

Review of Bryce and Blown (2012) by Morag Findlay

The Earth, Sun and Moon can provide an interesting cross-curricular focus for work in primary and secondary schools, linking science to a range of other subjects. This long paper provides a wealth of background material about a large number of significant studies that have expanded our knowledge about children's concepts of the Earth and beyond. Appendices offer suggestions for modelling activities using both physical and computer models; useful curricular approaches, textbooks and websites; as well as suitable children's literature. Overall, this is a valuable resource for student teachers, teachers and teacher educators.

The study itself compared the responses of 248 children/students aged 3 – 18 in China and New Zealand to questionnaires and/or Piagetian interviews about the size and shape of the Earth, Sun and Moon. One of the fascinating aspects of the paper was the use of three different media, written and oral language, drawing and play-dough modelling, to explore the children's concepts. These approaches could open up interesting approaches for teachers to use in class to explore children's concepts. The paper contains examples of transcripts of the children's interviews, drawings and play dough models. This combination provides real insight into the children's ideas, as well as allowing the researchers to make rigorous statistical analyses of the similarities and differences between groups of children.

Bryce, T. G. K., & Blown, E. J. (2012). Children's Concepts of the Shape and Size of the Earth, Sun and Moon. *International Journal of Science Education*, 1-59.
(currently only available electronically)