Accessible Immersive Learning for Art and Design - IADT: Digital & Online Learning

#backtomyroots

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Agenda

Introductions

Thinking big

Helpful models and theories

Getting practical

My recent experiences

About me…

Thinking big…

Learning Ecologies:

How we learn, and what contexts and elements we use for learning… in the digital age

(González-Sanmamed et al., 2019)

Thinking big…

Learning Ecologies:

Provide a way to ‘articulate the interdependencies between an individual and their environment’

(Barron, 2006)

To understand the multiple contexts that people experience in which the learn and grow

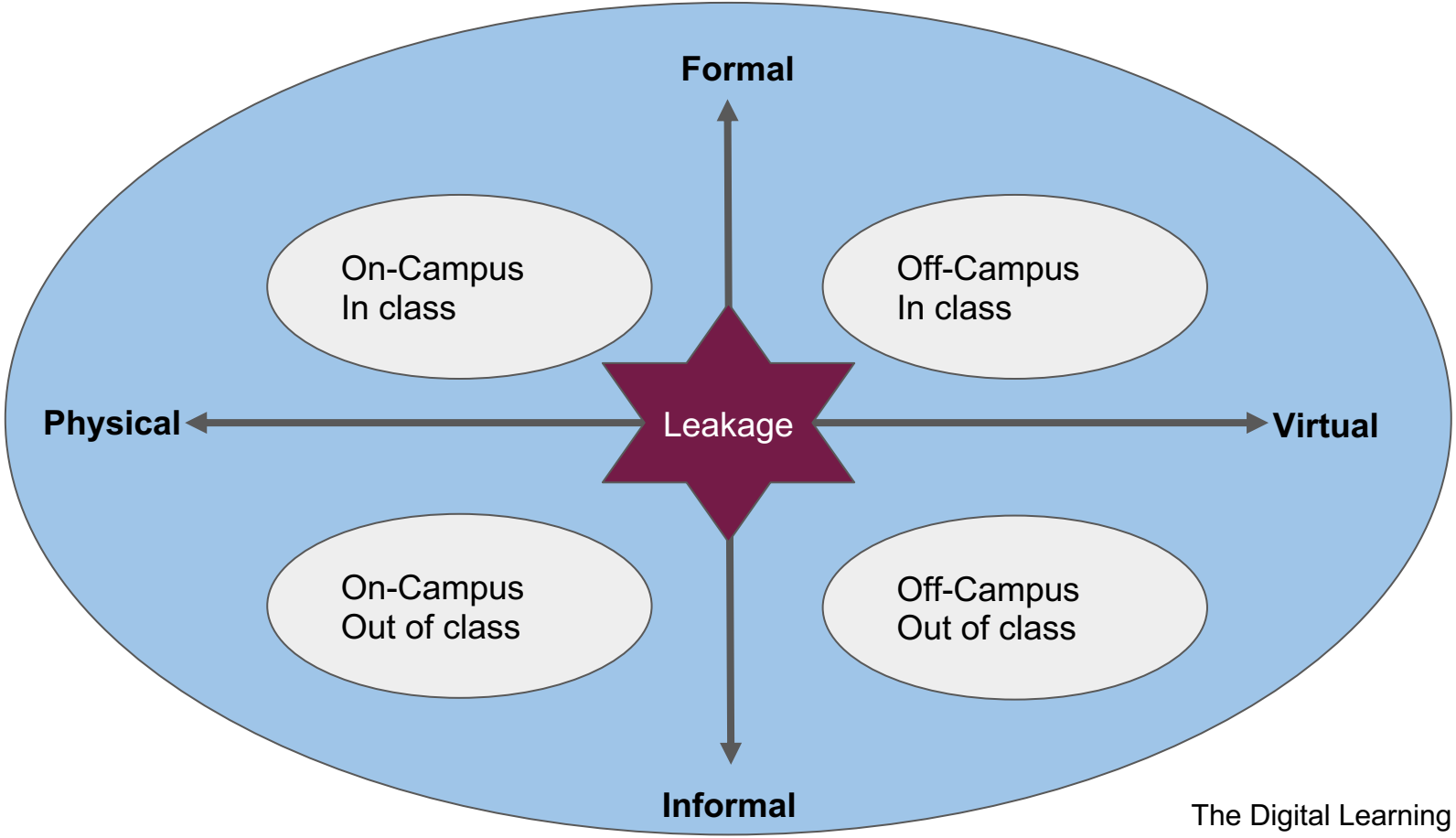
(Barron, 2004)

Thinking big…

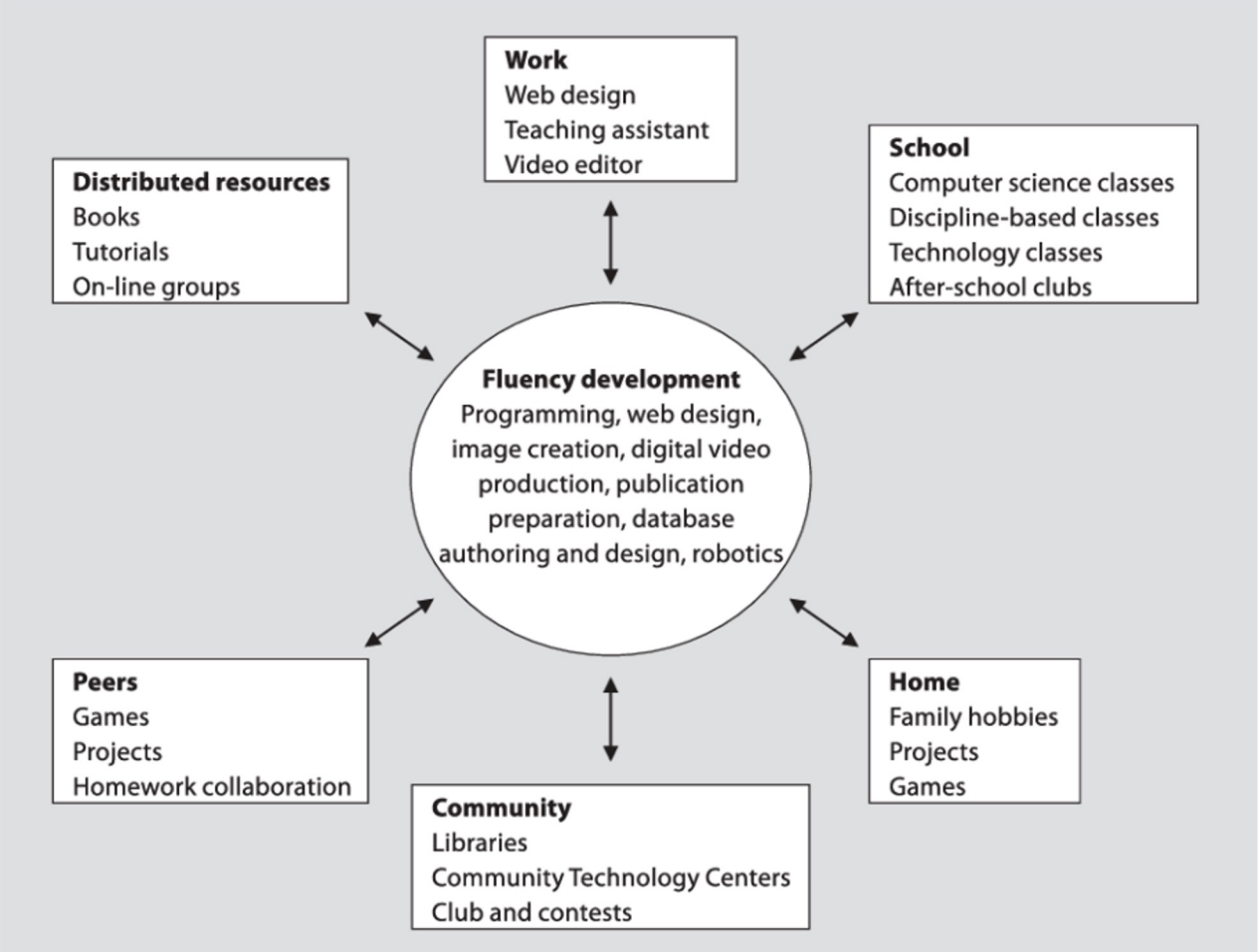
Learning Ecologies:

