

Research Publications

Book Chapters:

1. Argamon, S and **Dodick, J.** 2006. A corpus based study of scientific methodology: Comparing the historical and experimental sciences, in *Computing Attitude and Affect in Text*, James G. Shanahan, Yan Qu, Janyce Wiebe, eds. Springer, Dordrecht, The Netherlands.
2. **Dodick, J.T.**, and Argamon, S. 2006. Rediscovering the Historical Methodology of the Earth Sciences by Understanding Scientific Communication Styles, in Manduca, C.A. and Mogk, D.W., eds. *Earth and Mind: How Geologists Think and Learn about the Earth*, Geological Society of America, Special Paper 413, p. 105-120.
3. **Dodick, J.T.**, and Orion, N. 2006. Building an Understanding of Geological Time: A Cognitive Synthesis of the "Macro" and "Micro" Scales of Time, in Manduca, C.A. and Mogk, D.W., eds. *Earth and Mind: How Geologists Think and Learn about the Earth*, Geological Society of America, Special Paper 413, p. 77-93.

Articles:

4. Albright G., Sumida, S.S. and Dodick, J.T. 2002. The Basal Reptilian Family Captorhinidae and Basal Amniote Interrelationships. *American Zoologist*, 41 (6): 1378.
5. Dodick, J.T., and Modesto, S.P. 1995. The cranial anatomy of the captorhinid reptile *Labidosaurikos meachami*, from the Lower Permian of Oklahoma. *Palaeontology*, 38 (3): 687-711.
6. Orion, N., Dubowski, Y., and Dodick, J.T. 2000. The educational potential of multimedia authoring as a part of the earth science curriculum. *Journal of Research in Science Teaching*, 37(10), 1121-1153.
7. Dodick, J. T., and Orion, N. 2003. Introducing evolution to non-biology majors via the fossil record: A case study from the Israeli high school system. *The American Biology Teacher*, 65 (3), 185-190.
8. Dodick, J. T., and Orion, N. 2003. Cognitive factors affecting student understanding of geological time. *Journal of Research in Science Teaching*, 40 (4), 415-442.
9. Dodick, J. T., and Orion, N. 2003. Measuring student understanding of "deep time". *Science Education*, 87 (5), 708-731.
10. Dodick, J. T. (PI), and Orion, N. 2003. Geology as an Historical Science: Its Perception within Science and the Education System. *Science and Education*, 12 (2), 197-211.

11. Argamon, S., Dodick, J., and Chase, P. 2008. Language use reflects scientific methodology: A corpus-based study of peer-reviewed journal articles. *Scientometrics*, 75 (2), 203-238. (c:0)
12. Dodick, J. 2007. Understanding Evolutionary Change within the Framework of Geological Time. *McGill Journal of Education*, 42 (2), 245-264.
13. Sumida, S.S. and Dodick, J. 2007. A new genus and species of captorhinid reptile from the Lower Permian of north-central Texas illustrating the complexity of size and craniodental evolution in the Captorhinidae. *Journal of Vertebrate Paleontology*, 27, 155.
14. Dodick, J., Argamon, S., and Chase, P. 2008. Understanding Scientific Methodology in the Historical and Experimental Sciences via Language Analysis. *Science and Education* (in press).
15. Karlstrom, K., Semken, S., Crossey, L., Perry, D., Gyllenhaal, E. D., Dodick, J., Williams, M., Hellmich-Bryan, J., Crow, R., Bueno Watts, N., & Ault, C. 2008. Informal geoscience education on a grand scale: The Trail of Time exhibition at Grand Canyon. *Journal of Geoscience Education*, 56(4), 354-361.
16. Sumida, S., Dodick, J., and Metcalf, A. 2008. Reiszorhinus olsoni, a new single-tooth-rowed captorhinid reptile from the Lower Permian of Texas. Accepted for publication to the *Journal of Vertebrate Paleontology*.
17. Dodick, J., Dayan, A., and Orion. The attitudes of Orthodox Jewish science teachers towards teaching controversial topics in science. Submitted to the *International Journal of Science Education* (Accepted and in revisions).

