Pre-service Teachers Learn the Nature of Science in Simulated Worlds

JILL MARSHALL, University of Texas — Although the Texas Essential Knowledge and Skills include an understanding of the nature of science as an essential goal of every high school science course, few students report opportunities to explore essential characteristics of science in their previous classes. A simulated-world environment (Erickson, 2005) allows students to function as working scientists and discover these essential elements for themselves (i.e. that science is evidence-based and involves testable conjectures, that theories have limitations and are constantly being modified based on new discoveries to more closely reflect the natural world.) I will report on pre-service teachers’ exploration of two simulated worlds and resulting changes in their descriptions of the nature of science. Erickson (2005). Simulating the Nature of Science. Presentation at the 2005 Summer AAPT Meeting, Salt Lake City, UT.