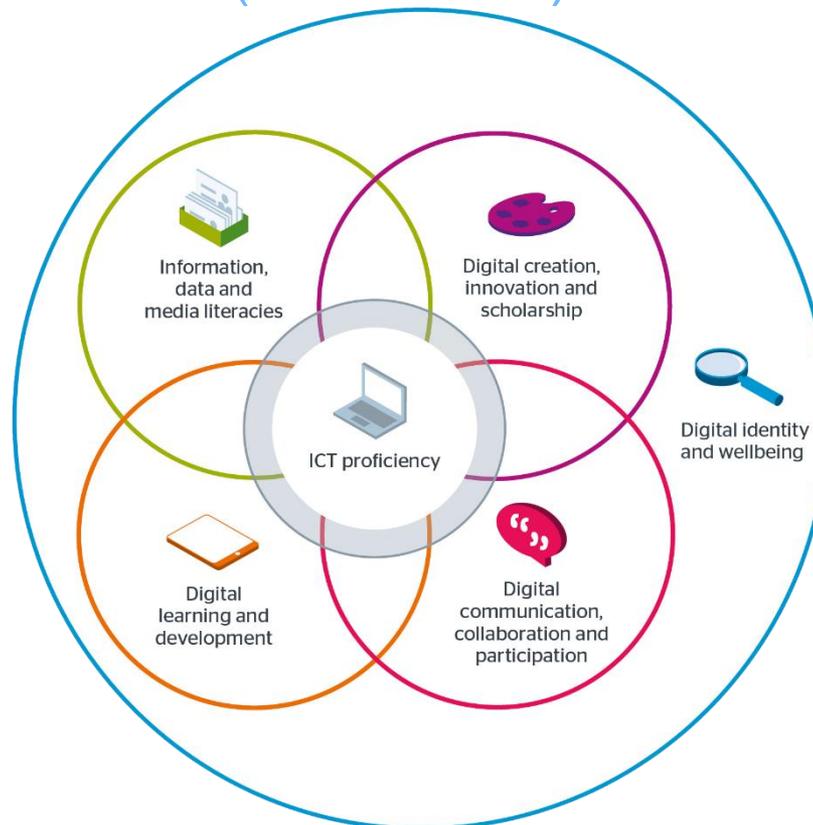
Consider your  
programme/module – where  
are the digital capabilities  
currently taught, practised or  
assessed?

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# Digital Capability Framework

(JISC 2017)



# Digital Fluency in programme / module



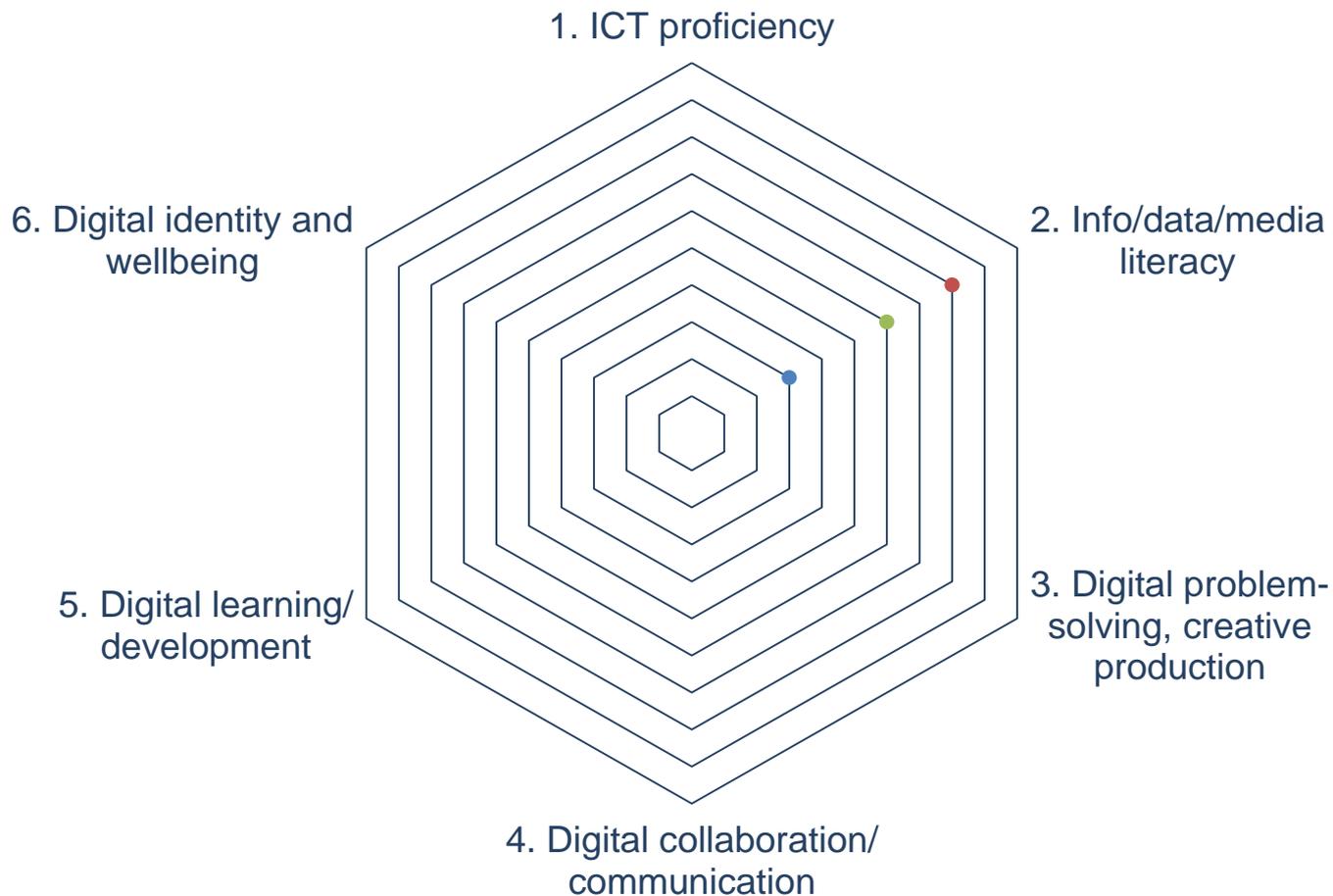
Programme / module title:

