

Designing and Using Texts to Advance Literacy and Science Learning in Project-Based Learning

Tuesday, December 6

11:00 a.m.-12:30 p.m.

Erickson Room: 252



The role of text in Project Based Learning (PBL) in science in the elementary grades is an under-explored area of inquiry. In fact, text use has historically been maligned in this context because contemporary science education reforms emphasize *using/doing* science, rather than *learning about science* (NRC, 2014), and the use of text has historically been conceived of as *learning about science*. Furthermore, PBL is typically focused on the creation of artifacts to demonstrate and communicate learning. Our argument is that well-chosen/designed texts – thoughtfully situated in robust tasks – can support both the learning of science concepts and the use of scientific practices to make sense of phenomena in PBL contexts. Furthermore, we argue that it is especially incumbent upon researchers to determine *how to employ text*, and *teach with text*, in the elementary grades in schools in which children depend upon good instruction to learn to read and engage in knowledge building with text.

In this presentation, our objectives are to describe design-based research in which we are systematically exploring the design, selection, and use of text to: (1) motivate science inquiry, (2) provide accessible sources for knowledge building in science, and (3) support discourse in the service of science learning. We will present several cases, defined by the texts themselves, how they were enacted, and what we learned about their affordances and challenges.



Presenters: Miranda Fitzgerald, Joseph Krajcik, Meredith Baker Marcum, Annemarie Palincsar

We are proud to welcome this interdisciplinary group of scholars!

For the full 2016-2017 Literacy Colloquy schedule, check out our wiki:
<http://llcolloquy.wiki.educ.msu.edu/> !