

Michael Skoumios

Michael Skoumios is Assistant Professor of Science Education at University of the Aegean (Department of Primary Education). He obtained a first degree in Physics from the National and Kapodistrian University of Athens, a second degree in Education from the University of Aegean and his PhD in Science Education from the Hellenic Open University. His research interests include science concept learning and teaching science in primary and secondary schools as well as the analysis and development of educational materials. He has published a considerable number of research papers in journals, books and conference proceedings.

Indicative Publications

- Skoumios, M., & Hatzinikita, V. (2004). Dealing with obstacles regarding heat and temperature. Στο: D. Koliopoulos, & A. Vavouraki (Eds), *Science education at cross roads: meeting the challenges of the 21th century*' (σελ. 107-118). Athens: Science Education Association.
- Skoumios, M., & Hatzinikita, V. (2005). The role of cognitive conflict in science concept learning. *The International Journal of Learning*, 12 (7), 185-193.
- Skoumios, M., & Hatzinikita, V. (2006). Research-based teaching about science at the upper-primary school level. *The International Journal of Learning*, 13 (5), 29-42.
- Skoumios, M., & Hatzinikita, V. (2007). Development of pupils' competences to identify obstacles during research-based science teaching. *The International Journal of Learning*, 14 (9), 237-247.
- Skoumios, M., & Hatzinikita, V. (2008). The structure of pupils' written explanations within the framework of the didactic elaboration of pupils' obstacles in science. *The International Journal of Learning*, 15 (5), 261-270.
- Skoumios, M. (2008). Sociocognitive conflict processes in science learning: benefits and limits, *Journal of Baltic Science Education*, 7 (3), 165-174.
- Skoumios, M., & Hatzinikita, V. (2008). Investigating the structure and the content of pupils' written explanations during science teaching sequences focused on conceptual obstacles, *Themes in Science and Technology Education*., 1 (2), 135-155.
- Skoumios, M., & Hatzinikita, V. (2009). Improvement in the level of pupils' grounds included in their dialogic argumentation during the didactic elaboration of obstacles in science, *Ubiquitous Learning: An International Journal*, 1 (2), 39-49.
- Skoumios, M., & Hatzinikita, V. (2009). Studying science class discussion: relations between discourse moves and grounds. *The International Journal of Learning*, 16 (2), 199-214.
- Skoumios, M., & Hatzinikita, V. (2009) Learning and justification during a science teaching sequence. *The International Journal of Learning*, 16 (4), 327-341.
- Skoumios, M. (2009) The effect of sociocognitive conflict on students' dialogic argumentation about floating and sinking. *International Journal of Environmental and Science Education*, 4 (4), 381-399.
- Skoumios, M., & Passalis, N. (2010) Chemistry laboratory activities: the link between practice and theory. *The International Journal of Learning*, 17 (6), 101-114.
- Skoumios, M., & Hatzinikita, V. (2010). Exploring pupils' "pathways" towards the identification of obstacles: the case of thermal equilibrium. *The International Journal of Learning*, 17 (10), 71-87.
- Skoumios, M. (2012) Improving students' ability to craft scientific explanations. *Proceedings in Advanced Research in Scientific Areas (ARSA), The 1st Virtual*

- International Conference* (p. 1036-1041). EDIS – Publishing Institution of the University of Zilina, Slovakia.
- Savvaidou-Kambouroplou, M., & Skoumios, M. (2012). Assessing Pupils' Perceptions of Schoolyard Habitats with the Use of Photoshop Drawings. *The International Journal of Technology, Knowledge and Society*, 7 (4), 57-73.
- Skoumios, M. & Savvaidou-Kambouroplou, M. (2012). Investigating Pupils' Images of Science Teaching Using Drawings. *The International Journal of Science in Society*, 3 (2), 179-192.
- Skoumios, M. & Passalis, N. (2013). Students' interaction and its relationship to their actions and verbalized knowledge during chemistry labwork. *Creative Education*, 4 (1), 1-8.
- Christopoulou, M. & Skoumios, M. (2013). Analysis of a physics school textbook according to Gardner's Multiple Intelligences Theory. *The International Journal of Science Mathematics and Technology Learning*, 19 (2), 98-109.
- Skoumios, M. (2013). Pupils' ability to interpret bar graphs. *The International Journal of Science Mathematics and Technology Learning*, 19 (3), 57-70.
- Iconomou, S. & Skoumios, M. (2013). Students' conceptions about the nature of sound: a study of their evolution and their dependence on the state of matter of the medium. *The International Journal of Science in Society*, 4 (3), 51-62.
- Antoniadou, P. & Skoumios, M. (2013). Primary teachers' conceptions about science teaching and learning. *The International Journal of Science in Society*, 4 (1), 69-82.
- Pantazopoulou, A. & Skoumios, M. (2013). The persistence of students' conceptions about buoyancy in gases. *The International Journal of Science in Society*, 4 (3), 95-108.
- Skoumios, M. (2013). The nature of the criteria the students use to justify their ideas during a computer assisted instruction based on socio-cognitive conflict processes. *Ubiquitous Learning: An International Journal*, 5 (3), 25-41.
- Hadzigeorgiou, Y. & Skoumios, M. (2013). The development of environmental awareness through school science: problems and possibilities. *International Journal of Environmental and Science Education*, 8, 405-426.
- Todas, A. & Skoumios, M. (2014). Practical Work in Primary Science: Actions and Verbalized Knowledge. *The International Journal of Early Childhood Learning*, 20, 37-50.
- Sapountzi, L. & Skoumios, M. (2014). Analysis of the Questions of Greek Physics Textbooks from a Content Perspective. *The International Journal of Science Mathematics and Technology Learning*, 20, 85-98.
- Sevdalis, C. & Skoumios, M. (2014). Non-formal and Informal Science Learning: Teachers' Conceptions. *The International Journal of Science in Society*, 5 (4), 13-25.