My field of expertise in  
a tweet

A successful X in my  
area is:

A digitally fluent X is:

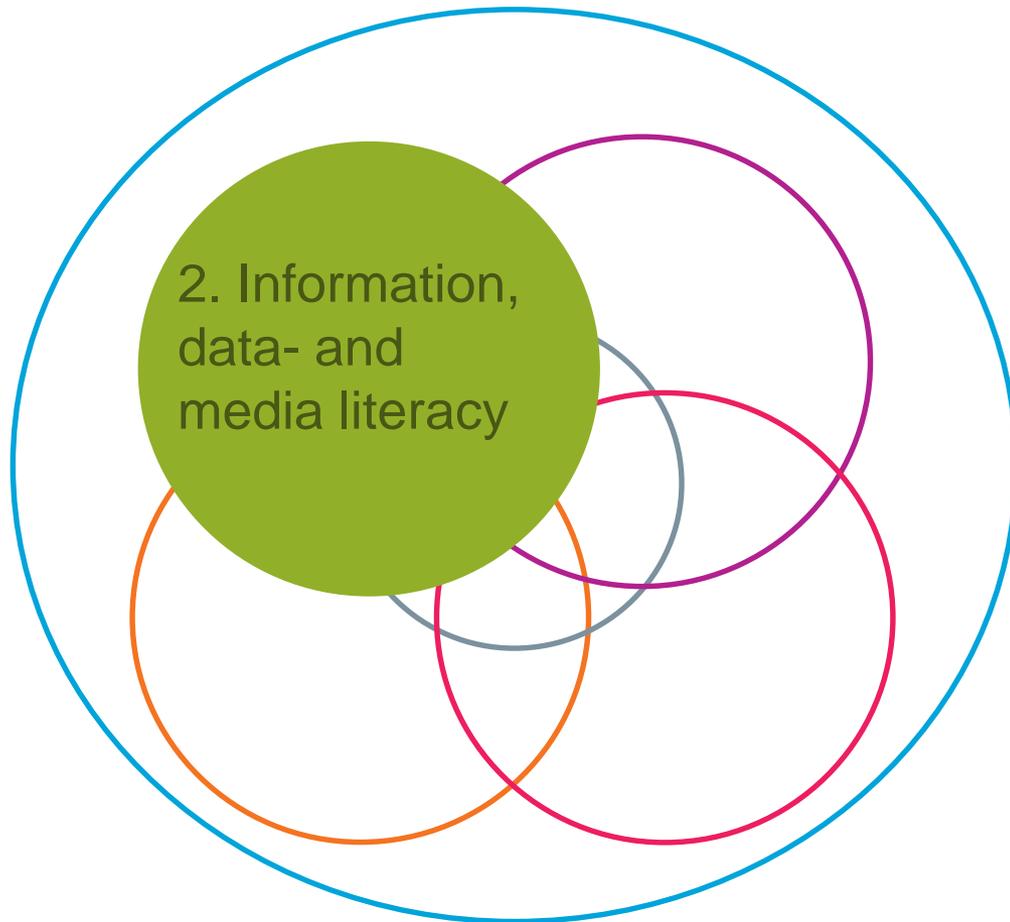
- Taught
- Practised
- Assessed





# Digital Capability Framework

(JISC 2017)



Digitally fluent graduates are able to think critically and make balanced judgements about the information they find and use.