The sum of contexts where a learner directs their activity, cultivates relationships, uses, produces, and shares resources

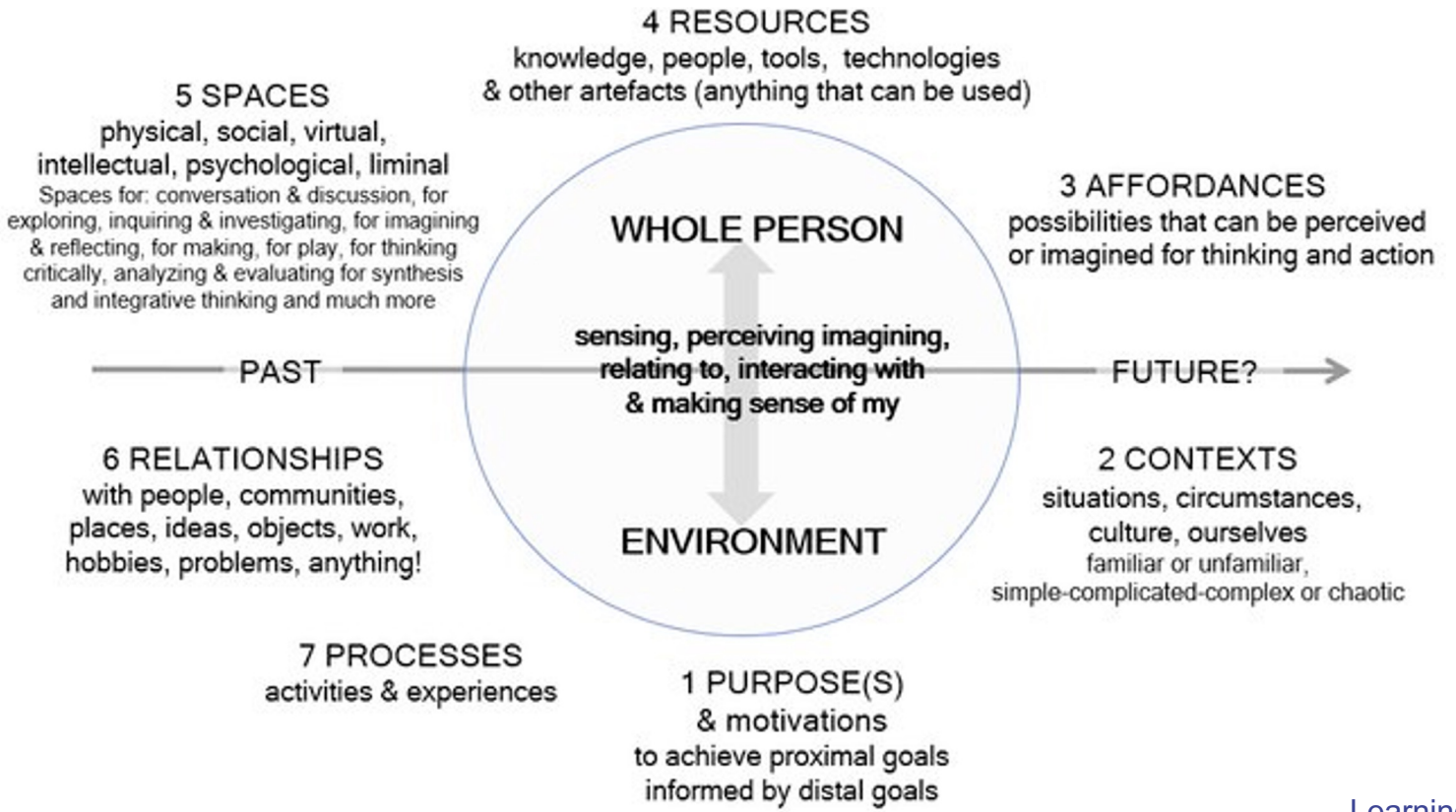
(Catasús, 2019)



