

MASTERY OR WONDER?

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In this article Arthur reflects upon what a 'Mastery' approach has to offer geography teaching and learning.

During recent work with teachers, the notion of 'mastery' has frequently cropped up in relation to teaching and learning; particularly in relation to mathematics, but also to other subjects more generally. This set me thinking – 'what is mastery?', 'what are its roots?', and 'would such an approach be relevant to teaching and learning geography?'

The meaning of 'mastery'

When I went to my dictionary to look up 'mastery'; unsurprisingly I found it had different connotations. It can mean 'a comprehensive knowledge or skill in a particular subject or activity', or 'the action of mastering a subject or skill, or control or superiority over someone or something'. In education we must go beyond literal meanings, but these 'definitions' sow the seeds for some deeper critical reflection.

In the field of education the concept of 'Learning for Mastery' was proposed by Bloom (1968), where pupils have to

demonstrate mastery of knowledge through testing before they move on to new knowledge. Here, all pupils are capable of learning anything if it is presented in the right way. The onus is, therefore, on the teacher to find the 'right way' for their learners. It is argued that this is beneficial in that it does not create 'glass ceilings' for learning – all can achieve, it is a matter of time and the 'right' method.

The mastery approach has been taken up by British policy makers interested in raising attainment (DfE, 2011), and in particular mathematics educators (e.g. National Centre for Excellence in Teaching Mathematics – see web panel; Vignoles *et al.*, 2015), with an upsurge in interest in mastery teaching methods from countries such as Singapore and China. Mastery can be seen as a strategy to deepen pupils' understanding, with fewer topics covered in greater depth – with greater emphasis placed on problem solving and reasoning and on how an impact on mathematics attainment has been demonstrated (Vignoles *et al.*, 2015). While this approach has been taken up with particular gusto in maths, it has clearly had a wider impact, particularly in this era of life without levels, when we now work at greater depth within the expected standard rather than pushing on to the next level.

Deepening understanding

To start with, let's look at potential positives. I am all in favour of deepening pupils' understanding of geography in terms of its key concepts:

- Place
- Space
- Scale
- Human and physical processes
- Diversity
- Environment and sustainability
- Interdependence.

The National Curriculum in England requirements (DfE, 2014) seem to support this, but I have my reservations about whether the National Curriculum recognises all of these key concepts. Its focus on problem-solving and reasoning seems to allow for an enquiry-based approach (Figure 1) with geographical thinking at its heart, but in terms of delineating appropriate knowledge and skills for different ages the National Curriculum provides limited support. However, materials are available via third parties that support decisions regarding appropriate knowledge, understanding and skills (e.g. Geographical Association, 2014a).

