Research Investigating the Advantages of Planetarium Shows

Summary:

The maturing planetarium educational research community no longer needs to test which instructional environment, classroom or planetarium, is better suited for teaching astronomy (Brazell, 2009); the planetarium is better apt to instruct students in astronomy” (Brazell & Espinoza, 2009).

Research supports the advantages of using digital planetarium for visualization of astronomy concepts. A digital planetarium helps learners accurately see three-dimensional astronomical phenomenon from different points of view.

Immersion in a digital planetarium show increases learners’ level of attention and the retention of information.

Planetarium shows include more than astronomy and space science. Many shows include diverse content to include interdisciplinary connections with biology, history, earth science, literature, cultural studies, and art.

List of Scholarly Resources:


Chastenay, P. 2016, From geocentrism to allocentrism: Teaching the phases of the moon in a digital full-dome planetarium, Research in Science Education, 46(1), 43-77.

Cirstea, R. P. 2013, Some Considerations on Educational Astronomy in the First Digital Planetarium from Romania, the Arges County Museum Planetarium, Procedia-Social and Behavioral Sciences, 76, 190-196.


Hayward, R.R. 1976, April, *The developing and field testing of an instrument using the planetarium to evaluate the attainment of the concept of annual motion*, in *The National Association for Research in Science Teaching*.


Reed, G., & Campbell, J.R. 1972, A comparison of the effectiveness of the planetarium and the classroom chalkboard and celestial globe in the teaching of specific astronomical concepts, School Science and Mathematics, 72, 368-374.


Small, K.J., & Plummer, J.D. 2010, Survey of the goals and beliefs of planetarium professionals regarding program design, Astronomy Education Review, 9, 010112-1


Trundle, K. C., & Bell, R. L. (2003), Using Planetarium Software to Teach Standards-Based Lunar Concepts, School Science and Mathematics, 103(8), 397-401.


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