

Background

Digital literacy, defined as the skills and knowledge to create, evaluate, critically apply, navigate and leverage digital tools for professional use, is increasingly important within our modern Western society. Studies show that 77% of employers expect college graduates to have internet-based computer skills and will independently acquire new skills as technology changes. Because current undergraduates are growing up in technology rich environments, there are dangerous assumptions about their ability to use these tools for learning and professionalism. Having access to technology does not mean they will be able to use it in a critical way. We need to differentiate between consumption and meaningful use. While the workforce is recognizing the benefit of having employees with digital literacy, universities are not teaching these skills or building student confidence in using them. We need to begin assessing the true nature of digital literacy in our students in order to better prepare them.

Why Archaeology?

Archaeologists study the material remains of human behavior

- Archaeologists use wide variety of digital tools for networking, public engagement, analysis, data storage, and more

Digital literacy is an important skill for archaeologists, the addition of digital tools fits into the broader course goals

- Integration of digital tools into an archaeology class is appropriate and fits with the discipline
- Technology use in classrooms fails when it is used for the sake of being new, rather than being critically used to improve learning

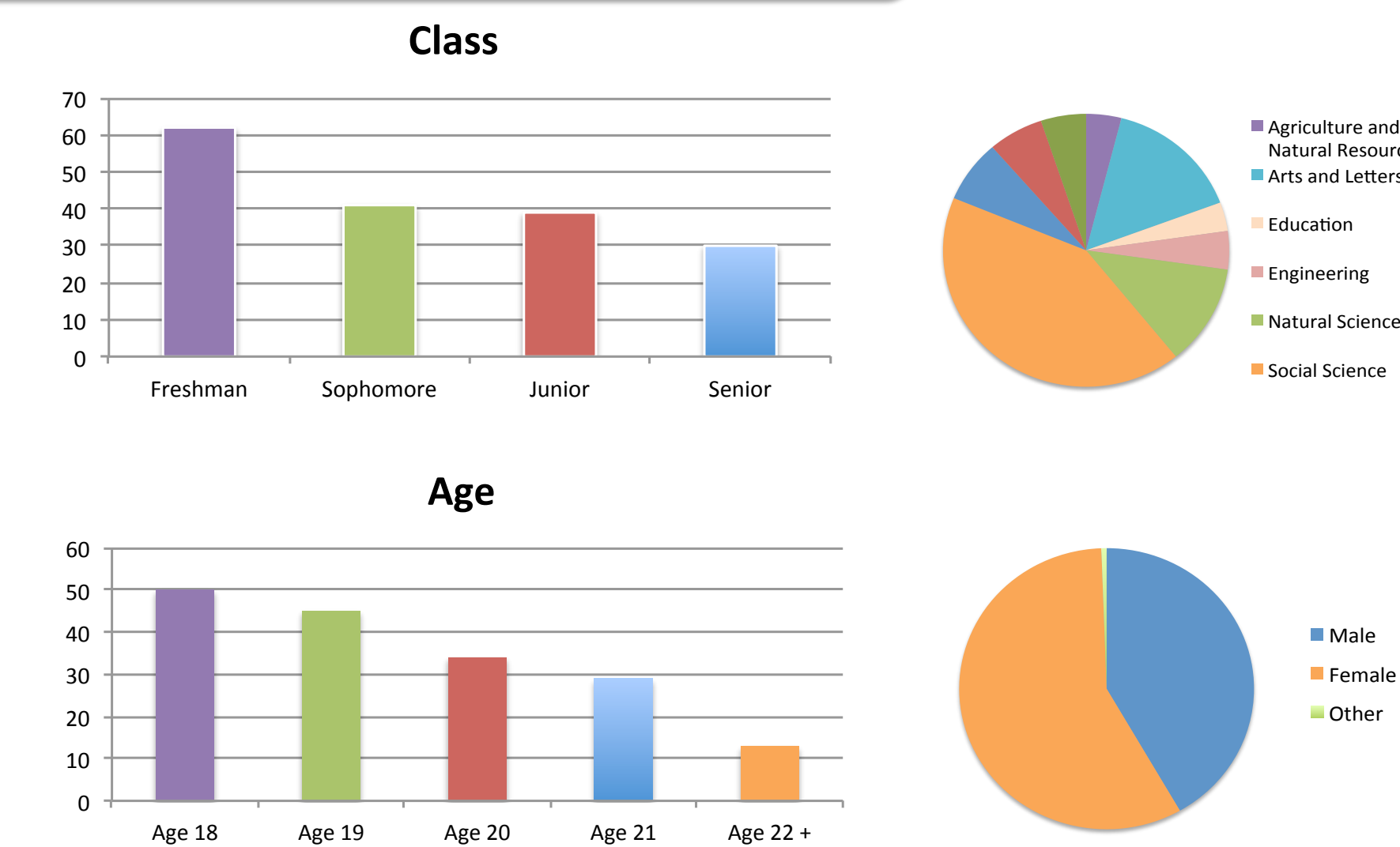
Objectives

- Assess the myth that students are “digital natives” by evaluating differences between perceived and actual digital literacy, and attitudes towards digital tools in their classrooms.
 - Students given two surveys on digital tool use, attitudes and perceptions about technology in the classroom, one prior to the course and one following the course**
 - If students are innately digitally literate, they will be able to describe and evaluate an archaeological controversy by locating, organizing and annotating evidence found online through the Storify platform, storytelling digital tool**
 - Further, they will better understand archaeological concepts from video, rather than traditional reading**
- By integrating technology in various forms into the course, students will gain confidence in their ability to use and reuse new digital technologies for learning
 - Various digital tools either mandatory as part of the course or optional, including Storify, Popplet, Twitter, and more

Sample

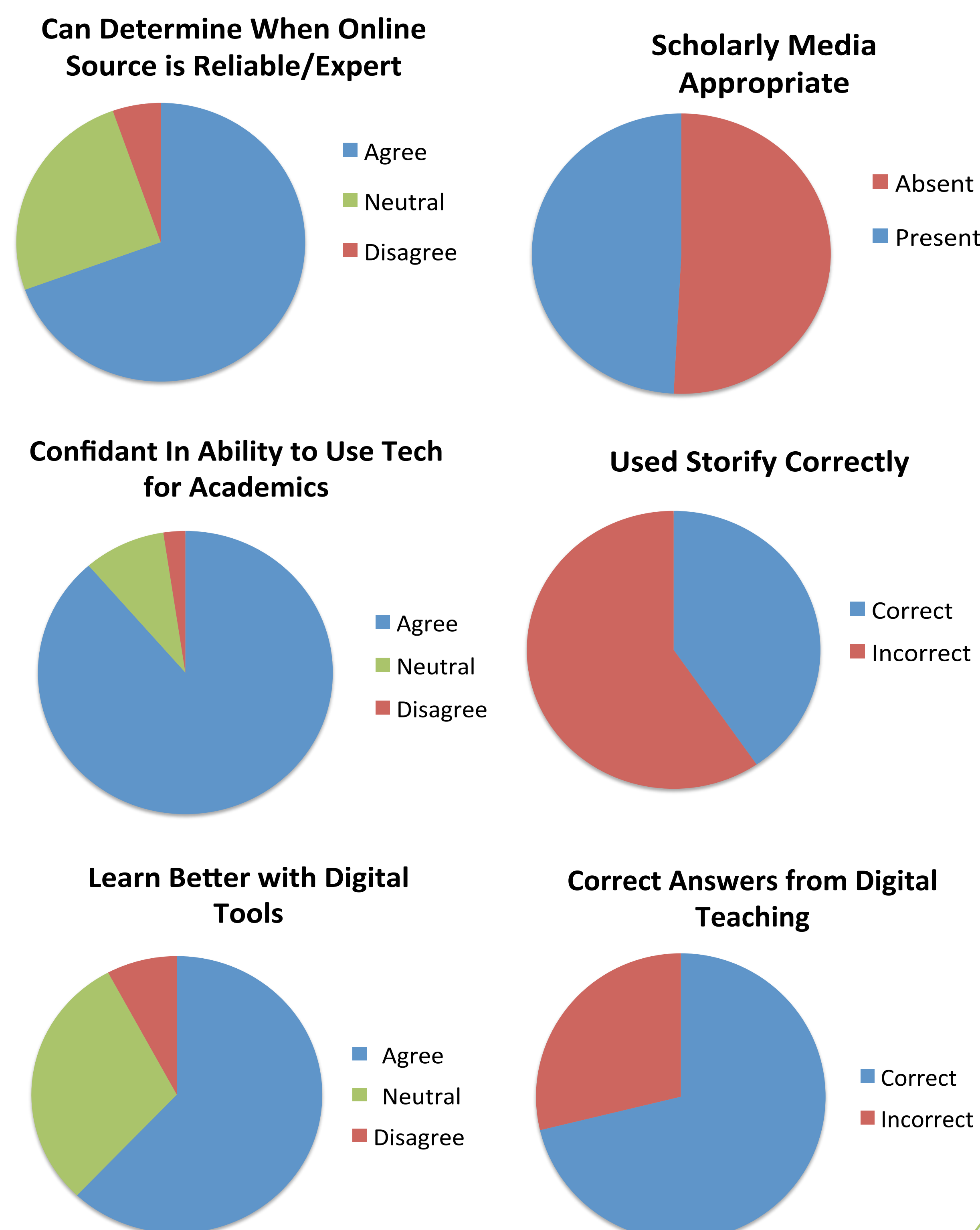
ANP 203: Intro to Archaeology (n=187)