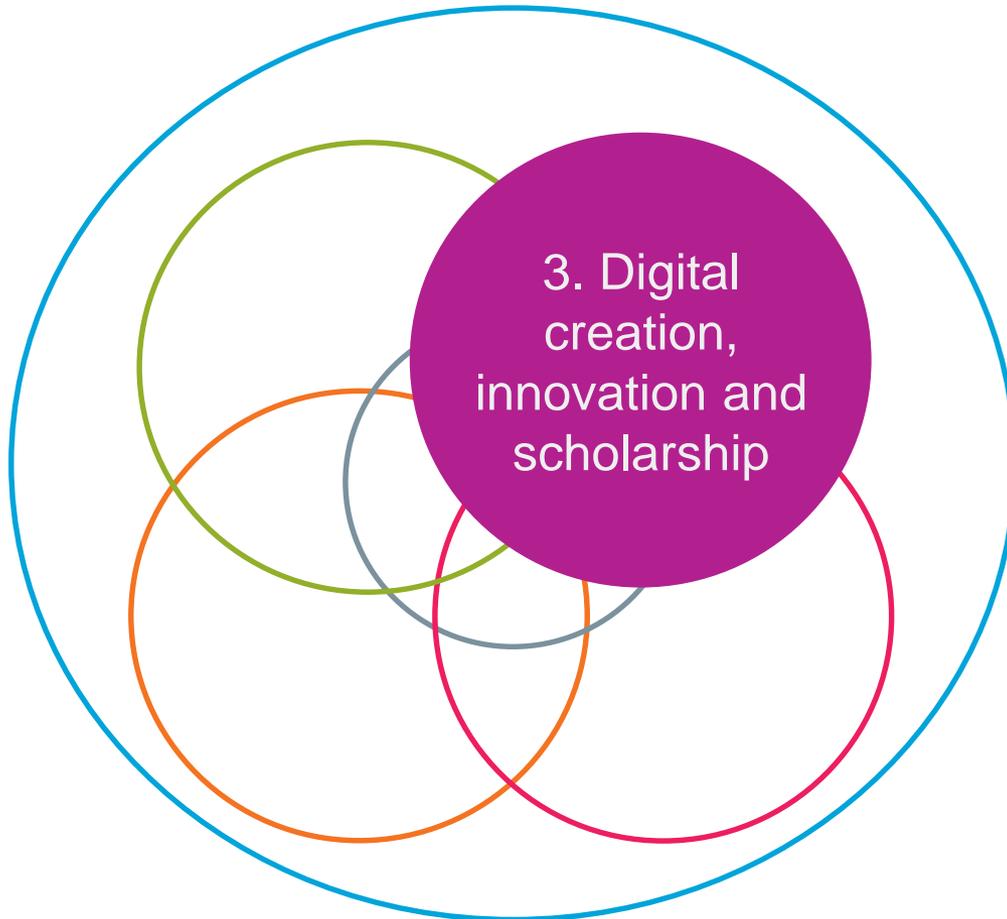
Also: **media literacy** = the capacity to critically receive and respond to messages in a range of digital media

# Example tasks for info, data & media literacy

- finding and critically evaluating a range of digital media, e.g. text, image, video, animation or audio.
- consulting and critically evaluating a range of academic, professional & industry sources and databases.
- manipulating, analysing and presenting numerical, visual and textual data.
- organising and sharing digital data/information/media created by others ethically, legally and safely.



## Digital Capability Framework (JISC 2017)



Whilst maintaining a critical perspective, digitally fluent graduates are open to continuously developing digital practices and artefacts in their specialist subject areas and in organisational settings.

also 'digital problem-solving'

# Example tasks for digital problem-solving

- Challenging students to discover, develop and share (new) ideas and research data using digital tools.
- Using modelling tools, simulation, VR/AR, virtual field trips, online role-play and games.
- Producing digital artefacts, performances, presentations, representations of designs, (multimedia) digital resources, social media contributions etc.
- Using online data sets, digital tools for manipulating data in new ways.



## Digital Capability Framework (JISC 2017)



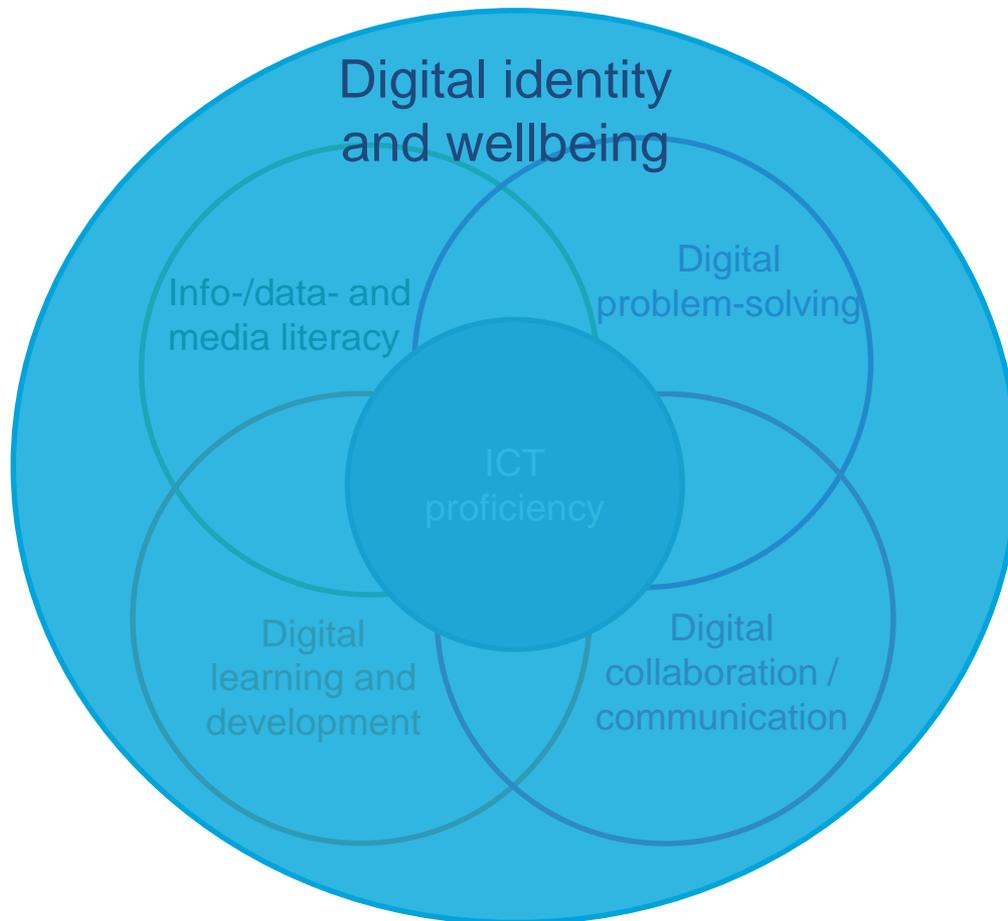
Students are able to effectively utilise digital platforms to connect, collaborate, and communicate in academic and professional contexts and as citizens.