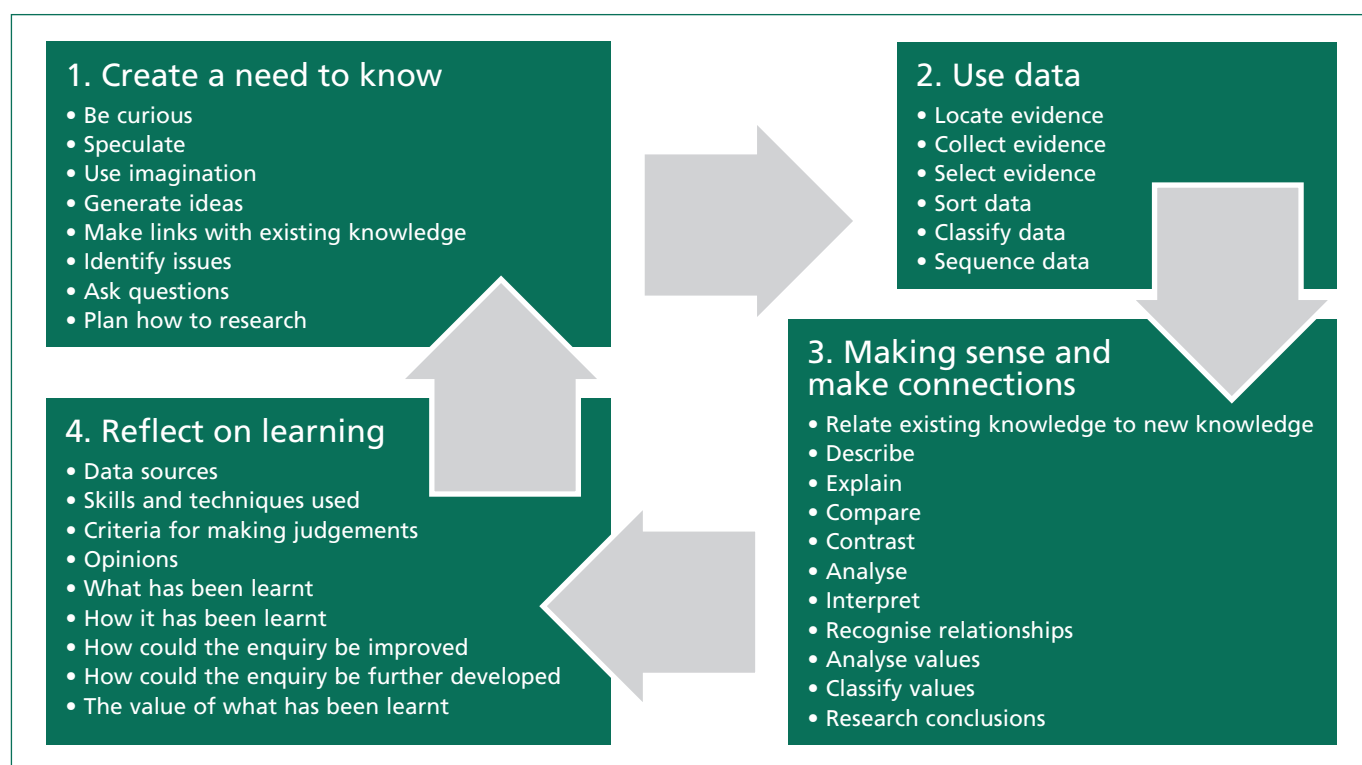


Figure 1: The Enquiry approach to geography. Adapted from Roberts, 2003.

In terms of geography teaching and learning, if we take the aspect of Mastery that refers to comprehensive knowledge or skill in a particular subject, then a lot hinges on one's construction of the subject. The oft-quoted aspiration from the current National Curriculum for England needs to be scrutinised carefully. This is the one that states: 'A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives' (DfE, 2013).

Pertaining to a 'comprehensive knowledge or skill' then, there seems to be some resonance, because it is predominantly a knowledge-based curriculum and skills are built in. However, the National Curriculum itself seems a barrier to comprehensive knowledge, skills and understanding (relevant to the age group) of geography as defined more broadly, rather than just in terms of the formal curriculum statements.

If we want to educate young geographers comprehensively, we need to go beyond the National Curriculum. In terms of the key geographical concepts above, the National Curriculum places a limited emphasis on some aspects, for example environment and sustainable development. Linked to this, there is also a limited focus on values and attitudes. For example, the notion of stewardship (Catling, 2010) is notable by its absence. This lack of a values and attitudes dimension can end up making learners passive recipients of knowledge, rather than critically active agents concerned with action in relation to environment and social justice.



In our approach to teaching, should we be thinking about mastery geography or wonderful geography? Photo © AC Rider/Shutterstock.com

A potential solution to these gaps within the National Curriculum for England is the notion of curriculum making (Geographical Association, 2014b, and see below). Teachers have the potential to build these missing aspects of high-quality geography into their curricula. Do we now need to adopt the Mastery approach, as we once had to adopt the literacy and numeracy hours as a pedagogic model? I think that the profession has moved beyond this, and now takes a more eclectic approach to teaching and learning, though obviously working within the restrictions of national assessment frameworks.

The aspect of Mastery that relates to control or superiority over someone or something provides concern. There are connotations here of 'man's [sic] mastery over nature', which resonate with colonial notions of dominance. These do not seem relevant to current educational aims where pupils, as custodians of the future, need to learn to live in harmony with the world rather than dominate it. If we reframe the notion of mastery to one of excellence, then our pupils should: 'have a passion for geography and have the confidence to work independently and in supportive ways with others younger and older than themselves. Pupils work with enthusiasm and commitment. They celebrate difference and diversity, are critical and creative thinkers and enjoy genuine participation' (PGQM Criteria (Gold) – GA, 2015).

Engagement with the Global Learning Programme would also be of benefit (see web panel).

Beyond the limits of Mastery

Overall, while mastery is currently a buzzword in UK educational circles, we may be seeing an example of old pedagogical wine in the new policy bottles. I am sure we would all aspire to high-quality geography education. However, we need to realise that the current geography curriculum does not necessarily allow for this. There are gaps – both pedagogic and in the nature of the subject. One way for teachers to begin to move beyond the minimalist geography curriculum is to embrace the notion of curriculum making: 'the creative act of interpreting a curriculum specification or scheme of work and turning it into a coherent, challenging, engaging and enjoyable sequence of teaching and learning' (Geographical Association, 2014b).

The idea of curriculum making empowers teachers to become architects of a curriculum that is appropriate for the needs of their pupils. It has the pedagogical model of enquiry at its heart and challenges teachers to consider:

- 'teaching approaches and specific teaching techniques
- pupils and how they learn

- the subject of geography, and what it is for' (Geographical Association, 2014b).

There are positive aspects to the notion of mastery learning, but on reflection I feel there are also some negatives. Maybe we should be thinking about wonderful geography rather than mastery geography – not seeking dominance of a body of knowledge and the world but seeing the wonder of it, engaging with it and taking action to improve the environment and the lives of its people.

References

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WEB RESOURCES

The Global Learning Programme:
<http://globaldimension.org.uk/glp>
National Centre for Excellence in Teaching Mathematics: www.ncetm.org.uk

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