Conference Proceedings (categorized according to year of publication):

18. Dodick, J. 2009. Understand Understanding Differences in Scientific Methodology via Language Analysis. Presented at the National Association of Research in Science Teaching Meeting (April 17-April 21, 2009, Orange Grove, CA, USA) (lecture, abstract and paper).
19. Semken, S., and Dodick, J. 2009. Timeline and Time Scale Cognition Experiments for a Geological Interpretative Exhibit at Grand Canyon. Presented at the National Association of Research in Science Teaching Meeting (April 17-April 21, 2009, Orange Grove, CA, USA) (poster, abstract and paper).
20. Tsybul'skaya, D., Dodick, J., and Camhi, J. 2009. Accessing and Incorporating Visitors' Entrance Narratives Enhances Guided Museum Tours. Presented at the National Association of Research in Science Teaching Meeting (April 17-April 21, 2009, Orange Grove, CA, USA) (lecture, abstract and paper).

21. Dodick, J., Dayan, A., and Orion, N., 2009. Philosophical Approaches of Religious Jewish Science Teachers towards the Teaching of "Controversial" Topics in Science. Presented at the 9th annual Israeli Society for the History and Philosophy of Science (April 5, 2009, Jerusalem, Israel) (lecture, abstract).
22. Dodick, J., Argamon, S., and Chase, P. 2009. Methodological Differences between the Historical and Experimental Sciences. Presented at the International Workshop: Darwinism and Functional Biology, Other Sciences and the Humanities (April 1, 2009, Jerusalem, Israel) (lecture, abstract).
23. Dodick, J., and Orion, N., 2009. Perceptions of Geology within Science and the Education System. Presented at the International Workshop: Darwinism and Functional Biology, Other Sciences and the Humanities (March 31, 2009, Beer Sheva, Israel) (lecture, abstract).
24. Dodick, J., and Flash-Gvili, I. 2008. Challenges to Graduate Student Research in the Historical Based Sciences. National Association of Research in Science Teaching Meeting (March 30-April 2, 2008, Baltimore, MD, USA) (lecture, abstract and paper).
25. Dodick, J. 2008. The perception of Geology within science and the education system. Presented at the 8th annual meeting of the Israeli Society for History and Philosophy of Science, Jerusalem, Israel. (lecture, abstract)
26. Semken, S., Bueno Watts, N., Ault, C., Dodick, J., Alvarado, C., Pineda, M., Dunbar, K., Karlstrom, K., Crossey, L., and Williams, M. 2007. Timeline interpretation and time scale cognition experiments for the trail of time at Grand Canyon National Park. American Geological Union Conference, Denver, CO. (poster, abstract).
27. Sumida, S.S. and Dodick, J. 2007. A new genus and species of captorhinid reptile from the Lower Permian of north-central Texas illustrating the complexity of size and craniodental evolution in the Captorhinidae. 67th Annual meeting of the Society of Vertebrate Paleontology (lecture, abstract).
28. Dodick, J., Dayan, A., and Orion, N. 2006. The attitudes of Orthodox Jewish science teachers towards the teaching of Geological Time (and other "controversial topics in science). National Association of Research in Science Teaching meeting, San Francisco, CA. (lecture, abstract, paper)
29. Argamon, S., Dodick, J.T., and Chase, P. 2005. The Languages of Science: A Corpus-Based Study of Experimental and Historical Science Articles. Proceedings of the 27th Annual Meeting of the Cognitive Science Society, July 20-24, 2005, Stresa, Italy. (poster, abstract, paper)
30. Argamon, S., and Dodick, J.T. 2004. Linking Rhetoric and Methodology in Formal Scientific Writing. Proceedings of the 26th Annual Meeting of the Cognitive Science Society, August 17-20, Chicago, IL 2004. (poster, abstract, paper)

