

1st Maker Space Staff Survey Report



PROGRAM OVERVIEW

1st Maker Space has a mission to empower children to learn through *doing* by providing makerspaces and engaging hands-on curriculum to help students discover a passion for learning that lasts a lifetime. Makerspaces are spaces where students can gather to create, invent, and learn.

RESULTS

A total of **25** staff responded to at least some portion of the survey. The results section is organized in the following six subsections: Staff Demographics, Time Spent in Maker Space, Perceptions of Teaching, Makerspace Self-Efficacy, 1st Makerspace Training Growth, and Respondent Comments.



STAFF DEMOGRAPHICS

Information regarding the school/program staff work at, their role at their school/program, time in current role, grade level(s) taught, subjects taught, and education are presented in Figures 1-6, with detailed results for each item presented in Tables A.1-A.6 in the appendix.

Figure 1. Over half of the respondents work at South Adams, followed by 40% indicating they work at either Anderson Preparatory Academy Elementary or Middle School, and 8% work at BGC of Lawrence County.

Figure 2. Three-fourths of respondents indicated they are licensed teachers.

What school do you work at?

Which of the following best desribes your current role/position?

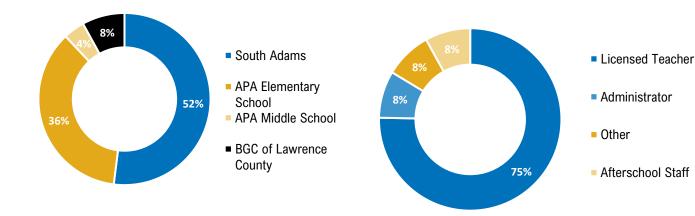


Figure 3. Close to half of respondents have served in their current role for less than five years.

How long have you served in your current role at your school?

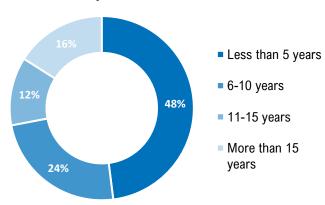


Figure 4. Nearly half of respondents indicated they teach Kindergarten and 1st Grade.

What grade level(s) do you teach?

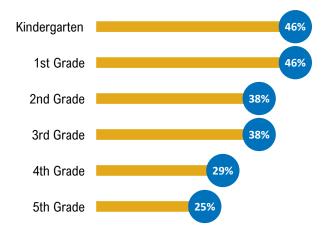


Figure 5. Two-thirds of staff indicated that they teach language arts and mathematics.

What subject(s) do you teach?

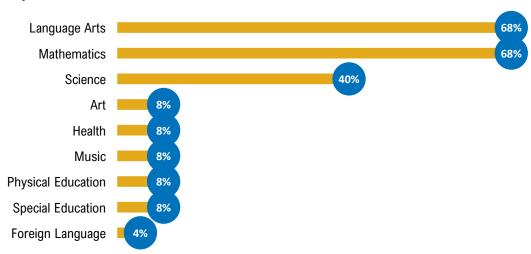


Figure 6. Roughly 96% of staff have a bachelor's degree or higher.

What is your highest level of education?

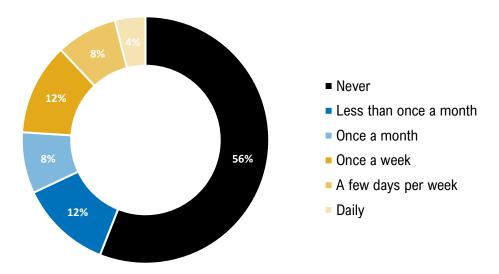




TIME SPENT IN THE MAKERSPACE

Of all respondents, 56% indicated they never use the makerspace in their classes. Further, 24% indicated they use the makerspace at least once a week. Results are presented below in Figure 7 with detailed results presented in Table A.7 in the appendix.

Figure 7. How often do you use the makerspace in your class(es)?

