

Figure 1. Laboratory unit functions within the academic ecosystem and its members have with individual and community goals / priorities.

In the RockEDU x Rita Allen Foundation collaboration through the Civic Science Associate Project, the core operating principle is that science is a fundamentally human endeavor. To provide full support to academic science thus requires that holistic support be provided to scientists.

Scientific research is conducted within a multi-layered ecosystem, wherein individual laboratories reside at the core of a larger institutional framework, and interface with the public through their research outputs (Figure 1). Laboratory units are typically headed by a single principal investigator and consist of scientists at different training / career / life stages. These scientists each have individual and community needs, goals, and priorities, which we will address and support by building tailored scaffolds.

Our project will target several areas of support for the laboratory. We have preliminarily categorized our scaffolds into 8 focused domains: organization, communication, setting expectations, individual development planning, assessment, diversity / equity / inclusion, citizenship, wellness, and leadership theory (Figure 2). The scaffolds we build within these domains must:

- 1) Have a solid basis in social and civic science principles.
- 2) Be easily accessible, open source, and user-friendly.
- 3) Be dynamic, with clear inroads and mechanisms for modifying and updating content as necessary for the laboratory group.
- 4) Be structured and specific, with flexibility for tailoring to different needs.

To this end, our planned resources are largely practical tools (e.g., rubrics, templates, guides), and will include theoretical knowledge packets where appropriate. We are also exploring and piloting user interfaces, such as the software platform AirTable, which could be suitable for both back- and front-end work. Our goal is to create a system that will equitably recenter resources such that rigorous science is accessible to and inclusive of all groups across career stages, irrespective of their background. Ultimately, we aim to provide support structures that would allow laboratory units to function cohesively, and that would allow individual scientists to bring their whole selves to work, embracing rather than tolerating differences.

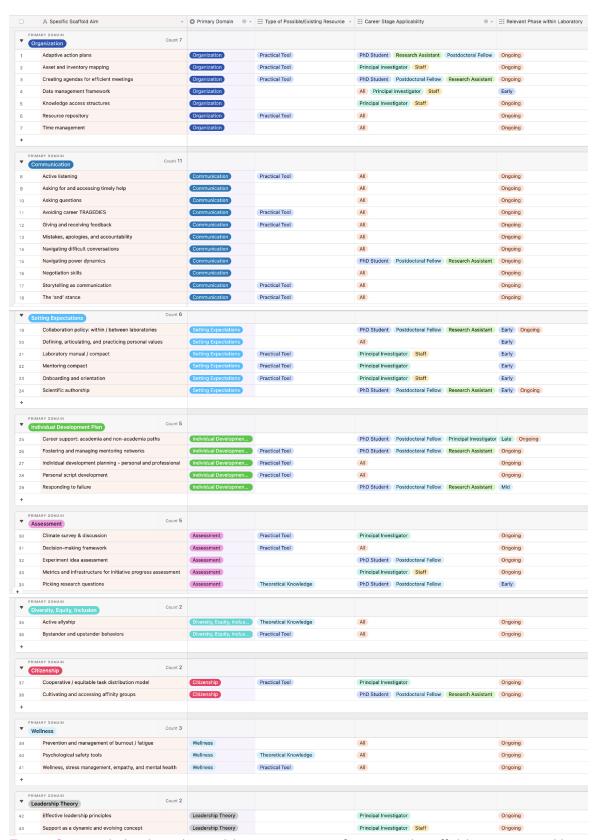


Figure 2. Sample back-end AirTable organization of proposed scaffolds categorized by domains and coded by multiple searchable / modifiable features.