# Some tasks for digital collab/comm

- presenting findings in a range of digital formats, appropriate for a defined audience or purpose (report, social media post, video, etc.)
- problem-solving individually or collaboratively using digital technologies (disciplinary software, wikis, forums, distant debates etc.)
- participating in digital (professional) networks safely, ethically and with respect (online discussions, email, forums, web-conferencing (sync/async), mailing lists, social media etc.)



## Digital Capability Framework (JISC 2017)



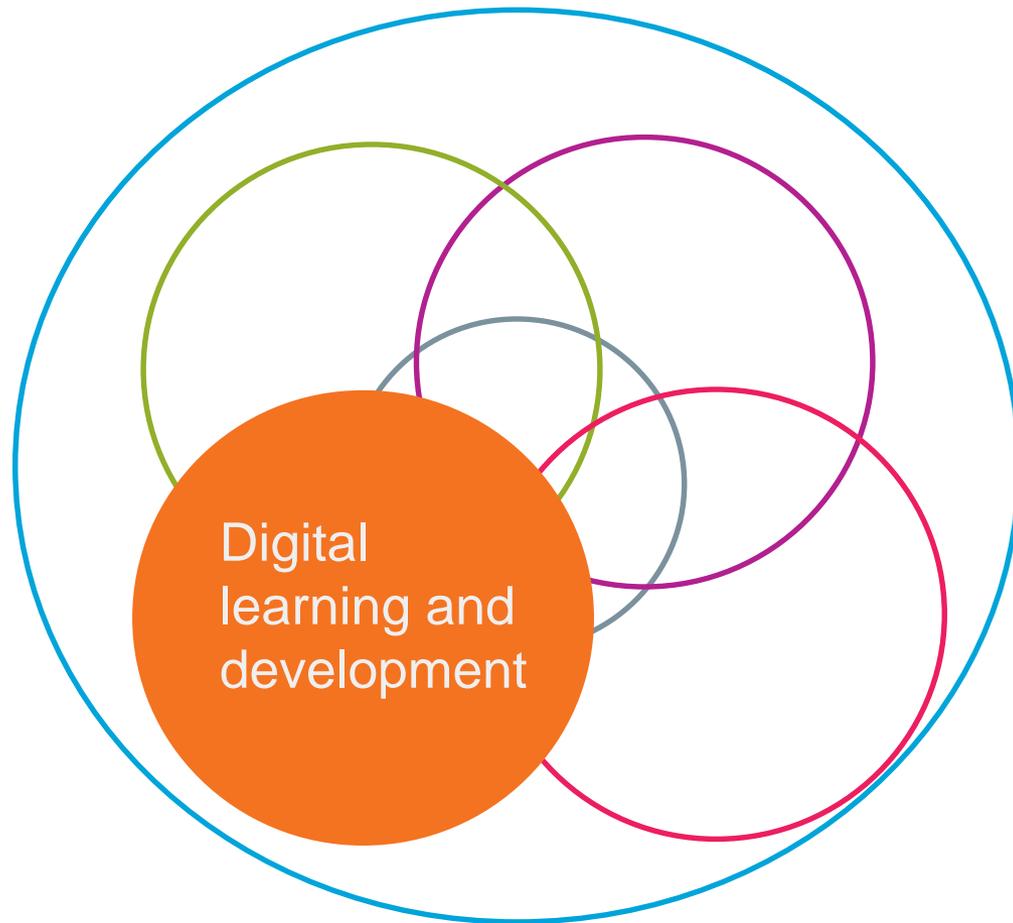
Students skilfully manage their digital identity across multiple platforms in a professional and responsible manner.

# Some ideas for digital identity & wellbeing

- Evaluate own and peers' online identities and academics/professionals in your subject.
- Creating/developing a professional online identity in the context of disciplinary tasks, e.g. blogs/wikis.
- Following your field's developments or subject experts online and on social media.
- Creating tips for developing a positive online identity.
- Debating cultural and institutional norms of digital behaviours, work-life balance & online safety in relation to your subject.



## Digital Capability Framework (JISC 2017)



The capacity to participate in and benefit from digital learning opportunities;

The capacity to support and develop others in digitally-rich settings. (JISC 2017)

