

Recommended practices for equitable makerspaces

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Abstract: Makerspace leaders must take action to improve equity of access in use of emerging technology.

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An informal review of library mission statements shows that libraries exist to serve the public good, advance literacy, connect people, radically foster inclusivity, and provide access to information (Urban Libraries Council, n.d.). In his work on new librarianship, R. David Lankes states that the mission of our librarians and our library staff is “to improve society through facilitating knowledge creation in their communities” (Lankes, n.d.). This mission includes our library makerspaces.

There are many different kinds of makerspaces: fab labs, hackerspaces, tech shops, and rooms with tools to use. Independent for-profit and nonprofit makerspaces exist, but these do not share the same mission as libraries. Library makerspaces are growing in number, though they also attract criticism for seemingly catering to only the tech-savvy and those from higher socioeconomic groups. As library makerspaces grow, leaders must remember our shared mission, including the greater purpose of providing equity of access to our resources.

As the American Library Association’s Interpretation of the Library Bill of Rights states:

“Libraries should establish and maintain strong ties to organizations that advocate for the rights of socially excluded, marginalized, and underrepresented people. Libraries should act in solidarity with all groups or individuals resisting attempts to abridge the rights of free expression and free access to ideas” (ALA Council, 2017).

Using this interpretation, library managers, staff, and librarians must be aware of the issues of diversity and inclusion in makerspaces, and must strategize to take specific actions to diversify these spaces, particularly through finding alliances with groups that are underrepresented in libraries. Further, library staff and faculty can continually analyze and provide strategic outreach to those individuals whom they don’t see using the library. As each library serves unique communities with specific demographics, so must its makerspace reflect or even exceed that level of diversity. In this column, I have identified a few strategies that can assist with this work. I invite you to challenge, discuss, and improve upon these ideas.

Listen and Act

Makerspaces are often used by individuals from high socioeconomic backgrounds, and users are predominantly male (Agency by Design, 2015; Noel, Murphy, & Jariwala, 2016). It is important to recognize this and ask users what can be done to make the space more welcoming for all users. Responding by hosting a “Ladies Night” can further the issue by not changing the culture and access of the space. Additionally, “Ladies Night” events are not gender inclusive and can lead to more isolation from those in non-conforming, non-binary, or trans genders. Makerspace leaders ought to listen to the communities and take action to reduce additional barriers. If one chooses to host a specific event to welcome other genders, using a title such as “Breaking Barriers” can be more inclusive of all non-dominant genders.

Library makerspaces, fab labs, and tech shops should not cater solely to individuals from high socioeconomic backgrounds. For example, “Mothership,” a makerspace in Berkeley (Mothership Hacker Moms, n.d.), California, caters to mothers and their children. Library programs that cater to both parents and children, especially single parents, can become a regular event.

Surveys are not always required to learn what the real barriers are to access in a makerspace. In my time as an advocate and leader in makerspaces, I have heard several makerspace users inform me that the makerspace is not for them. I listen to these individuals as they explain why they believe this. I have heard about past injustices, including microaggressions, space design, representation of images within the space, and outward statements of bias. These injustices serve as barriers to knowledge creation and acquisition. Some individuals have been told that they cannot code or don’t know how to use a drill. The work we must do to counteract this pattern is immense.

As a leader in a makerspace, one must truly listen to, and deeply learn from, what individuals say about the space. Changes made as a result to these statements can only improve access for everyone.

Identity and Access

Who belongs in a makerspace? What does making mean? Who is a “maker”? Who gets to call themselves a “maker”? One best practice when conducting makerspace outreach is to form a circle and ask people what they most recently made or what they achieved: ramen, macaroni and cheese, a sewing project, car repair, etc. In this way, we broaden the definition of making. Then, ask everyone this question: “who identifies as a maker?” Few may raise their hands.

After a short educational experience led by makerspace leaders, users gain confidence using different kinds of emerging technology. When leaders then repeat the question “who is a maker” they often find that the numbers have flipped—this time, the majority may raise their hands. Some still may not. There is no need to put those individuals on the spot by asking why they remain unconvinced, but if the opportunity does arise to ask them privately, leaders can do so and listen to what they say, taking action as appropriate.

Entrepreneurial Skills as a Maker Bridge

Makers tend to need entrepreneurial skills once their ideas become viable. Entrepreneurial skills are a more wide-ranging set of skills that anyone can use to help further their careers. Offering pipelines to help makerspace users access these skills will broaden the kinds of individuals who want to use a makerspace.

While some makerspaces do offer entrepreneurial services, these services ought to be extended to reach a diverse range of individuals, remembering that any makerspace housed in a library must exist to provide equity of access. Anyone can be an entrepreneur, and entrepreneurship is “creating something that didn’t exist before and attaching value to it” (Eddy, 2016). Libraries must begin offering entrepreneurial services, including patent resources, business plan ideas, subscriptions to technology tutorial databases, and pipelines to fabrication

resources. Library staff can build their own competencies in these areas, then teach others in their makerspace or in other parts of the library.

Analyze and Strategize

Who are the individuals served by library makerspaces? For each makerspace, library leaders can review usage and demographic data and then provide strategic outreach to specific groups who are not well represented. Approaching these groups is important, as is educating them about makerspaces. Makerspace employees must always share the same information with underrepresented groups as they would with other groups; this is essential to providing all users with the same opportunities.

As a library staff member working with makerspaces, an awareness of personal bias is critical. Before even beginning the outreach process, become aware of bias and how it can impact your own work. MTV's Look Different Bias Cleanse (<http://www.lookdifferent.org/what-can-i-do/bias-cleanse>) is a great place to get started.

Conclusions and Questions

Given that libraries serve everyone, providing equity of access is central to the purpose of libraries; continuing and extending this mission into the makerspaces, then, is key. As makerspaces exist in many different kinds of spaces, and are not always the most equitable spaces, libraries must look more carefully at the ways that their users are utilizing their makerspace, and more importantly, who it is from their community that is using their makerspaces. In the book *The Public Library*, David McMenemy (2009) defines equity of access as "all members of a community having the right to use the information and books that they need regardless of their ability to afford them or without undue influence or prejudice from

others who may wish them not to have access” (pg. 39). When communities evolve in makerspaces, each individual within that makerspace will bring their own notions of bias.

While I have brought up some practices that one can engage in so that library makerspaces are open to and in service of all, I am left with several questions for our profession. What is our level of responsibility to provide equity of access in our libraries and makerspaces? What are the best ways to analyze our services? Should we be evaluating who uses our libraries, as well as our makerspace? How can library staff work towards social inclusion policies aimed at serving excluded communities? I believe that the library profession may need to perform additional research to ensure that libraries are meeting the needs of the underrepresented. I am curious to hear others’ thoughts, and welcome a dialog on this topic.

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