

A grayscale photograph of four students (three women and one man) sitting around a table, looking down at papers and books, appearing to be in a collaborative learning environment. The image is semi-transparent, allowing the text to be overlaid.

# **Introduction:**

## **How we teach and how students learn**

**Dr Simon Tate (Newcastle University)**  
**&**  
**Dr Lynda Yorke (Bangor University)**

# Plan for this session

- What are generic pedagogies?
- What are signature pedagogies?
- Different learning styles

# Eh? Pedagogy?

- The method and practice of teaching.
- aka the science of teaching and learning.

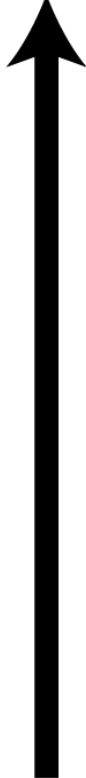
# Generic Pedagogies

- Transmissive lecturing
- Constructivist learning
- Problem-based learning
- Learning through enquiry/research
- Case studies
- Role-play/debate/discussion/group work
- Technology-enhanced learning (Mentimeter, Padlet etc)
- Service and community learning

# Other ways to conceptualise learning

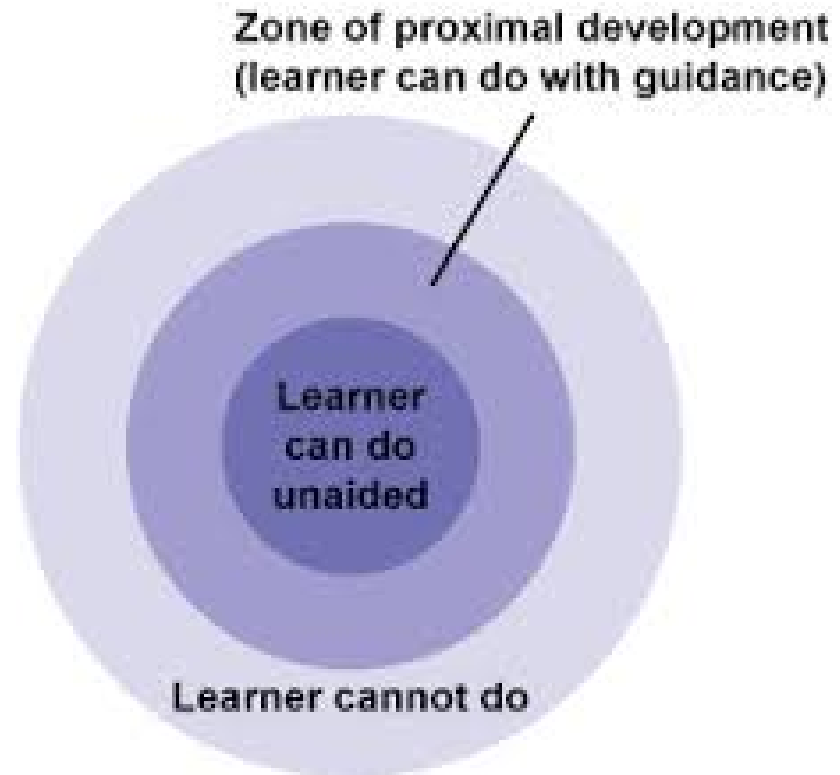
- **Surface v deep learning** (Marton and Saljö, 1984; Biggs, 1987)
- **Strategic learning** (Biggs, 1987)

# Bloom's Taxonomy of the Cognitive Domain (1956, revised 2001)

<b>Evaluation</b>	 High	Judge, evaluate, support, criticise select, recognise
<b>Synthesis</b>		Summarise, argue, relate, organise, generalise, conclude
<b>Analysis</b>		Select, compare, separate, differentiate, contrast
<b>Application</b>		Predict, select, assess, show, use construct, compute
<b>Comprehension</b>		Identify, illustrate, represent, explain, contrast
<b>Knowledge</b>		Write, state, recall, reproduce, describe
	Low	

