

Power Analysis to Unveil Participant-Makerspace Dynamics

Inclusivity is not an inherent quality of makerspaces, even those with the intention to be inclusive. The quest for inclusivity in makerspaces goes beyond the tangible offerings available to participants and the physical design of the space itself. It delves into a deeper inquiry: Who or what holds the power within the makerspace, and how does that influence the perception of its inclusivity? The power dynamics and the entities that communicate and shape the environment play a crucial role in determining whether a makerspace truly embodies inclusivity or falls short of it. To understand these power dynamics between groups of people, or people in relation to spaces or designs, researchers can conduct a Power Analysis to expose the nuances of the target relationships.

As explained by the "Makers Lab Power Analysis Summary," a Power Analysis is a framework for users to question and generate insight on different domains of power. Conducting a Power Analysis empowers makerspace creators to delve into the underlying levels of inclusion and exclusion, acknowledging them as intangible phenomena. This approach proves invaluable in comprehending which aspects of the makerspace are pivotal to how participants feel in the space, as well as revealing elements that require a more inclusive perspective. By employing a Power Analysis, makerspace creators can evaluate the inclusiveness of the space and develop guidelines that foster a culture of inclusivity. Numerous applications exist for using a Power Analysis in the context of the virtual makerspace.

Activity Objectives

Gain insights into strategies for scrutinizing power dynamics within makerspaces, leveraging the virtual makerspace as a platform for evaluating the messages of inclusion

Step-By-Step Overview

A Power Analysis research plan can be very different depending on what relationship you are seeking to understand. A power analysis could be used to gain insight into various features of a makerspace. You can conduct a power analysis of the people in the space, the design of the space and its equipment, as well as what events are held in the space. The following step-by-step instructions are general and will guide you to creating a more specific plan of analysis, which can be applied to the virtual makerspace with your target community.

- 1. Understand and document the bigger picture of your research topic such as materials that are out, or people that have contributed to or use the space. Include both formal and informal connections. This can be done both from your perspective or from others'.
- 2. Investigate the way that these different factors relate to each other and how they are presented in the makerspace, as well as how they might impact your target audience.
- 3. Create actionable deliverables based on your analysis.

Example

The example on the next page is created based off of Melo and Nichols' book "Re-making the Library Makerspace: Critical Theories, Reflections, and Practices." In the chapter "From Needs Analysis to Power Analysis: A Framework to Examine & Broker Power in Makerspaces" Marshall and Melo included multiple examples. The example summarized here has been modified to be implemented with the virtual makerspace.

Invite your participants to explore the virtual makerspace as they please. Take pictures (or screenshots) of the spaces your participants expressed positive emotions with, and screenshots of the spaces your participants expressed negative emotions with. Use these screenshots to build connections between what participants associated positive emotions with as compared to negative emotions.

Some questions you can explore for this example are what spaces communicate inclusion or exclusion. However, other examples of questions to explore include [1]:

- Is the makerspace located in an "agnostic" space (e.g, a library)? Or is it located in a space that is associated, either by name or location on campus, with a particular disciplinary focus?
- How do new makerspace users "know" how to engage with the space?
- What equipment takes up the most space? The least?

For another example of this method, refer to this <u>link</u>. At this website you will find a method on using Power Analysis specifically with stakeholders in a Power-Interest grid.

Works Cited

1. Melo, M., & Nichols, J. T. (2020). Re-making the library makerspace: Critical theories, reflections, and practices. Library Juice Press.

Questions?

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