

MakerEd

Key Findings: A Study of the Communities and Resources that Connect Educators Engaged in Making

This document highlights key findings from a study carried out by SRI International of maker educators and their online and blended communities and networks. The goals of the study were to: 1) identify both short- and long-term needs of maker educators in terms of access to resources and connections with peers, 2) determine the reasons for joining online and blended maker-centered communities, and 3) highlight common ways educators participate in these communities. The data set included a mixed-methods survey (N=492) of maker educators and interviews with community leaders (N=16) and participants (N=17) within teacher-centered and maker-centered communities and networks.



Maker educators appreciate being part of open and generous communities that are willing to share

In response to the survey question, “What do you like most about the maker educator community?” the most common responses were:

- Generosity / willingness to share
- Sense of community
- Openness
- Creativity and innovation
- Passion
- Feeling of not being alone
- Friendly / welcoming

Maker educators are particularly focused on learners aged 5-13, and there may be a trend towards incorporating making in K-12 settings

While educational making traces its roots to out-of-school settings, such as drop-in maker spaces and afterschool programs, a large number of survey respondents (62%) work in K-12 settings. This may be indicative of a trend toward increasingly incorporating making into the school day.

There are varied reasons for maker educators’ interests in making

Many educators shared their feelings that making can help students develop real-world skills and dispositions associated with positive work and life outcomes, including creativity, problem-solving, critical thinking, perseverance, and the ability to innovate. Some also mentioned that making promotes equity and appeals to diverse learners. Still others remarked that making is a self-directed, learner-driven process that builds empowerment and participants’ sense of agency. Many noted the power of making to motivate and engage learners, the low-stakes nature of making in which failure is permitted and expected, and the connections between making and STEM or STEAM content.

Maker educators who responded to the survey tended to be experienced, veteran educators and leaders

Over three-quarters of respondents (78%) had been educators for 7+ years. Of these experienced educators, 70% work in K-12 public, charter or independent schools. Many of these experienced educators, particularly those with 11+ years of experience, have taken on administrative roles or other leadership positions.

The educational roles of maker educators are diverse and unique

Maker educators shared their unique titles and roles within their formal schools and informal organizations. The variety of roles suggests that educators have numerous entry points for integrating making. Some of the titles and roles included: makerspace manager and program director, museum educator, teacher librarian, STEM coordinator and program manager, teacher-on-special-assignment (TOSA), instructional coach, educational technology coordinator, media specialist, and mentoring facilitator.

Maker educators must attend to equity

Maker educators are thinking about how to increase diversity and inclusion in their programs, and this is something seen as very important. There is a significant need to actively address issues of equity by encouraging broader definitions of making, providing support for the design of spaces, furthering funding opportunities, and building onramps for engagement.

Maker educator communities are often driven by passionate leaders, but the communities they run are not always staffed in a stable way

Many of the community resources for maker educators are supported by the generous efforts of busy educators who give their time for a cause they feel passionate about. Many of these leaders work during personal time to organize, facilitate, and promote these communities. For many communities, a lack of funding for dedicated staff is often an issue.

Maker educators lack segmented, searchable resource collections

Survey results show that maker educators are very interested in resource collections with articles, lessons, tutorials, research, and multi-media. Specifically, K-12 maker educators need searchable & segmented resource collections that provide information on how making links to standards and specific grade-level skills. They also wish to search for activities that fit within their constraints such as preparation time and materials. Additionally, information about grant applications and application wizards are important resources for maker educators, and further development of such tools may be very valuable.

Maker educators are interested in building a shared resource base

Currently, maker educators engage with communities primarily asynchronously by accessing online resources. There is a high-level of commitment to building a shared resource base. Maker educators are interested not only in accessing resources, but also in sharing them.

For more information about the study, visit:

Key Findings: <http://MakerEd.Org/community/research>

Full Report: <http://bit.ly/MakerEducatorCommunities>

This document is based on the report titled “A Study of the Communities and Resources that Connect Educators Engaged in Making,” published September 2016, that was produced by SRI International for Maker Ed. SRI makes no representations or endorsements with respect to the use of any excerpt of the full report.