

Research on Student Learning

The ideas "the sun is a star" and "the earth orbits the sun" appear counter-intuitive to elementary-school students [1] The ideas "the sun is a star" and "the earth orbits the sun" are not likely to be believed or even understood in elementary grades. [2] Whether it is possible for elementary students to understand these concepts even with good teaching needs further investigation. [3]

References

- [1] Baxter, J. (1989). Children's understanding of familiar astronomical events. *International Journal of Science Education*, 11, 502-513.
- [2] Vosniadou, S., Brewer, W. (1992). Mental models of the earth: A study of conceptual change in childhood. *Cognitive Psychology*, 24, 535-585.
- [3] Vosniadou, S. (1991). Designing curricula for conceptual restructuring; lessons from the study of knowledge acquisition in astronomy. *Journal of Curriculum Studies*, 23, 219-237.
- [3] American Association for the Advancement of Science, Project 2061 (2001). *Atlas for Science Literacy*, 44.