31. Argamon, S., and Dodick, J.T. 2004. Conjunction and Modal Assessment in Genre Classification: A Corpus-Based Study of Historical and Experimental Science Writing. Proceedings of the AAAI Spring Symposium on Attitude and Affect in Text, Stanford, CA, March 2004. (poster, abstract)
32. Dodick, J.T., and Orion, N. 2004. Cognitive factors affecting student understanding of geological time. Presented at the 32nd annual meeting of the International Geological Congress, in Florence, Italy, August 20-28. (poster, abstract)
33. Tzou, C. Reiser, B., Dodick, J., Finn, L., Sy, M., Hug, B. 2003. Teaching about ecosystems in a Project-based curriculum: Promises and Challenges. National Association of Research in Science Teaching meeting, Philadelphia, PA. (lecture, abstract).
34. Dodick, J.T., and Orion, N. 2003a. Cognitive factors affecting student understanding of geological time. Presented at the 2003 annual meeting of GeoScieEd IV in Calgary Alberta. (lecture, abstract).
35. Dodick, J.T., and Orion, N. 2003b. Geology as an Historical Science: Its perception within science and the education system. Presented at the 7th annual meeting of the International History and Philosophy of Science Teaching Conference, Winnipeg, Manitoba, Canada. (lecture, abstract, paper)
36. Albright G., Sumida, S.S. and Dodick, J.T. 2002. The Basal Reptilian Family Captorhinidae and Basal Amniote Interrelationships. Presented at the 2002 SICB (The Society for Integrative and Comparative Biology) meeting at Anaheim California. (poster, abstract)
37. Dodick, J.T., Alters, B., and Orion, N. 2001. Using the Fossil Record to mitigate Student Misconceptions of Evolution. Presented at the 2001 annual meeting of the Society for Studying Evolution, Knoxville Tennessee. (lecture, abstract).
38. Dodick, J.T. 2001a. Cognitive factors affecting student understanding of geological time. National Association of Research in Science Teaching, St. Louis, MI. (lecture, abstract, paper)
39. Dodick, J.T. 2001b. Cognitive factors influencing student understanding of geological time. Presented at the 2001 Symposium (“Building Bridges: Linking Learners”) of the Department of Education at Concordia University, Montreal, Canada. (lecture, abstract).
40. Dodick, J.T. 2000. The revolution of “deep time” and its implications for geology in the scientific and educational domains. Presented at the 2000 Annual meeting of the Israeli Geological Society, Rosh Pina, Israel. (lecture, abstract).
41. Dodick, J.T. 1999a. Cognitive aspects of “deep time”. Presented at the GeoSciEd III conference, Sydney, Australia. (lecture, abstract).

42. Dodick, J.T. 1999b. Cognitive aspects of deep time and their influence on environmental insight. Presented at the 7th International Conference of the Israeli Society for Ecology and Environmental Quality Sciences, Jerusalem, Israel. (lecture, abstract)
43. Dodick, J.T. 1998. "From Dinosaurs to Darwin": A multidisciplinary curriculum in fossil biology. Presented at the 1998 annual meeting of the Israeli Geological Society, Mizpe-Ramon, Israel. (lecture, abstract).
44. Orion, N., Dodick, J.T., Ben-Zvi, O., Kali, Y., and Gudovitch, Y. 1998. Student misconceptions of principles and concepts in the earth sciences. Presented at the 1998 annual meeting of the Israeli Geological Society, Mizpe-Ramon Israel. (lecture, abstract).
45. Dodick, J.T. 1990. A multiple tooth rowed captorhinid from the Lower Permian of Oklahoma. *Journal of Vertebrate Paleontology*, 9 (3), p. 9. Presented at the 49th annual meeting of the Society of Vertebrate paleontology, Austin, Texas. (lecture, abstract)
46. Dodick, J.T. 1989. The cranial anatomy of *Labidosaurikos meachami*, a multiple tooth rowed captorhinid reptile. *Journal of Vertebrate Paleontology*, 8 (3), p. 13. Presented at the 48th annual meeting of the Society of Vertebrate Paleontology, Tuscon, Arizona. (lecture, abstract).
47. Dodick, J.T. 1988. The single tooth rowed captorhinid reptile, *Protocaptorhinus olsoni*. Presented at the 47th annual meeting of the Society of Vertebrate Paleontology, Philadelphia Pennsylvania. (lecture, abstract).