The Digital Learning Ecology
Brown, 2015



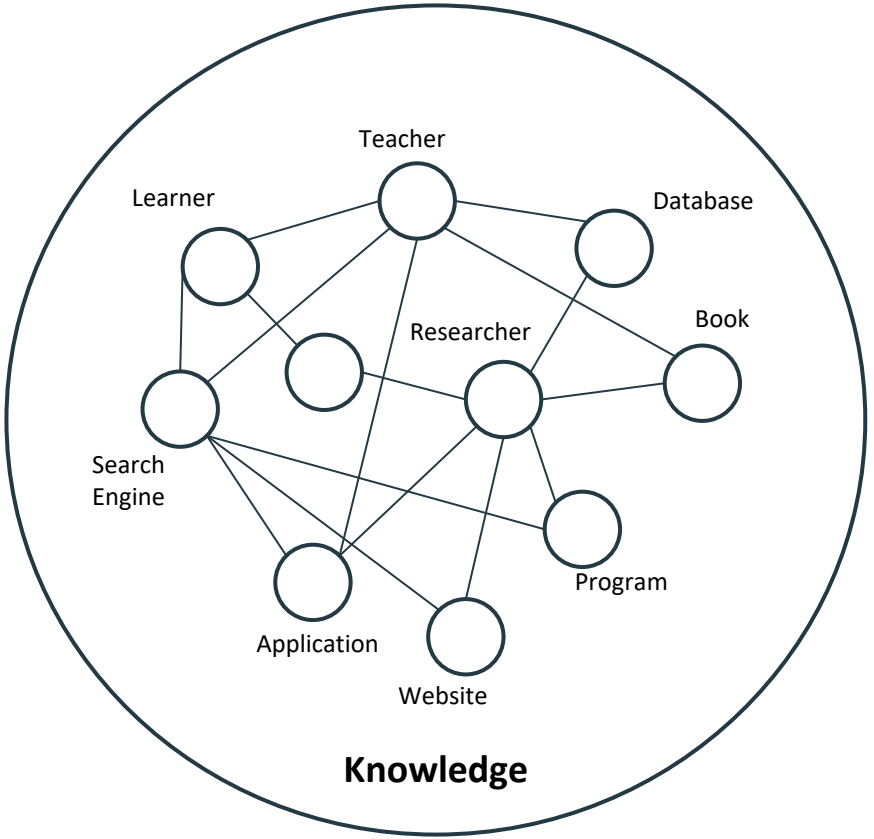
Learning Ecology
Barron, 2006



Learning Ecology
Jackson, 2016

Connectivism

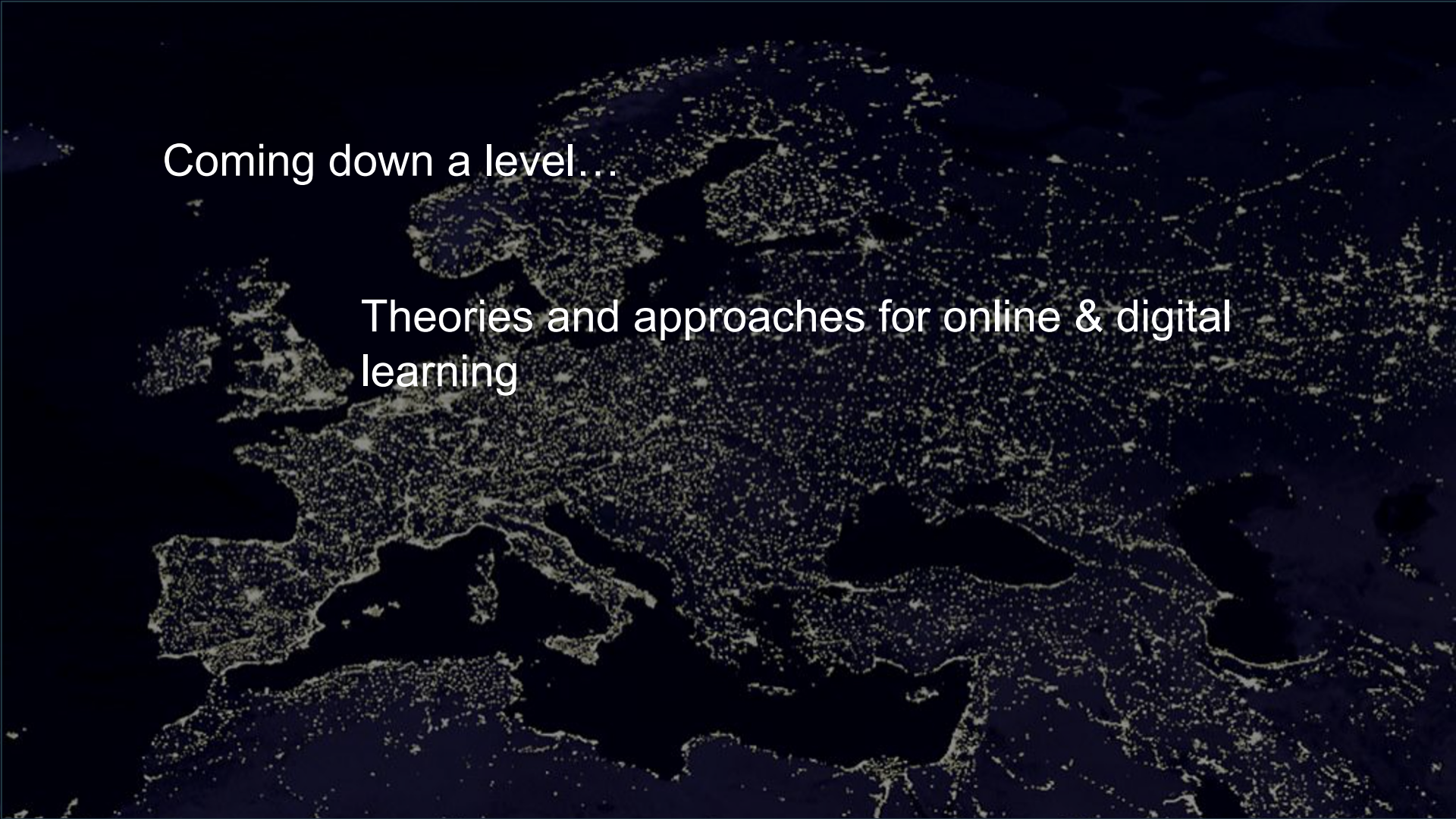
- Acknowledges a change in the way information flows, grows and changes due to internet
- Learning is focused on connecting information sets and connections that enable us to learn more
- Based on 8 principles:
  - Learning and knowledge rests in diversity of opinions
  - Learning is a process of connecting specialized nodes or information sources
  - Learning may reside in non-human appliances
  - Capacity to know more is more critical than what is currently known
  - Nurturing and maintaining connections is needed to facilitate continual learning
  - Ability to see connections between fields, ideas, and concepts is a core skill.
  - Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities
  - Decision making is itself a learning process. Choosing what to learn and the meaning of incoming information



Connectivism
Siemens, 2005

Do we consider the entire ‘ecosystem’ of our students learning?

How might a ‘learning ecology’ way of thinking impact how we engage with our students?