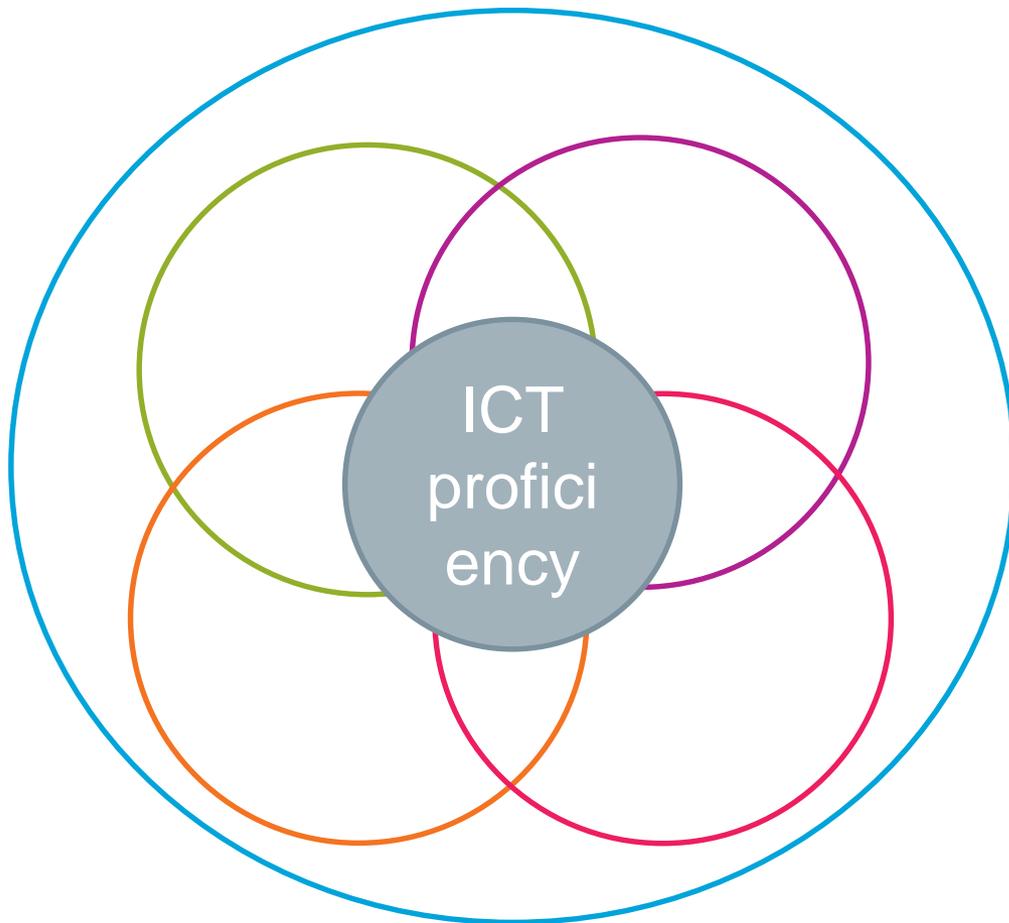
# Some ideas for digital learning/dev

- using institutional platforms, e.g. VLE, resources, online submission, online tutorials
- signposting students to applications that help organise and plan work (e.g. productivity, mind-mapping tools, revision apps/tools).
- signposting students to digital learning opportunities (e.g. Lynda.com, YouTube, MOOCs, blogs, online help/tutorials, study skill sites etc.)
- recording learning or achievement (e.g. online portfolios, reflective logs, etc.).



## Digital Capability Framework

(JISC 2017)



The confident adoption of new devices, applications, software and services and the capacity to stay up to date with ICT as it evolves.

The capacity to deal with problems and failures of ICT when they occur and implement solutions.

An understanding of basic concepts in computing, coding, and information processing.

# Some ideas for ICT proficiency

- Get students to critically reflect on and evaluate their use of technologies and resources in specific tasks.
- Bartering useful apps between students – last useful app/technology learnt.
- Discussing troubleshooting IT challenges.
- Setting coding challenges for the more advanced.
- Peer-led teaching: senior peers support students with technologies/applications.

# Digital Fluency in programme / module



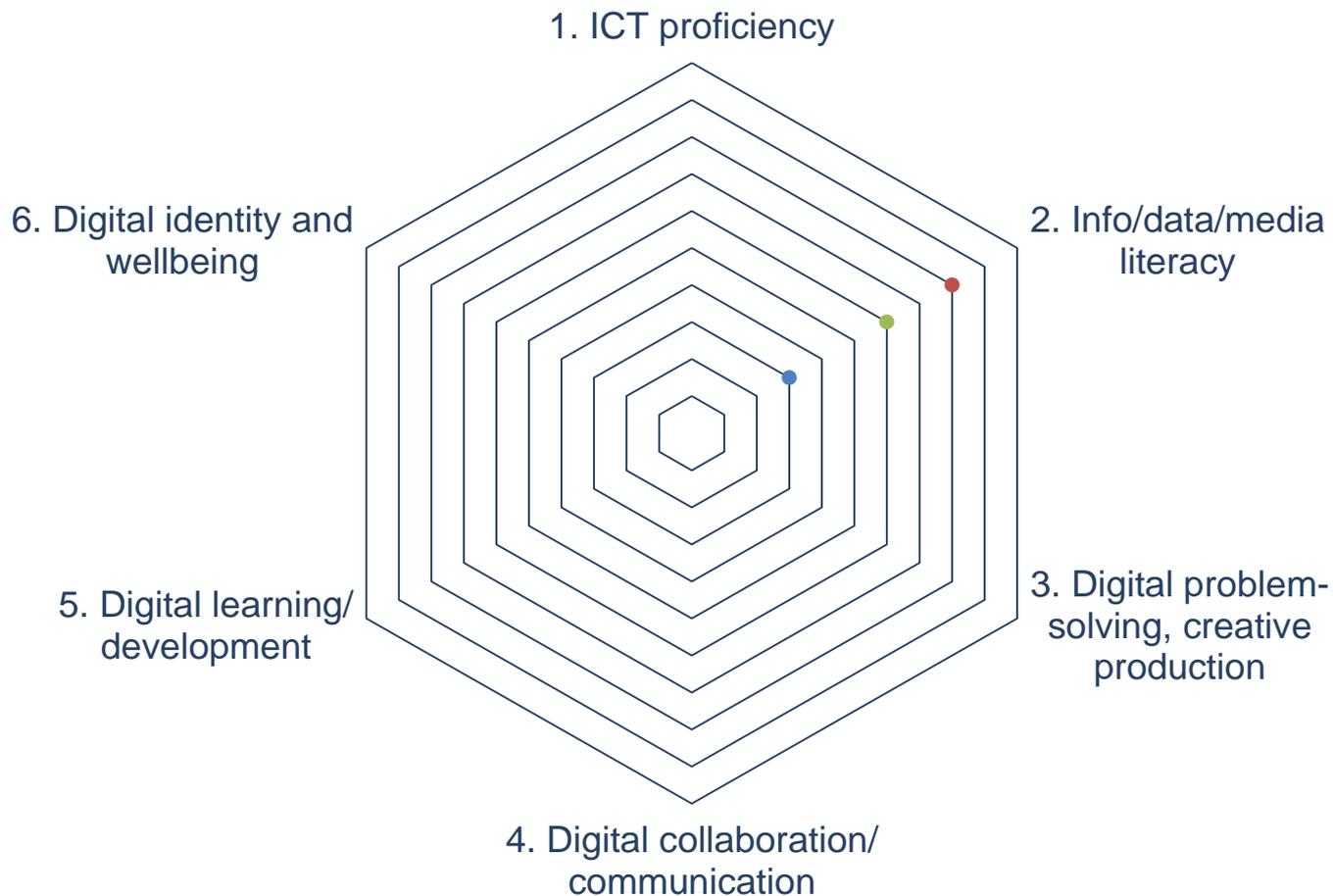
Programme / module title:

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a tweet

A successful X in my  
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A digitally fluent X is:

- Taught
- Practised
- Assessed





## Consider – module-level:

How could I adapt my module design to enhance students' digital fluency?



# Consider: programme-level

How can you develop students' digital fluency **progressively** across your programme?

*[C2021 principle]*

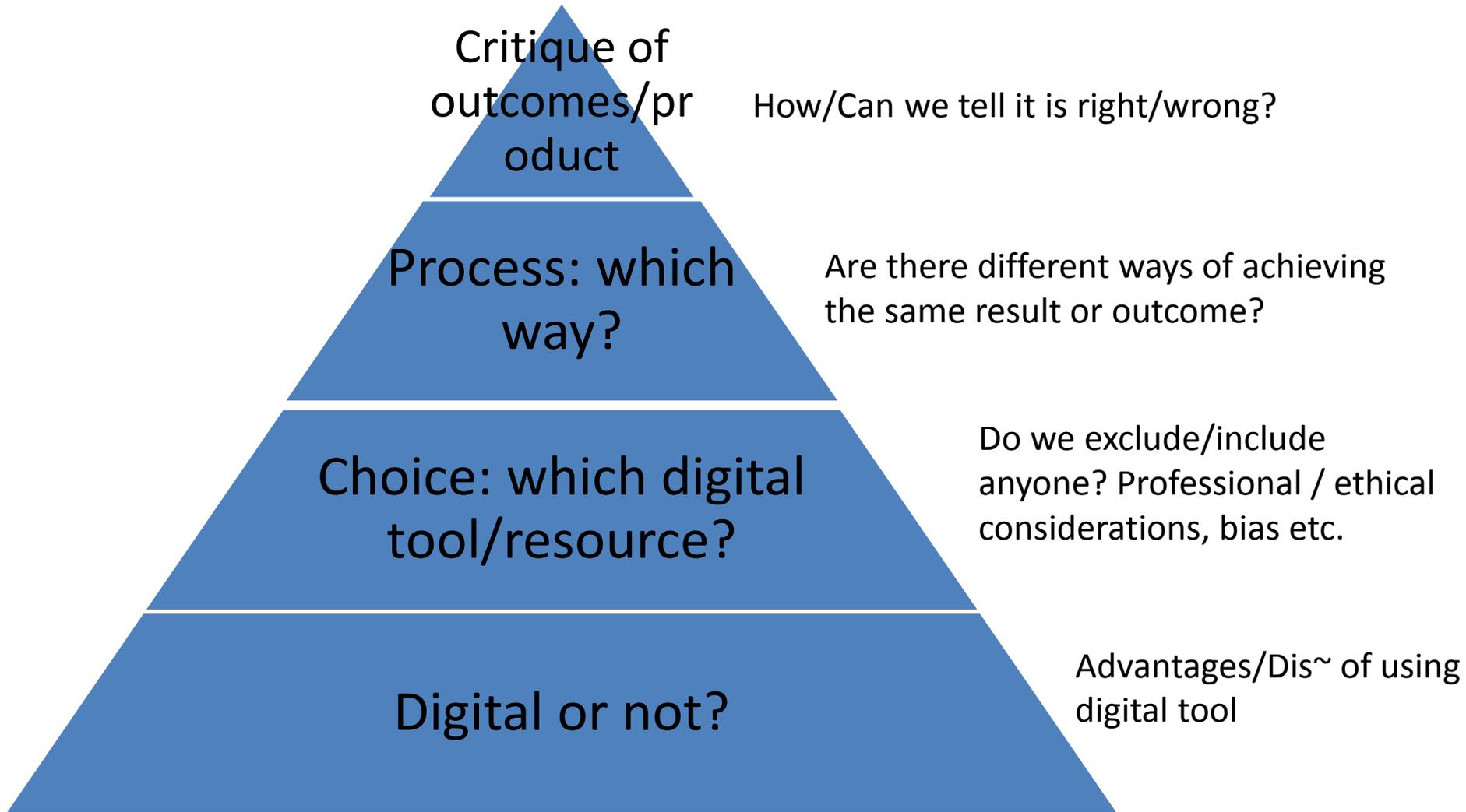
What are the **challenges** of doing this from a programme design perspective?