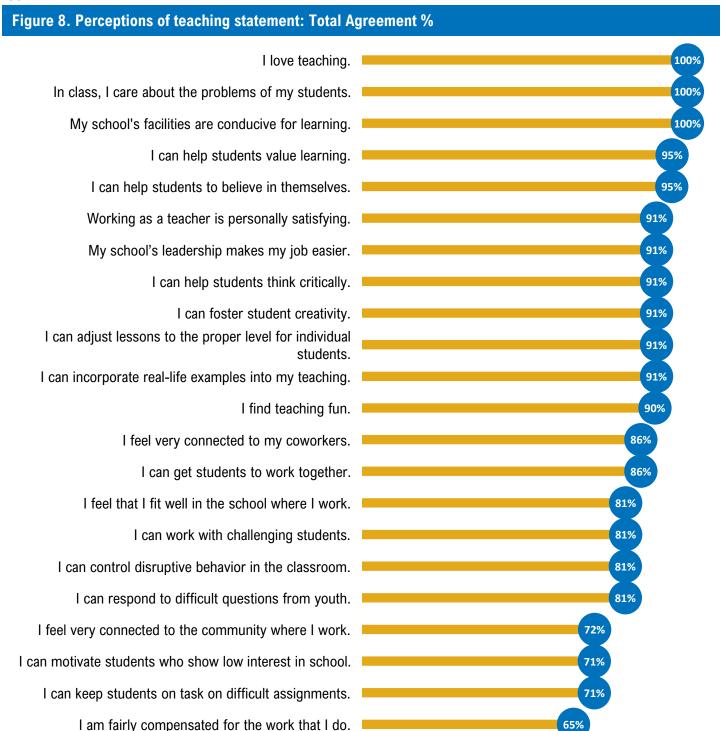




PERCEPTIONS OF TEACHING

Respondents were asked to rate their agreement with 22 statements related to teaching with 100% of staff agreeing or strongly agreeing that they love teaching, care about the problems of their students, and their school's facilities are conducive for learning. Additionally, of all statements, 12 had a total agreement percentage or 90% or higher, with another six having a total agreement percentage above 80%. The statement with

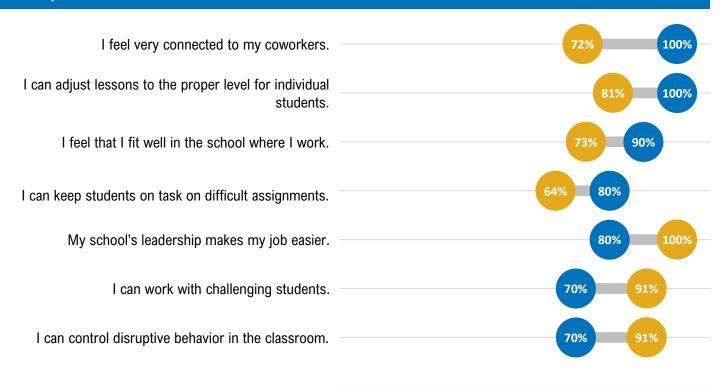
the lowest total agreement percentage was, "I am fairly compensated for the word that I do" at 65%. Total agreement percentages are presented below in Figure 8 with detailed results for each item in Table A.8 in the appendix.



Perceptions of Teaching: Comparing Those Who Use the Makerspace and Those Who Never Use the Makerspace

Staff who indicated they use the makerspace at least once a month had higher total agreement levels than those who indicated they never use the makerspace for items like feeling connected to their coworkers and adjusting lessons to the proper level for individual students. However, there were a few statements where those who never use the makerspace had higher total agreement percentages than those who indicated they use the makerspace at least once a month. Figure 9 shows statements with notable differences between those who use the makerspace and those who never use the makerspace. Note: Due small sample sizes, results should be interpreted with caution and treated as only as potential rationale for continued study.

Figure 9. Perceptions of Teaching Comparison: Staff who use the makerspace vs. Staff who do not use the makerspace.