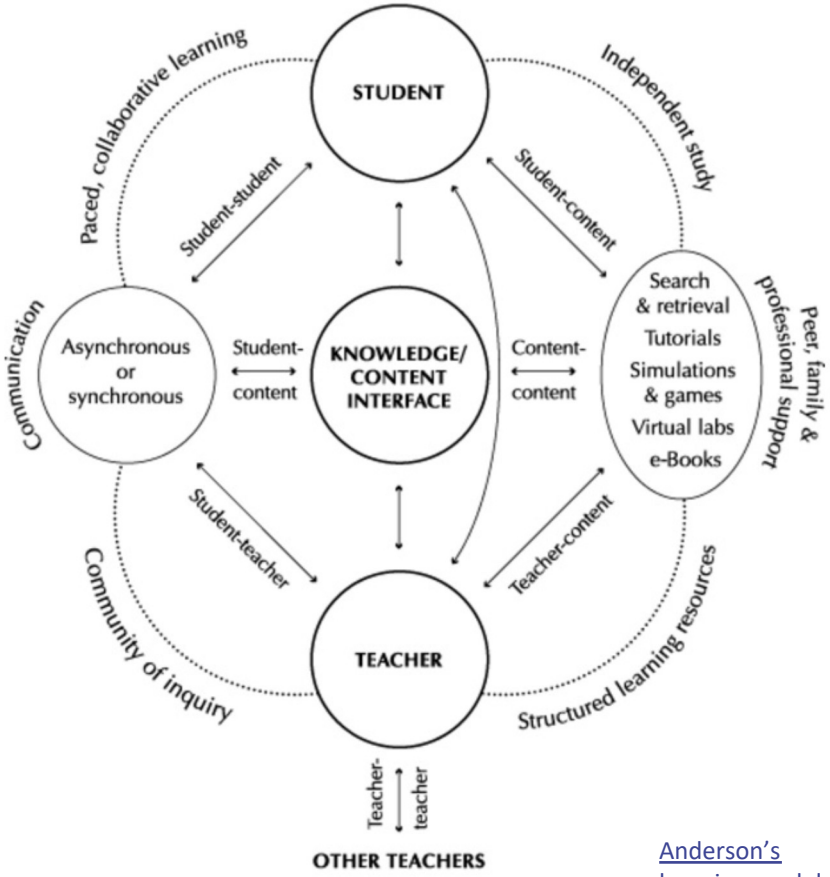

Coming down a level…
Theories and approaches for online & digital learning

Online Learning Model

- Views learning through 4 overlapping lenses:
  - Community - centeredness
  - Knowledge - centeredness
  - Learner - centeredness
  - Assessment - centeredness

The model identifies the two main players: **students** and **teachers** and their **interactions** with **each other** and **content**

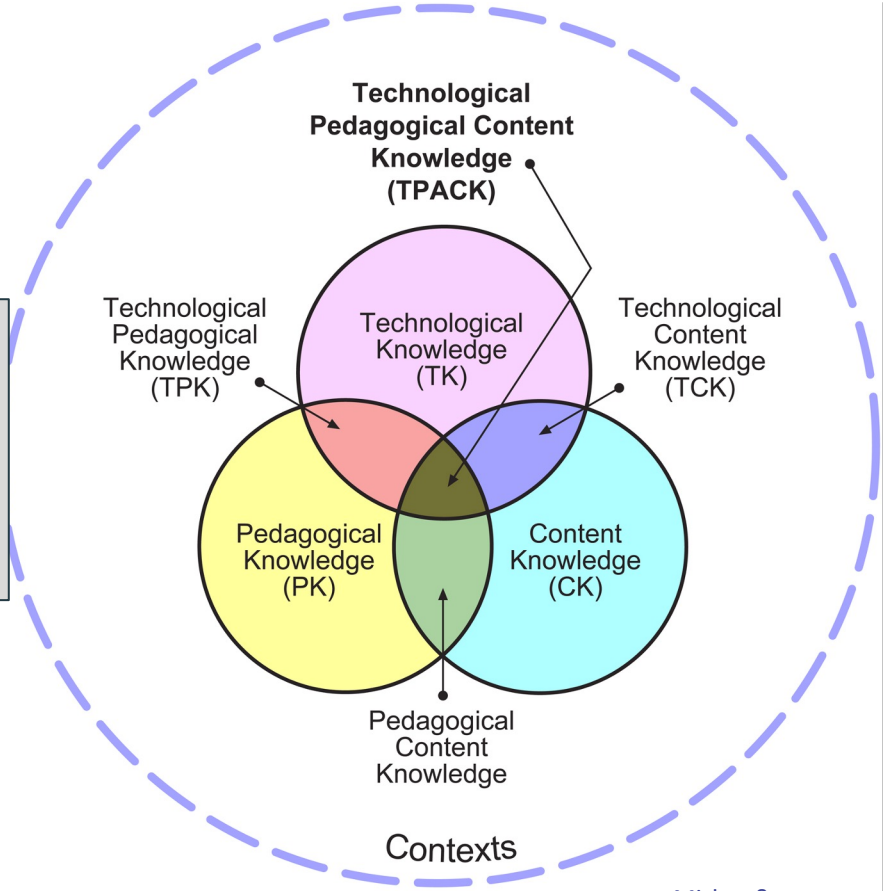
- Students can interact with content directly, as they locate it on the web
- Students and teachers can form a community of inquiry using structured synchronous and asynchronous tools.
  - Learning is collaborative & social but also binds learners/teachers in time together
- Teachers can present content in a self-paced manner, students carry out independent study
  - Learning is more isolated but learners/teachers are not bound together in time



[Anderson's learning model]

