Introduction

In 2010, the FSU Libraries started an effort to better understand its undergraduate, faculty, and graduate STEM populations' academic habits and behaviors. This broad base was needed as the STEM libraries were overdue for renovation and there was very little data on our modern STEM population's needs.

A Unique Methodology

We set out to understand the STEM population without the study participants knowing that we were from the library in order to:

• Minimize auspices bias
• Understand STEM populations that are not library users
• “Cast a wide net” to capture the population’s overall academic needs and behaviors
• Follow with a “library-centric” phase that asks questions about impact of libraries services and spaces.

Mixed Methods

Combined ethnographic techniques and a survey disseminated though an FSU population-wide email blast.

GPS Mapping

“A Week in the Life” was mapped of a sample of the FSU STEM population using GPS Loggers.

STEM Disciplines

An effort was made to interview faculty and students from a wide range of STEM disciplines.

Sample Size

Quantitative: Survey Data (n=778)

Qualitative: Charrettes (n=20)
Interviews (n=20)
Photo Diaries (n=20)
Focus Groups (n~31)
Freeze Frames (n=20)
GPS Mapping (n=10)
Emerging STEM Themes

- STEM “Studiers” vs. “Researchers”
- Importance of Collaboration
- Proximity in STEM

Further Inquiry

- More in-depth coding with NVivo
- Analysis of journal access comments
- Analysis of unprompted library comments
- Integrate results with LibQUAL+ results
- International Students’ Experiences
- Differences between STEM disciplines

STEM Respondents by Discipline to the Academic Work Survey

Impact

- Science library space redesign
- Technology: software & hardware needs
- New services for non-library users identified

Discussion

Success in the STEM fields as one advances academically becomes more of a collaborative research enterprise. Proximity of people, space, and equipment seems to be critical for STEM researchers. Access to scientific journals online is a part of the lab experience. Study spaces are more important for undergraduate STEM than for researchers. However, subjects from all academic levels agreed that a quiet, private environment is important to their success. Questions about sex differences in the STEM fields have yet to be examined. As expected, technology plays a vital role in both STEM student or faculty work. Possible implications for library technology based on computer software, hardware, and specific types of laboratory equipment used in various STEM discipline, will be examined further.