



Core units: Key understandings Years F–4

Illustration 2: Sequential development of understanding maps

What does research tell us?

Developing mapping skills with young children has both attractions and significant hurdles. Research suggests that children may not appreciate aspects of scale, distance and direction until the later years of primary school. However, the visual nature of the medium means that maps and plans are suitable for expressing ideas from the earliest years onwards.

Palmer and Birch (2004) describe how children around the age of five tend to draw pictures in which known places are linked in some way (topological maps) but which show few other map characteristics. By contrast, by the time they are ten, children are likely to produce much more accurate and detailed maps which involve abstract ideas of scale, direction and symbolic representation (Euclidean maps). Palmer and Birch conclude that no child is too young to be introduced to maps. Interestingly, the ability to orientate a map seems to be a key step in developing competence in map work and should be worked at from the earliest years. The years between six and eight are particularly crucial in moving children from the impressionistic use of maps to more abstract understanding and most children will happily work with the idea of routes and symbols even before then.

Although there is considerable debate about how best to introduce maps to young children, the importance of environmental experience is widely acknowledged. Catling (1998) reports how teaching young children mapwork in the context of the local area can radically improve their knowledge of local features and develop their confidence to the point where they are willing to recognise the extent and limitations of their knowledge. Structured talk and conversation also appears to have a crucial role. Large (2004) investigated whether young pupils who travelled to school by car were less aware of the landmarks and other features than their walking counterparts. What she discovered was the crucial importance of parental involvement – those who talked with an adult about their journey scored highest, regardless of the method of transport.

Children naturally want to engage with maps from the earliest age. The crucial question is how best to develop their understanding. Wiegand (2006) provides a very useful and authoritative account of different theories of cartographic understanding, from which he concludes that no single approach is sufficient to explain children's learning. The value of diverse approaches was also affirmed by a small-scale study into different ways of teaching about the UK map (Scoffham and Whyte, 2009). There is potential here for your own action research. If you keep a record of the maps that children draw and the context in which they were generated it will develop into a valuable archive for future research. It might also shed light on whether there is any observable difference in mapwork skills between girls and boys. There are many questions to investigate.

Source: An excerpt from Bridge, C. (2010), How children relate to maps. In S. Scoffham (Ed.), *Primary geography handbook* (Chapter 8). Sheffield: Geographical Association.
© The Geography Association, 2010.

Material sourced from Geographical Association resources. Further material and International Associate Memberships are available from the Geographical Association website <http://www.geography.org.uk/>