TPACK Framework

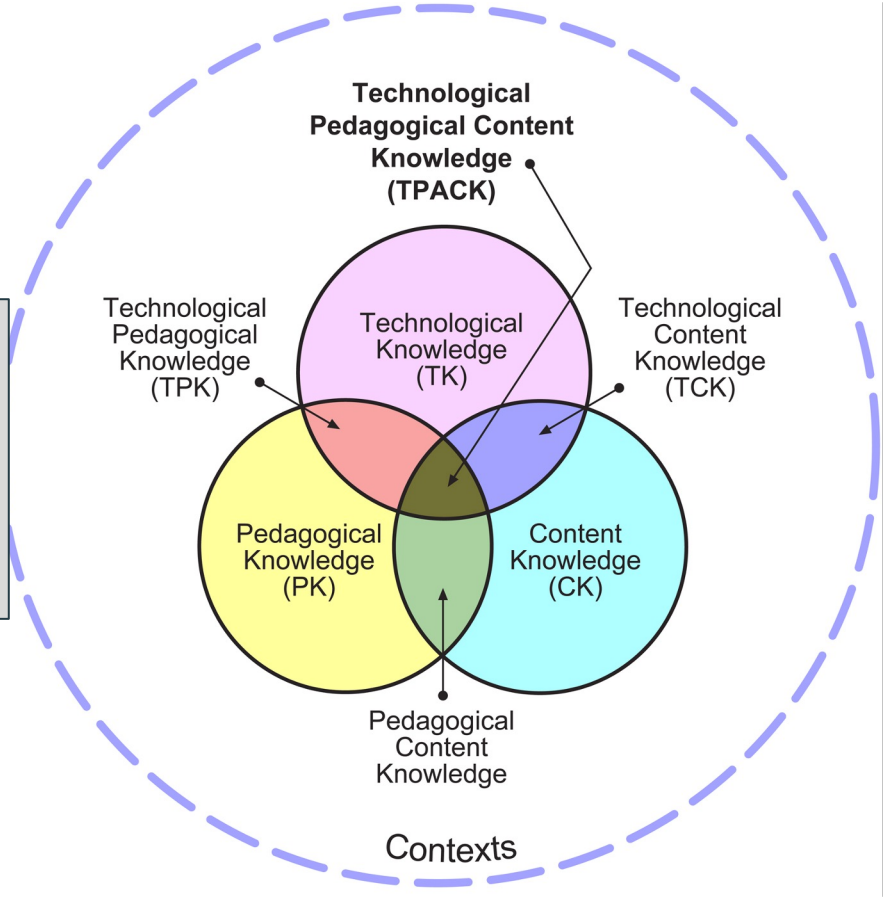
Technological Content Knowledge (TCK) – describes teachers' understanding of how **technology** and **content** can both influence and push against each other. TCK involves understanding how the subject matter can be communicated via different edtech offerings, and considering which specific edtech tools might be best suited for specific subject matters or classrooms.



Mishra & Koehler, 2006

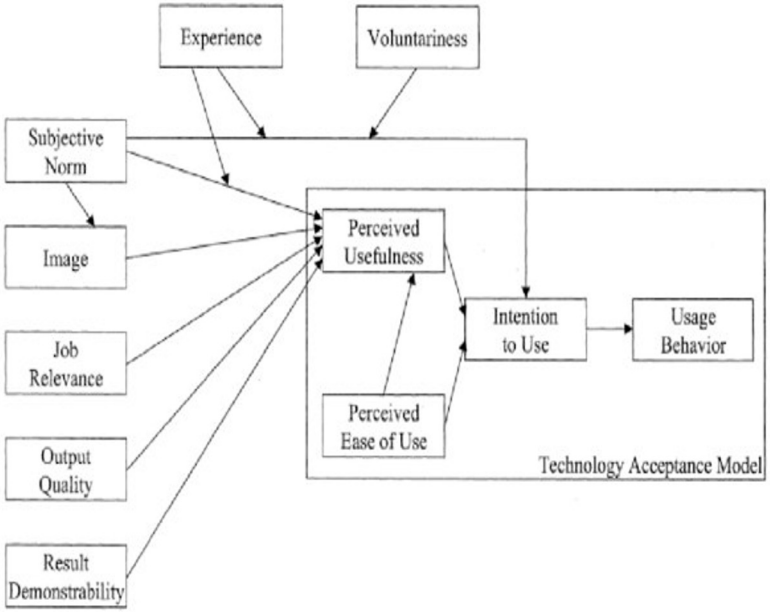
TPACK Framework

Technological Pedagogical Knowledge (TPK) – describes teachers' understanding of how **particular technologies** can change both the **teaching** and **learning** experiences by introducing **new pedagogical affordances and constraints**. Another aspect of TPK concerns understanding how such tools can be deployed alongside pedagogy in ways that are appropriate to the discipline and the development of the lesson at hand.



Technology Acceptance Model (TAM)

Process	Variable	Definition of variable
Social influence	Subjective norm	"A person's perception that most people who are important to him/her think he/she should or should not perform the behavior in questions" (Fishbein & Ajzen, 1975, p. 302).
	Voluntariness	"Extent to which potential adopters perceive the adoption decision to be non-mandatory" (Venkatesh & Davis, 2000, p. 188).
	Image	"The degree to which use of an innovation perceived to enhance one's status in one's social system" (Moore & Benbasat, 1991, p. 195).
	Experience	"The direct effect of subjective norm on intentions may subside over time with increased system experience" (Venkatesh & Davis, 2000, p. 189)
Cognitive instrumental	Job relevance	"An individual's perception regarding the degree to which the target system is applicable to the individual's job. Job relevance is a function of the important within one's job of the set of tasks the system is capable of supporting" (Venkatesh & Davis, 2000, p. 191).
	Output quality	"In perceptions of output quality, users will take into consideration how well the system performs the tasks that match their job relevance" (Davis, Bagozzi, & Warshaw, 1992, p. 985).
	Result demonstrability	"Tangibility of the results of using the innovation will directly influence perceived usefulness" (Moore & Benbasat, 1991, p. 203).