One challenge:

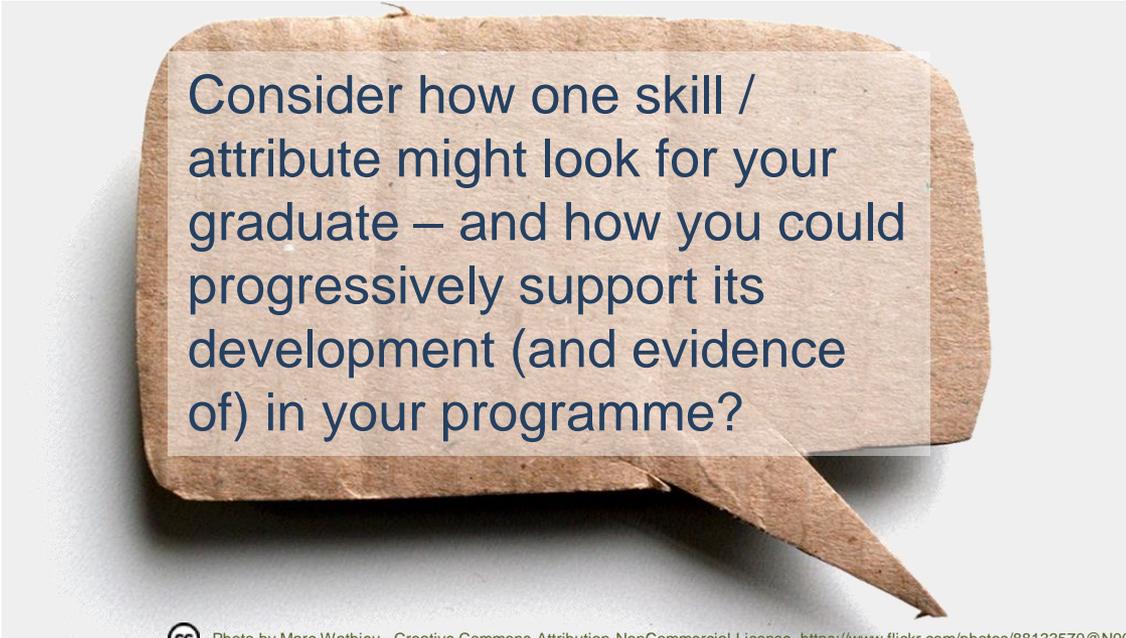
How can students **recognise** the (critical) digital skills/capabilities that they are developing?

# Layers of criticality in using digital technologies and sources





# Activity: Pick one 'signature' capability



Consider how one skill / attribute might look for your graduate – and how you could progressively support its development (and evidence of) in your programme?

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# C2021 resources on DF online



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## Digital Fluency

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Watch later Share

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**Reading list**

**Who to contact**

**Robin Sellers**

+44 (0)151 794 2513  
[cie@liverpool.ac.uk](mailto:cie@liverpool.ac.uk)

# DF case studies @LivUni

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- Hallmarks/Attributes
- Research-connected teaching
- Active learning
- Authentic assessment
- Confidence
- Digital fluency
- Global citizenship
- Keywords
- Short Description
- Abstract

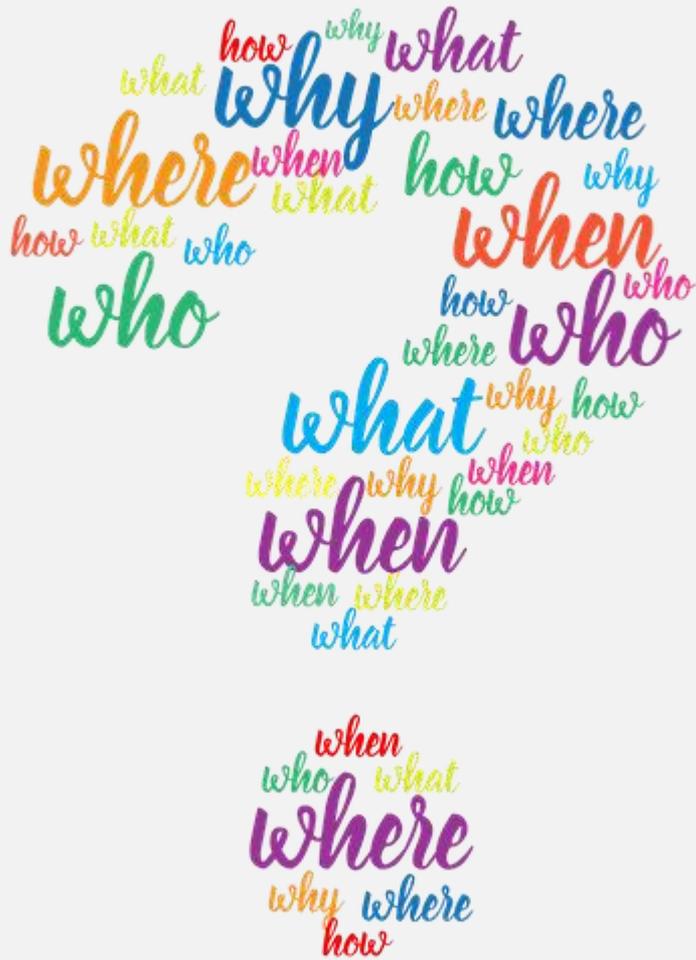
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# Next: network meeting



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# Your feedback?