# Lev Vygotsky

- Zone of proximal development
- 'Scaffolding'



# Signature Pedagogies

- Forms or styles of teaching that are common to a specific discipline.
- Deliver the knowledge, skills and standards of practice that Geography students should be familiar with.
- “Faculty want students to learn more than basic content; we want them to understand and practice disciplinary ways of thinking or habits of mind” (Chick, Haynie, & Gurung, 2009, p. 2) and to do so in ethical, moral, and/or professionally prescribed ways (Shulman, 2005).



# Characteristics of signature pedagogies

- **Surface structure** which entails acts of teaching & learning
- **Deep structure** of assumptions about how best to teach
- **Implicit structure** related to the moral values, beliefs and professional attitudes of teachers.

... involve making choices to select certain approaches to T&L while (usually unintentionally) disregarding others.

# Signature pedagogies in geography

- **Fieldwork:** active, experiential.
- **Spatial information handling:** GIS, cartography, visualization, spatial cognition, big data.
- **Holistic/integrative learning:** physical sciences + social sciences + skills

(Komoto, 2009; Whalley *et al.*, 2011; Spronken-Smith, 2013)

# What makes geography unique?

“Geography occupies a distinctive place in the world of learning, offering an integrated study of the complex reciprocal relationships between human societies and the physical, chemical and biological components of the Earth. Geographers study place, space and time, recognising the great differences and dynamics in cultures, political systems, economies, landscapes and environments across the world, and the links between them.”

(Subject Benchmark Statement for Geography, QAA, 2014)

# Signature Pedagogies - relevance

- Help you to understand how your teaching is guided by the discipline.
- Make you realise that you will use certain approaches to teaching and disregard others.
- Help you to guide your students to think and behave like disciplinary experts.

# Signature Pedagogies – more info

- Journal of Geography in Higher Education
- Journal of Environmental Education
- Environmental Education Research
- Journal of Geoscience Education

# Which Pedagogies?

Consider:

- what do I want the students to know after a teaching session?
- what do I want the students to be able to do?
- how can I best facilitate them reaching these objectives?

# Learning Styles

- We need to understand/be aware of how our students learn and ensure that we use a variety of methods to cover the range of learning styles our students have.
- We need to understand/be aware of how we learn so that we can recognise how that influences how we design our teaching sessions, and what impact that might have on our students.
- Understanding learning style preferences may help you to identify where problems or challenges are arising as a result of your approach.
- Learning styles have been heavily critiqued (e.g. Pashler et al. 2008, Lillienfeld et al. 2010)

# What does being inclusive mean?

Inclusive teaching recognises all students are entitled to a learning experience that:

- Respects diversity
- Enables participation
- Removes barriers
- Anticipates and considers a variety of learning needs and preferences

By being attentive to:

- Educational, cultural and social background
- Physical or sensory impairment
- Mental wellbeing



# You can be inclusive and attentive in many ways

- Consider your tone, words and body language
- Are you teaching examples sensitive to gender and ethnicity? (*is your curriculum white & male?*)
- Can you communicate key concepts in different ways so that students can engage differently?
- Are you aware of students who might feel excluded or who are becoming disengaged? How can you tell?
- Do you have any unconscious bias (*hint: we all do!*)
- Are slides and handouts friendly for dyslexic students?

[https://www.yorks.ac.uk/media/content-assets/student-services/documents/A-Guide-to-Dyslexia-\(PowerPoint\)-A5.pdf](https://www.yorks.ac.uk/media/content-assets/student-services/documents/A-Guide-to-Dyslexia-(PowerPoint)-A5.pdf)

# Getting help and advice to put all of this into action

- Handouts
- Start with the academic staff member you are working with/for
- Do you have an academic TA lead?
- Your PhD supervisor, or other department staff
- Advance HE (HEA) Associate Fellowship course