Venkatesh and Davis, 2000

Effective Online Teaching Competencies

Presence

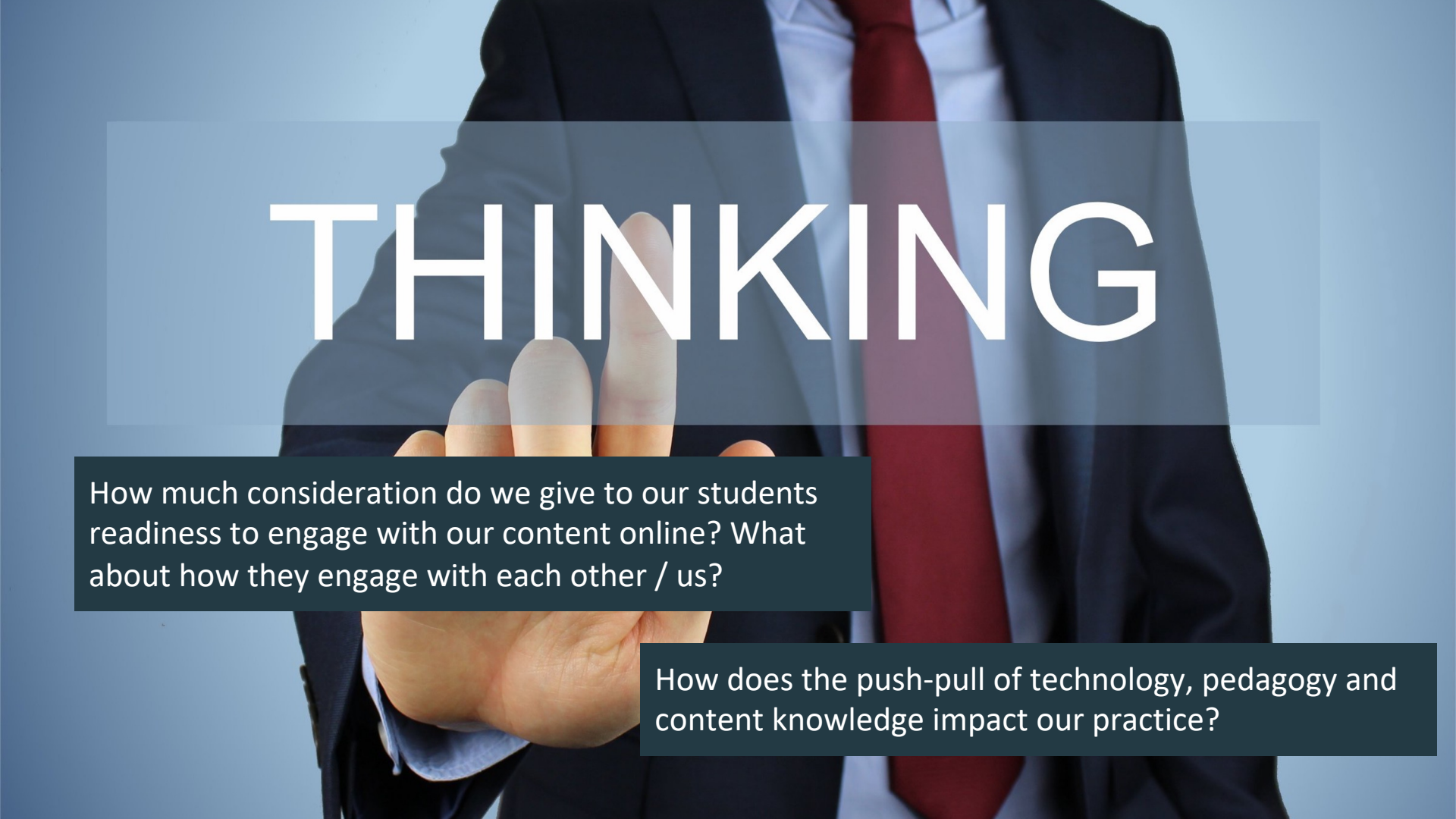
Communication
Modelling online behaviours
Cordial learning environment
Expectations
Listen to students

Facilitation

Facilitate interaction
Promote interactivity
Encourage cooperation
Resolve conflict
Encourage active learning
Implement instructional strategies

Supporting Students

Feedback
Monitor student progress
Time management
Manage learning environment
Content knowledge
Responsiveness



How much consideration do we give to our students readiness to engage with our content online? What about how they engage with each other / us?

How does the push-pull of technology, pedagogy and content knowledge impact our practice?

ABC Design For Learning

Shifting the focus: Experience Types

Acquisition

Books | Readings | Website | Video | Document | Blog | Social Media | Podcast

Collaboration

Wiki | Assignment or Task | Skyle | Trello | Twitter | Zoom | Google Meet | Blog

Discussion

Forum | Chat | Zoom | Meet | Comments sections (YouTube, PodCasts) | Twitter | Facebook | Skype

Investigation

Database | Wiki | Library / Online | Documents | Online sources / journals | Videos | Social Media | Online news sites

Practice

Assignment | Quiz | Video | Podcast | Workshop

Production

Wiki | Blog | Video | Podcast | Prezi | Go Animate | PowToon |

Tools

Experience Type

- Acquisition
- Collaboration
- Discussion
- Investigation
- Practice
- Production

Your context

Tools available
Time available
Subject matter / goal of lesson(s)
Skill levels
'Place' in curriculum (introduction, development)

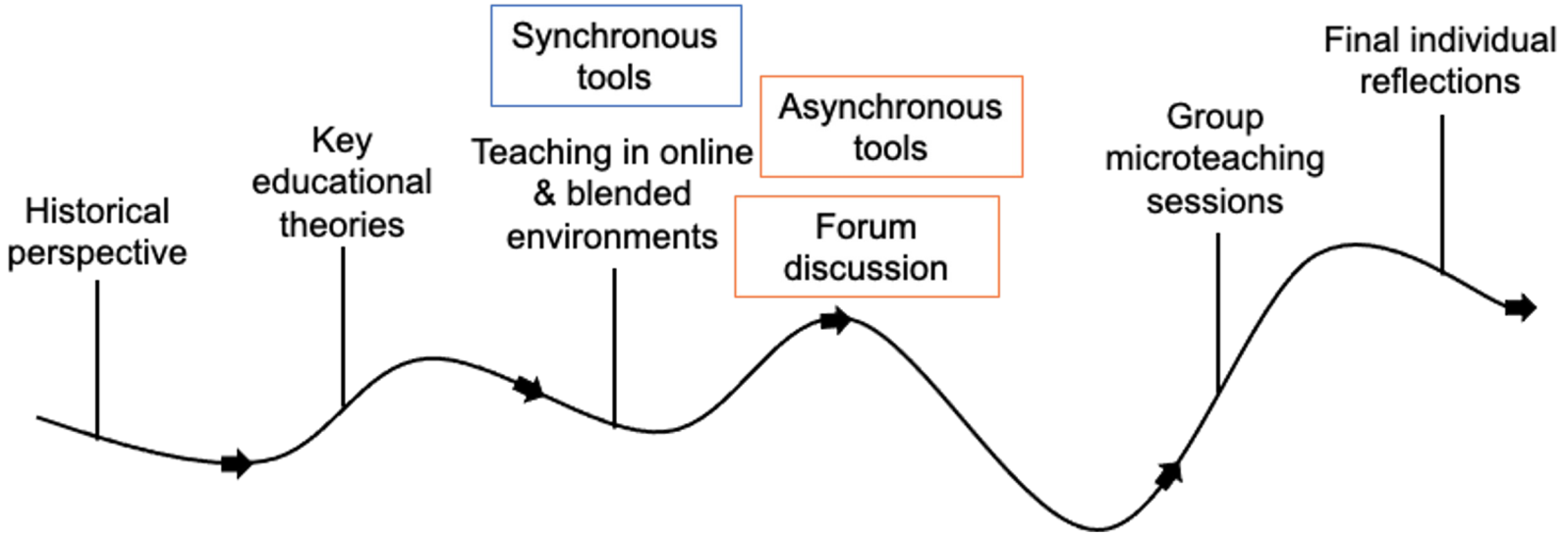
Mapping out your content & delivery

Weeks/Topic	Content	Learning types			
Week 1 of module	Module introduction	Acquisition Teacher introduces module in Zoom	Discussion Students discuss their current experiences using the chat box and mic	Investigation Students provided with a number of links on Google Classroom to source ideas for their project	Discussion 'Social' forum available for students to share their ideas for their assignments
Week 2 of module	Introduction to Volcanoes	Acquisition Edpuzzle video provided which outlines the main ways volcanoes are formed	Practice Students asked to draw a volcano and label the main parts. Submissions made to MS Teams	Collaboration Students work together to create a 'database' of active volcanoes in Europe. Stored on Google Classroom	
Week 3 of module					
Week 4 of module					

How can we map out our online / blended delivery so that it creates a variety of experiences for our students?

