

## Mastery learning and geography

Every so often education has a new ‘buzzword’. In 2015 ‘mastery learning’ caught the attention in England and the Department for Education flew in teachers from Shanghai to raise standards in mathematics with their ‘Chinese mastery’ teaching style. The Guardian ran the headline, *‘Differentiation is out. Mastery is the new classroom buzzword’* (1 October 2015). The approach has impacted on mathematics teaching, but has also had a wider impact across the school curriculum.

Despite the media hype, mastery learning is not new, nor did it originate from China. It has a basis in educational research, from the work of Benjamin Bloom (1968). Its’ principles have been adopted by good geography teachers for decades. In 2001, Catherin Owen wrote in *Teaching Geography*:

*‘In developing a scheme of work I decided to use Bloom’s (1976) ‘Mastery learning’ approach, teaching the unit through normal teaching methods and then through enrichment or support work. This approach appealed to me as it embraces differentiation as a core part of teaching rather than it being an “add on”.’*

Bloom proposed that students should demonstrate ‘mastery’ of knowledge before they move on to learn new knowledge and he believed that all students are capable of learning anything if presented in the right way. Both ideas resonate with good geography teaching. However, the notion of ‘mastery’ does give the impression that knowledge is always right or wrong, which is not always the case in our subject. Perhaps geographers should consider it as ‘learning for excellence’?

Bloom’s mastery learning strategy outlined, in summary:

- 1) The teacher identifies the concepts and skills they want students to acquire and plans short learning units.
- 2) High-quality initial teaching of these concepts/skills.
- 3) Formative assessment to identify precisely what students have learned well by the end of the unit and where they still need additional work. The formative assessment provides *correctives* – i.e. what students must do to correct their learning difficulties and to master the desired learning outcomes.
- 4) Students complete their corrective activities. Then there is a second formative assessment that addresses the same learning goals but includes different problems or questions. This offers students a second chance to succeed and finds out if correctives were successful.
- 5) For students who demonstrate their proficiency on the first assessment, enrichment or extension activities are planned. These give opportunities to broaden and expand learning.

Bloom believed that by using this approach nearly all students could truly master academic content. Later research has supported him showing that students consistently reach higher levels of achievement and develop greater confidence in their ability to learn and in themselves as learners.

## Mastery learning in practice

Mastery learning is a teaching strategy recommended by the [Education Endowment Foundation](#) particularly for lower achieving students and when students work in groups and take responsibility for helping each other.

Most users of mastery learning stress the importance of diagnostic assessment before the teaching sequence to hone the specific goals for the unit. All emphasise the importance of high-quality teaching and see the use of formative assessment to monitor student progress and give specific feedback as equally important. The 'corrective' teaching designed to remedy identified learning problems should not be described as 're-teaching'. It should adopt a different approach to the original teaching e.g. using different examples and involving peer tutoring or collaborative activities. Mastery learning recognises high achievers and offers challenging, and rewarding enrichment experiences beyond the established curriculum.

## Mastery learning, the spiral curriculum and enquiry-based learning.

The biggest problem with the notion of mastery learning is knowing when students have mastered something. Learning in geography takes time and new ideas have to be seen in different contexts for students to understand them securely. It is risky to assume that students have 'mastered' understanding a geographical concept or a skill and you never have to return to it. It is returning to previous learning and consolidating it in a new context that is the premise for the idea of spiral progression<sup>1</sup> in geography (see [Planning for progression](#)). Think about teaching a skill such as six-figure grid references. Most teachers will feel that students have grasped this in Y7, but when they need to use this in later lessons, it often has to be retaught.

An even greater problem is if 'mastery' learning is used as a template for every lesson. No teaching approach should be sacrosanct. For example, a mastery learning approach, with a prescriptive and structured style, might not sit comfortably within geographical enquiries.

## Reading for trainee teachers and NQTs

- Bloom, B.S. (1968) *Learning for Mastery*. Los Angeles, CA: UCLA/Center for the Study of Evaluation of Instructional Programs
- Kelly, A. 'Mastery or Wonder? *Primary geography*, Spring 2017
- Owen, C. 'Developing literacy through key stage 3 geography', *Teaching Geography*, October 2001

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<sup>1</sup> Day, A. 'Geography: Challenges for its next century', *Teaching Geography*, April 1995