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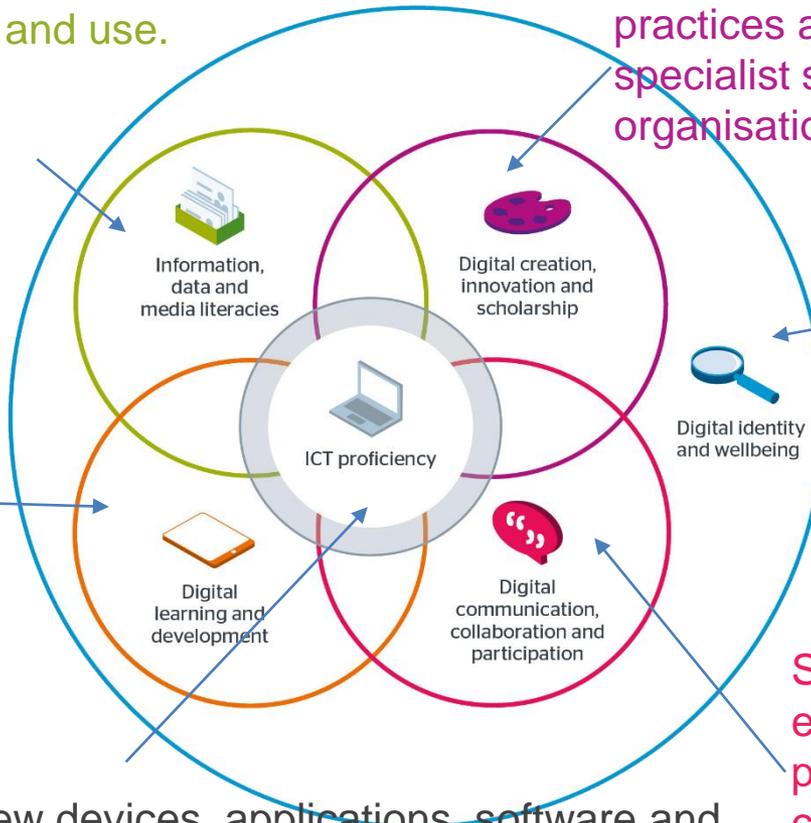
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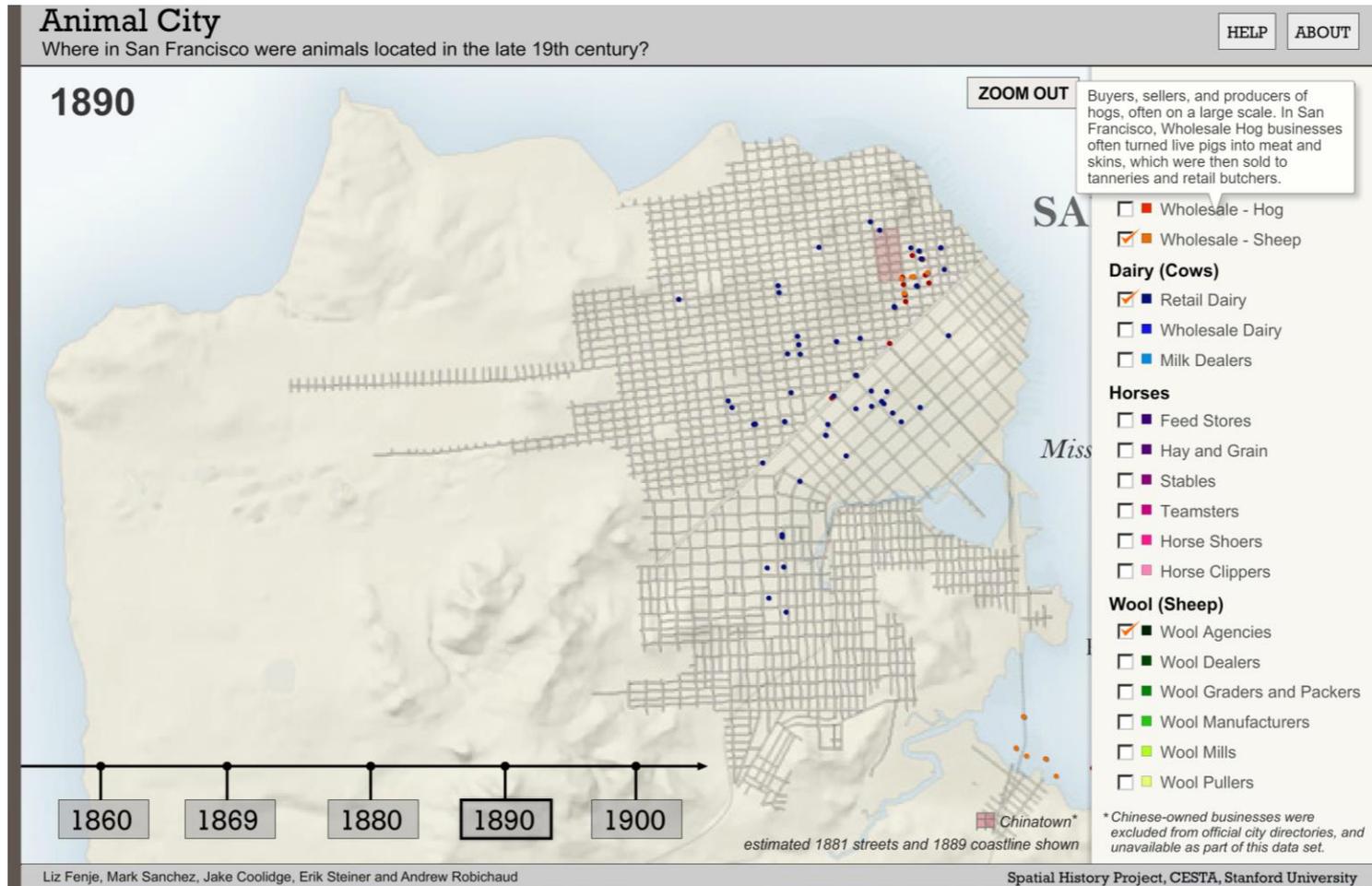
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# References