Online Pedagogies Module for Pre-service Teachers

Module Overview



Assessment Brief

PART A: 3 Microteaching Activities (Total: 30%)

Students will be divided into groups. Each member of the group will deliver microteaching components to their group and receive peer feedback from the other members of that group.

Grades will be awarded on a pass/fail basis, based on each folder containing:

- The 3 Microteaching Activities
- Feedback from peers on each microteaching activity

Activity 1
Recorded Live webinar / lesson - 10 mins (+/- 10%) with peer feedback
Due Fri 2nd October

Activity 2
Asynchronous content (recorded presentation / screencast) - 5 mins (+/- 10%) with peer feedback
Due Fri 23rd October

Activity 3
Moderated Discussion forum (min 5 teacher interactions) with peer feedback
Due Fri 6th November

Group divided into small groups for microteaching sessions

Grade awarded on pass/fail basis once components completed, focus of evaluations was on support/learning

Delivery of 3 different micro-teaching sessions

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SG901 Peer Feedback Sheet - Webinars

Teacher Name: **Date:**

Topic: **Evaluator Name:**

Component	Poor	Average	Good	Very Good	Excellent
Preparation					
Session management					
Varying interactions					
Communication					
Use of available tools					

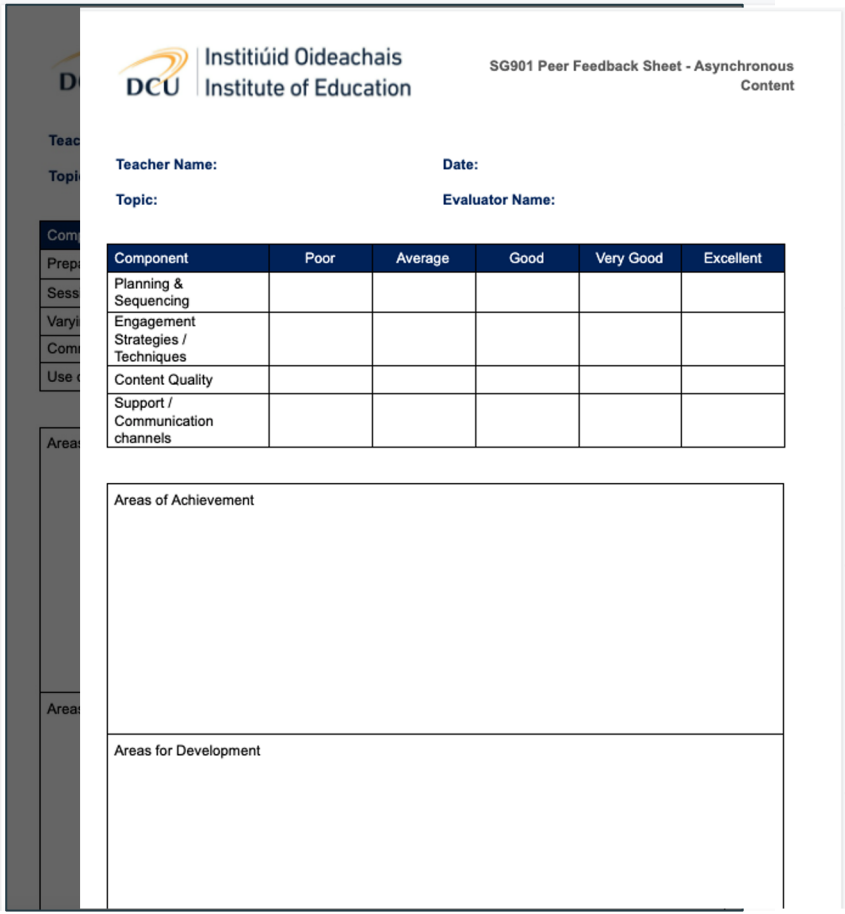
Areas of Achievement

Areas for Development

General information

Evaluation of specific elements

Areas of achievement and development



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SG901 Peer Feedback Sheet - Asynchronous Content

Teacher Name: **Date:**

Topic: **Evaluator Name:**

Component	Poor	Average	Good	Very Good	Excellent
Planning & Sequencing					
Engagement Strategies / Techniques					
Content Quality					
Support / Communication channels					

