Christina C Chestnut* (christina@stokedonsteam.org), Anneliese E Haines (anneliese@stokedonsteam.org) and L E Nichols (l@stokedonsteam.org). The effects of STEAM-centered modules on student learning. Preliminary report.

In this study we focus on the effects of STEAM-centered (Science, Technology, Engineering, Art, and Mathematics) workshops (modules) on students’ learning; more specifically, we look to describe the impact that the addition of Art to a STEM activity has on student understanding and mastery. The modules are developed through a Project-Based Learning lens, consisting of loosely-defined tasks driven by well-defined outcomes. One of the modules we use in the research is the creation of a board game. For each participant we are collecting pre- and post-workshop surveys for each module, conducting one-on-one interviews, and recording researcher observations during the activities. A descriptive analysis will be conducted on these data sources to develop a profile of our case study subjects, a subset of the participants. From here, we plan to develop further studies on this area of research so as to understand empirically the STEAM approach to learning. (Received September 17, 2013)