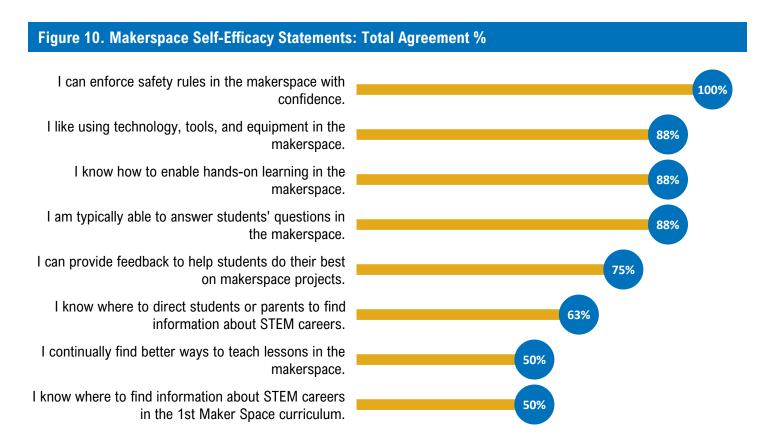




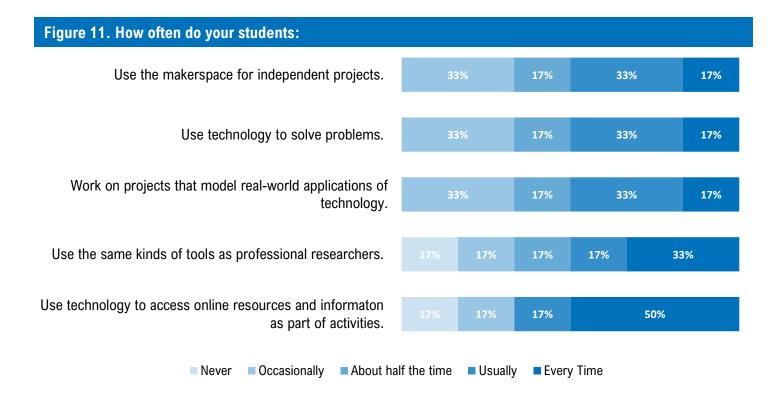
MAKERSPACE SELF-EFFICACY

Staff were asked to rate their agreement with eight statements regarding makerspace self-efficacy. All staff agreed or strongly agreed that they can enforce safety rules in the makerspace with confidence. However, just half of the respondents agreed or strongly agreed that they continually find better ways to teach lessons in the makerspace and that they know where to find information about STEM careers in the 1st Maker Space curriculum. Total agreement percentages for each statement are

presented below in Figure 10 with detailed results for each item in Table A.9 in the appendix. Note: Due small sample sizes, results should be interpreted with caution and treated as only as potential rationale for continued study.



Staff were also asked to indicate how often their students complete specific tasks that demonstrate makerspace self-efficacy, with 50% of respondents indicating that their students use technology to access online resources and information as part of activities every time. Results for all six items are presented below in Figure 11 and in Table A.11 in the appendix.





1ST MAKER SPACE TRAINING GROWTH

Just eight respondents indicated that they have attended professional development from 1st Maker Space. Seven respondents provided responses to each item on the retrospective prepost scale related to 1st Maker Space training growth, with three indicating an increase in their

overall confidence level related to the seven items following the training. One respondent indicated their confidence level remained the same and the other three indicated a decrease in their confidence level. It should be noted that it is possible these respondents misinterpreted the structure of the survey based on their positive responses to the qualitative questions regarding 1st Makerspace Training. The **before training** and **now** responses are detailed below in Figure 12 and in Table A.12 in the appendix. Respondents could also provide comments about how the makerspace training has helped them as a teacher, with most having positive things to say. These comments are in Table A.13 in the appendix.

Figure 12. 1st Maker Space Training Growth: Confidence Before Training and Now 14% 43% Planning individual makerspace lessons. 25% 29% 43% 14% Using a lesson plan from 1st Maker Space. 43% 14% 57% 14% Implementing activities that incorporate teamwork. 14% Using strategies to create 14% 57% 14% group censuses among 14% students during activities. 29% Using equipment in the 14% 43% makerspace. 14% Working with community 57% 14% partners. 14% Empowering youth to lead 17% 17% 50% 17% activities 14% Before: Not at all confident Before: Somewhat Confident ■ Before: Mostly Confident Before: Completely confident Now: Not at all confident Now: Somewhat Confident Now: Mostly Confident Now: Completely confident

RESPONDENT COMMENTS

What do you like most about the makerspace in your school?

Respondents who indicated that they use the makerspace in their class(es) at least once a month were asked what they liked best about the makerspace in their school. Respondents indicated that the liked the value it brings to the students, how it allows the students to be hand-on, and different materials available to students. Verbatim responses are presented below in Table 1.

Table 1. What do you like most about the makerspace in your school?

How members are mostly able to do the whole process on their own or with the help of their peers.

I like that it has so many options for the students to use. I also like that many types of technology are available to the students.

I like the value and worth it brings to our students

I love all the materials available to use.

It looks nice and updated!

Large space

The fact that it engages students in hands on learning activities.

The tables and space to work independently.

What are the barriers to implementing the makerspace at your school?

Respondents who indicated that they use the makerspace in their class(es) at least once a month were also asked about the barriers of implementing the makerspace. Multiple staff said that time and making an appealing curriculum to keeps students' interest. Verbatim responses are presented below in Table 2.

Table 2. What are the barriers to implementing the makerspace at your school?

Creating a program curriculum that is appealing enough to get a majority of members to participate when participation is optional.

I am a specials teacher, so it is time.

I think time and the fact that we are sharing the space with other people right now while we wait on the construction project to be finished.

It's a struggle to know how to use the materials.

No real barriers

The attention span of the students and their ability to follow directions.

Time.

What are the barriers that keep you from using the Makerspace at your school?

Respondents who indicated that they never use the makerspace in their classes were asked about the barriers keeping them from using the makerspace. Multiple staff indicated not having enough time and not knowing how to use the makerspace. Verbatim responses are presented below in Table 3.

Table 3. What are the barriers that keep you from using the Makerspace at your school?

DO not know anything about it!

I am unsure where/what the makerspace is that we are speaking about.

I don't have time/don't know when or what to use it for

Limited time. I only work with each small group for 25 minutes and we have a great deal to cover in our curriculum during this time.

Time

Time, Knowledge of Makerspace

Time.