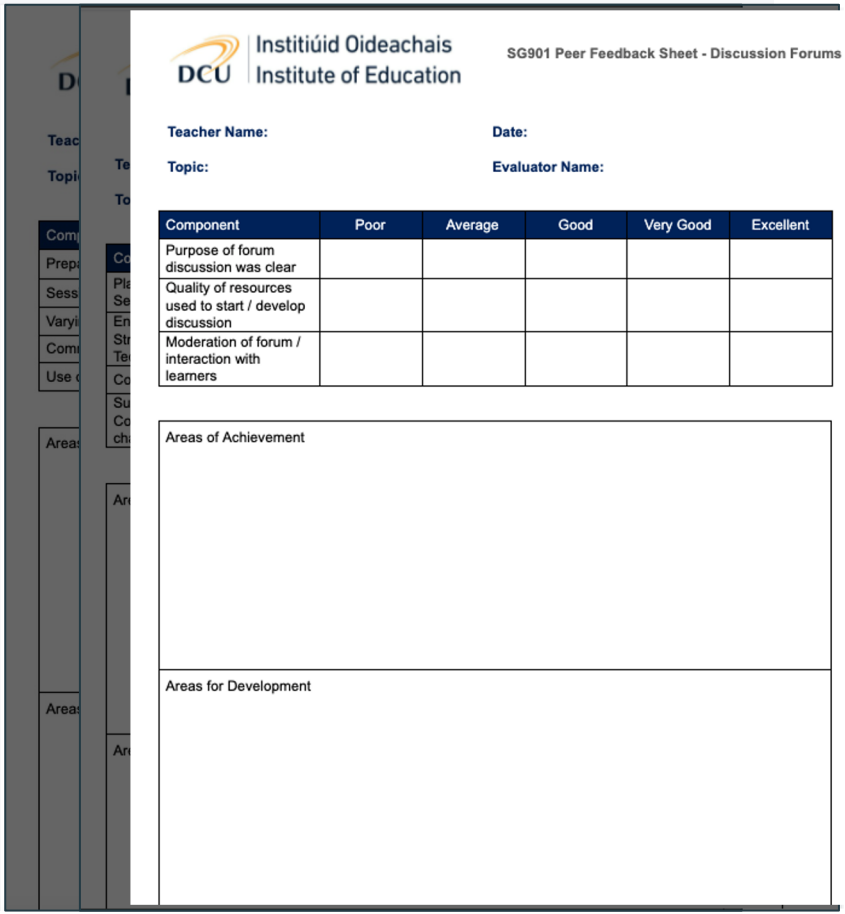
Areas of Achievement

Areas for Development

General information

Evaluation of specific elements

Areas of achievement and development



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SG901 Peer Feedback Sheet - Discussion Forums

Teacher Name: **Date:**

Topic: **Evaluator Name:**

Component	Poor	Average	Good	Very Good	Excellent
Purpose of forum discussion was clear					
Quality of resources used to start / develop discussion					
Moderation of forum / interaction with learners					

Areas of Achievement

Areas for Development

General information

Evaluation of specific elements

Areas of achievement and development

Research Procedure

Participants

244 pre-service teachers, studying for PME

Module delivered to 1st and 2nd year students

82 returned responses (34%)

Questionnaire

20 questions across 4 main themes

- **Perceptions of module content**
- **Perceptions of assessment approaches**
- **Application of learning**
- **Looking to the future**

Questions were presented with a likert scale (1 - 5), which space for qualitative responses

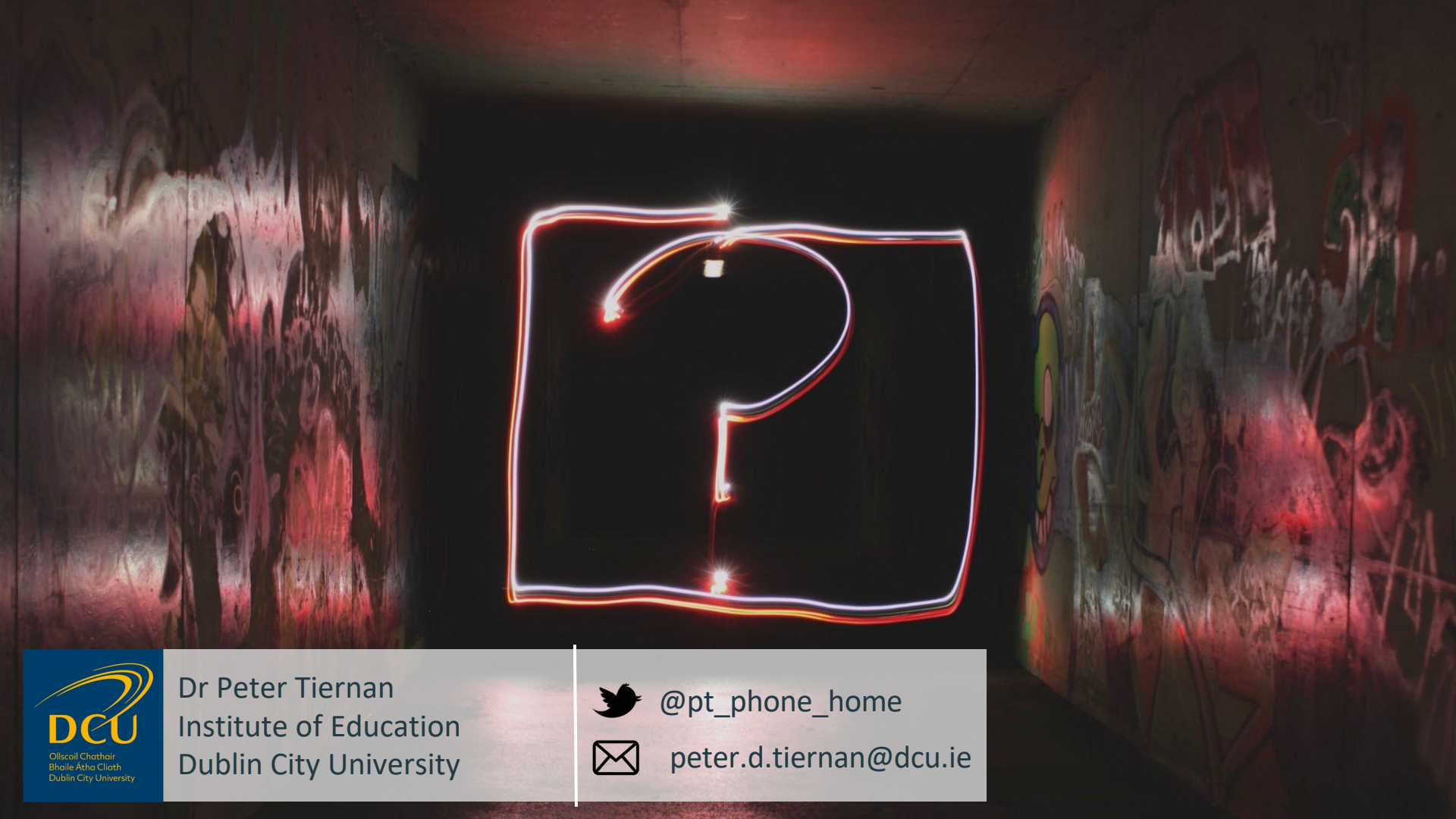
Findings

Purpose of microteaching sessions was to provide students with the opportunity to practice skills: peer evaluations were designed to turn this into a collaborative learning experience.

General: Sense of gratitude and relief - technology and approaches were not as daunting once they got started. They had a newfound confidence in their abilities

Technology: Learning about the tools is important, but understanding how and why we use the tools is more important in order to establish engagement. Module provided a foundation for future learning and experimentation.

Implications: Many of the tools and techniques are relevant in online learning as well as traditional classroom environments. Students were encouraged to reflect on their face-to-face teaching and how interaction and engagement are encouraged.



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