- 187/207 consented
- Introductory course for majors and non-majors
- No digital requirements



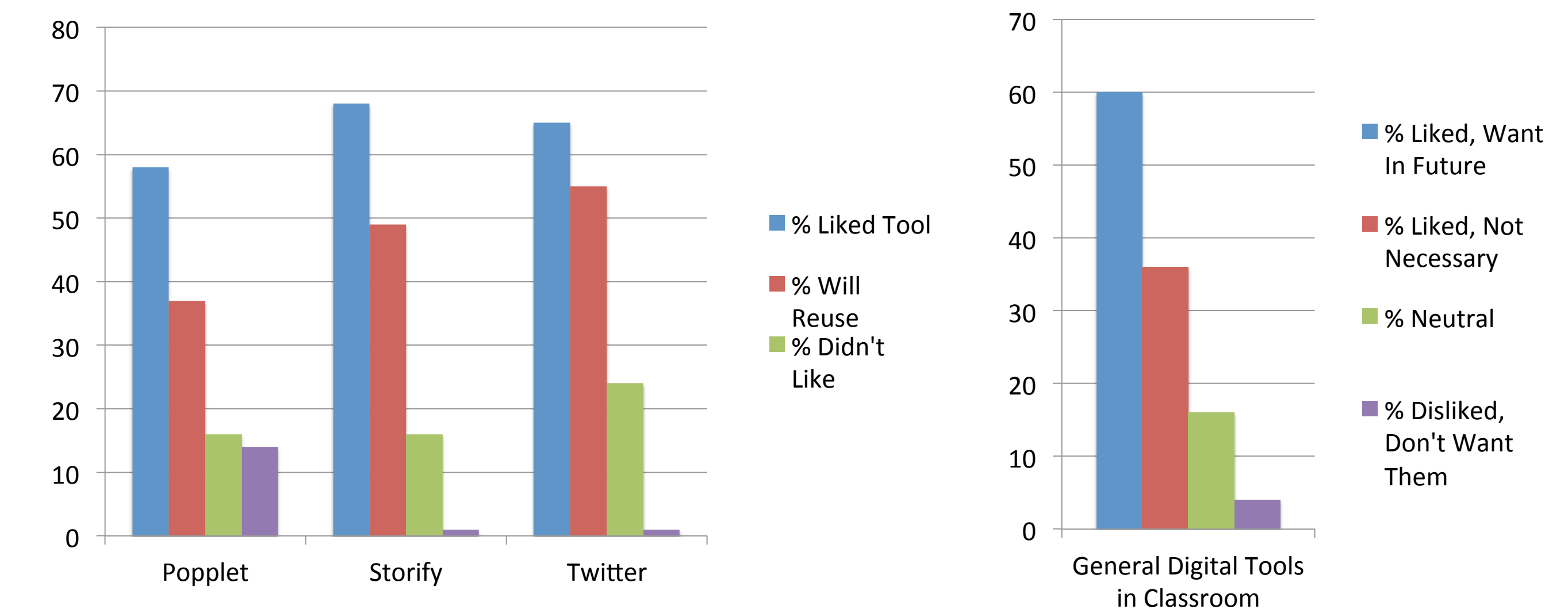
Results

Comparison of Digital Literacy Perception vs Actual Use

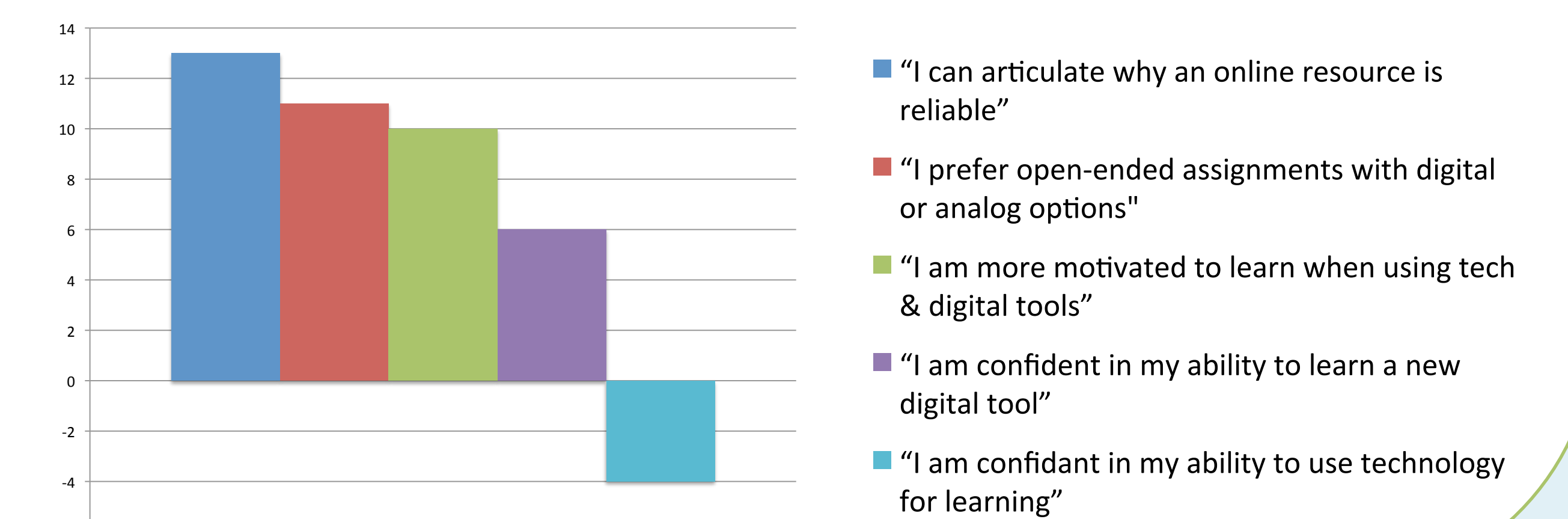


Results

Post-Course Attitudes Toward Digital Tools for Learning



Changes (%) in Attitudes Toward Technology in the Classroom



Discussion

Both students and instructors make assumptions about digital literacy

- Students perceive themselves as more digitally literate than they actually are- didn't innately know how to use and share digital tools, were unable to evaluate digital materials, and couldn't find scholarly resources online
- As the course instructor, I perceived that students were more digital than they actually were- sought to address higher levels of digital learning, and didn't expect that many of the issues would be simple ones like online sharing, inability to locate appropriate resources, and issues using D2L

Implications

Integrating technology into the classroom was successful- students liked the technology, would reuse it in academic settings, and they appear to learn some topics better through digital materials. Since digital literacy is an essential 21st century skill, we need to start treating it like basic reading and writing skills, and make integrating it into our courses a priority.

In the future, I need to look closer at skills that students are lacking, and exactly how technology can support better learning. It was unexpected that the most frequent issue was with D2L, not new technology. I need to reassess the level of literacy I start with, and create better scaffolding from the beginning.