How do students learn geography?

‘How do you think children learn?... It can be helpful to stop every now and then and think about what we do to help children learn. When we bring some of the intuitive ideas to the surface, and share them with others, we can gain more control over the repertoire of choices and strategies we have available.’ (Liz Taylor, 2004)

Liz Taylor offers good advice here. As an experienced teacher you will have a very good understanding of how to help children learn, but you might need to reflect on what you do and bring these ideas to the surface to share them with trainee teachers. It is important for trainee teachers to have a good understanding of the how students learn in geography as well as knowing ways to help them to progress. They also need to know how to discriminate between tasks that only occupy students in lessons and those activities that really help them to learn geography.

- Refer to the trainees’ webpage on How do students learn geography

The process of understanding geography

Discuss with trainee teachers Bennett’s diagram on the roots of understanding shown on the trainee teachers’ webpage. Emphasise the role played by teachers who help students to make the link between their personal experience and geographical concepts.

Consider with trainees the distinction between working memory and long-term memory, and how this impacts on learning in geography.

Also discuss Weeden and Lambert’s principles of learning geography and what the trainees read about the five aspects of learning listed on the trainees’ webpage. Discuss these theoretical ideas in relation to lessons they have observed or taught and what they found from the activity that focussed on students’ learning.

The role of learning theory in geography ITE training

Trainee teachers should be aware of some of the important learning theories and how they influence how we teach geography. In some quarters, the theory of learning has received a bad press in recent years in the belief that a practical approach is more important for trainee teachers. But both are important. As Sheila King has written:

‘It is unlikely that teachers whose practice is largely uninformed by the theories of others will develop the professional competence required by teachers in the twenty-first century.’ (King, S (2010) Reflecting critically on practice in Brooks, C (Ed) Studying PGCE Geography at M Level, Routledge)

Ensure that trainee teachers carefully read the references given on the trainees’ webpage. Make sure you facilitate access to appropriate classes and students for them to complete the teacher activities that focus on learning.
Discussions with trainee teachers

- Discuss their findings from their ‘Focus on learning’ activity and what they found out from their discussions with teachers about how students learn (see trainees’ webpage).
- Discuss the different ways students learn and what they have read about this.
- Refer to the trainees’ support sheet *Misconceptions and misunderstandings in geography,* and discuss these, especially ones that are relevant for topics that trainees are currently teaching. Suggest they make a list of common misunderstandings as they observe and teach lessons, so that they can focus on these as they plan lessons.
- Download trainees’ support sheet on *Learning theories* and discuss with trainee teachers how the three important aspects of geography teaching below draw on the ideas proposed in learning theories:

**Geographical enquiry**
This approach adopts the principles developed by the psychologist Jerome Bruner. He planned activities that posed students questions and promoted speculation. He valued learners using sources of evidence, engaging in open ended discussions and reflecting on what they had learned. Enquiry in geography similarly values understanding and applying fundamental concepts rather than memorising facts.

**Geographical learning through language**
The use of language – speaking, writing, reading and listening – is central to the development of students’ thinking and learning in geography. Literacy is a vehicle to develop subject knowledge and understanding. It helps students to structure thoughts, reason arguments and sift information. Developing students’ literacy skills through geography is not simply about helping them write or talk, it is about using language and literacy to develop geographical thinking. Personal and expressive forms of language, both oral and written, reveal what students feel, believe and think in geography and give the teacher essential insights into their understanding.

**Thinking through geography**
Thinking through geography is a ‘cognitive acceleration programme’ that was inspired by the developments in science (CASE). It is built upon the theory of social constructivism. In thinking activities students are encouraged first to access their existing knowledge and understanding and are taught any new vocabulary. This is called the concrete preparation phase. They are then challenged to go beyond their current thinking by the thinking activity which introduces them to new information and evidence in; this is described as the construction zone. Leat describes how students experience cognitive conflict when there is a mismatch between the incoming knowledge and what they already know. It is resolved when they form new concepts. Leat comments, ‘we get a small window on this happening for a student when they might say with feeling ‘Ahh – I get it!’

The significance of the new learning and concepts they have learned is the function of debriefing, which makes this a very important activity for consolidating learning. Leat discusses metacognition (developing and understanding of their own thinking) and bridging (transfer of concepts to other contexts) as two key roles of debriefing.


**Applying ideas of how students learn to trainees’ lessons.**

- Look at *this diagram* of the teaching and learning sequence and discuss with trainee teachers how this sequence applies in units of work that they are teaching. How does this reflect the learning theories you have discussed with them?
• Consider with trainee teachers these statements about learning in geography. How could trainees apply them in the lessons they are planning to teach?
  - Students must be actively engaged in lessons to learn. Passive learners are a myth.
  - Students need to relate their existing knowledge to a new situation to allow for progression in their conceptual understanding.
  - It helps students to have concrete examples and illustration of new concepts and ideas – images are very important in geography.
  - Extracting and summarising information from different sources i.e. transforming and using data helps students to internalise and understand information – copying does not.
  - Talking helps students to relate new knowledge to previous experiences and to clarify their thinking.

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