

Early Childhood Cooking Activities: Identifying the Ingredients of STEM in Unexpected Places

Christine Tippett, University of Ottawa

Todd Milford, University of Victoria

Abstract

There is limited information on STEM instruction at the early childhood level. What is available are suggestions that *science* instruction for young children should be play-based, build on prior knowledge, highlight concepts that are developmentally appropriate, and include a scaffolded inquiry approach (e.g., Trundle & Saçkes, 2012). Children's early science (and by extension, STEM) experiences should be hands-on and allow them to experiment and explore with everyday materials in meaningful ways; these types of experiences are related to later academic and social success. In this presentation, we highlight a pre-existing cooking program for Pre-Kindergarten (Pre-K) students and describe opportunities the program provides for STEM integration. Using a classroom observation protocol, we identified 23 out of 48 indicators of early childhood STEM, with another 6 indicators being supported by the teacher. Evidence from this small case study supports the inclusion of STEM in early childhood education, and suggests that STEM can be nurtured in less traditional contexts such as cooking. The young children in this study were participating in activities that are likely to promote STEM learning: engaging in questioning, process skills, and scientific and engineering practices.