Findings from the DIL Interviews: Cultures of Practice

Skills in this competency may include:

- Recognizes the practices, values, and norms of his/her chosen field, discipline, or sub-discipline as they relate to managing, sharing, curating, and preserving data.
- Recognizes relevant data standards of his/her field (metadata, quality, formatting, etc.) and understands how these standards are applied.

Additional skills mentioned by an interviewee:

- Standard protocols in the lab that may or may not match discipline-wide standards.

Average Ranking of Importance (5=essential): Faculty=3.71, Students = 3.88

Faculty responses:

A major concern of faculty was the low level of prior training graduate students possess in respect for cultures of data practice. One faculty described student knowledge in this area as “underwhelming”. Although students are relatively adept at saving their files and making backups, they are not as competent with sufficiently sharing, curating, and preserving data.

Faculty believe that guidance in this area would be beneficial. While it’s true that faculty recognize the importance of obtaining skills through experience or peer teaching, they would generally prefer to have formal training available so that there were established practices and norms to follow in the lab and the discipline. One participant described an ideal course for learning cultures of practice in the discipline that would include attitude, skills (e.g., scripting language), visualization, and technical writing for describing results.

Several faculty commented that they themselves were unaware of any established practices, values, or norms for a data culture of practice in their discipline. For example, the computer science faculty member points out that being able to properly document your research, and to go back to it in the future, is a discipline-wide issue.

Student responses:

Students are uniformly unaware of any standards or discipline-wide norms for organizing, documenting, and sharing data.

Yet, they recognize that this is something useful and important. One student states that if researchers do not adhere to the standards of their field, “the results will not mean as much.” And several students mention that they would be willing to follow standards if they were established.

One computer science student mentioned that metadata standards in academia and industry appear to be at odds, with a greater amount of metadata being required in industry.