Heather Pierce* (pierc@emmanuel.edu). STEM Apprentices in the Modern Classroom: Using Technology to Bring Ancient Teaching Techniques into the Modern World.

Traditionally in education it has been more common for a student to learn from experience rather than instruction. A student would receive general guidelines, then start working in the chosen field. However, in a modern classroom, students are given a lot of instruction and then are left to their own devices to put this instruction to practical use. I believe with modern technology we can rekindle the craftsman/apprentice relationship into our classrooms and teach STEM subjects in a more personable way that is easier to relate to.

In this talk, I will cover some of the history of the apprentice relationship and how it translates to modern flipped classrooms. I will discuss some of the statistics of flipped classrooms in the STEM fields. I will also discuss how to make content available to all students with modern technology and the tools available, as well as some of the disadvantages one may encounter. Lastly I will discuss some of my own and some of my colleagues experiences with flipped classrooms. (Received September 21, 2015)