WHAT DO YOU WANT TO MEASURE WITH ACTION RESEARCH?

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This month's 1-Question Survey asked school librarians to consider what data they would most want to collect if they were to engage in action research. When asked what impact or need(s) they would like to measure, respondents listed their top priority to be student learning (48%). The next area identified was general usage (33%) and then collection development (31%). Teacher support (27%), research needs (24%), and use of space within the library (22%) followed, with technology needs (17%) being of least concern.

Action research can be used as a tool within education by employing "continuing cycles of investigation designed to reveal effective solutions to issues and problems experienced in specific situations and localized settings" (Stringer, 2013). This allows whomever is doing the research a chance to build their own set of data that can then inform professional practices and improve the effectiveness and efficiency of the library program.

School librarians are in a special spot in most schools. They have a direct instructional impact on every student in the school as well as being an instructional support person to every regular classroom teacher. However, most of us get little time with full groups of students which makes collection of data quite complicated.

One of my (Jen's) first action research projects involved a prescribed and leveled reading program. This was so long ago that I cannot even find my data, but I remember the impact. With one class of second graders, we quit using the leveled book/quiz program and I gave them regular book talks and utilized the screensaver on their classroom computers to promote the newest books in the library. Their highstakes reading scores were as good or better than their other classmates who continued with the prescribed and leveled reading program. Checkouts for my screensaver class were also much higher than the control groups. This example of data collection supported a theory I had in regards to student learning and the school library. It was not difficult to collect, but it did require reflection, collaboration with teachers and administrators, and time, but it was well worth the effort.

Sometimes collecting data is even easier. In my high school library I transitioned from using a decades-old clipboard sign-in process to a Google Form. This method gave us easy-to-access and actionable information with very little impact on time or effort. We could measure which classes students were visiting from, their reason for visiting the library, and, with a quick exit form, we could gather qualitative information regarding how well the library met user needs. All this required was one dedicated computer to serve as a sign-in kiosk and a little bit of space on the desk. Where no one ever referred to the clipboard, this data we collected helped us with student safety, technology use, and influenced our yearly needs assessment documentation. This example of action research for the purpose of collecting general library use data would be simple to tailor to any school library.

Action research doesn't have to focus only on users. As survey respondents demonstrated, one area of intense interest to school librarians is collection development. There are certainly many methods for evaluating your collection, but one many of us find ourselves thinking about right now is how to ensure we are providing inclusivity and diversity with our selections. In a recent Twitter chat, Nancy Jo Lambert, librarian at Reedy High School, shared the work she has undertaken to conduct a diversity audit of her collection. "Conducting a diversity audit has made me honestly evaluate my collection.... Now my collection development practices are driven by data." The real beauty is that almost all of the work is being done by her high school aides, and she has shared her resources for anyone to use. You can access her work and templates online (Lambert 2020).

If you're avoiding action research because it sounds scary and serious, we hope the above examples demonstrate just how accessible this process can be. Consider what you're currently doing in your library and how you can use data to make your work more meaningful, measurable, effective, and efficient.



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Makerspaces and Assessment

Heather Moorefield-Lang

When we think about assessment, we might turn our minds toward grading and standardized testing. In reality, when thinking about makerspaces and assessment it is better to think in terms like evaluation, observations, and even measurements.

Assessment will always have to be different for maker and DIY spaces and the type of learning that occurs there. And we need to remember there is a difference between evaluation and assessment. Assessment looks at teaching and instruction and measures effectiveness, typically with an eye toward improvement. Evaluation on the other hand is where we look at instruction and teaching and determine the value. When we create partnerships with our peer educators, the outcomes and projects from maker activities can be assessed through grades and other methods of evaluation (portfolios, project-based learning, etc.).

There is an inquiry-based foothold to the new AASL standards framework that would work well with maker learning locations and could tie in with assessment models for making in libraries. We want our students to create, collaborate, and innovate. Being in the business of research we also want our students to think critically, research, identify problems, and arrive at solutions in their making. Essentially our students are moving through the information literacy process in their maker endeavors.

Ideas for Assessment in Your Makerspace

Badges

Makerspaces are an informal learning environment, hence the space and activities are great for informal evaluation. Badges are an excellent way to assess your making, give feedback to students, and apprise peer educators and collaborators. Badges offer a narrative into what students have learned and skills they have gained.

Portfolios

Portfolios, and particularly digital portfolios, offer a location to gather, share, and reflect on work. Portfolios offer an option of assessment; a strong narrative and lens into our students' learning but also a valid alternative to more standardized methods.

Observations

How many classes am I teaching? What maker activities are we doing? What are the student numbers? How have we increased over the past year? These and many other questions can be asked in the library maker setting. As the library leader in your school, communication is key. Letting your community and administrators know what is occurring in your library is of great importance. Share your story, often, and proudly!

Self-Assessment

In my early career I was a theater teacher. Reflection and self-assessment were always an integral part of my craft as an actor, director, and theater teacher. Having my students look at their work— strengths, weaknesses, what went well, what could be better, what could change—was a tie to my own instructional practice. As a librarian and a professor, I continue to look at my work to see how it could be improved, what best worked for my community, what didn't, and what could change. The same can be done with students in maker learning spaces. Self-assessment can be completed in a myriad of ways. I am fond of the 3, 2, 1 method (Three Things I Learned, Two Things I Would Have Liked to Learn, One Thing I Would Do Differently). There are a variety of ways to adjust this evaluation method. The main objective is getting students to reflect on their maker work and practice.

I was recently told that good instruction makes up for bad testing. Most states have state-level mandated testing or assessment. We have grading. Evaluation and assessment of a maker learning space is a way to promote the work occurring in a school library makerspace. Informal measurements let us show our community the work that we are doing with our students and peer educators. Makerspaces have become a wonderful addition to many school libraries, evaluation, assessment, and measurement can provide a way to advocate for these already important additions to our library spaces.



Moorefield-Lang, Heather. "Makerspaces and Assessment." *School Library Connection*. (March 2018). schoollibraryconnection.com/Content/Article/2143630.

Using Data to Advocate for Library Budgets & Quality Materials

Jenny Takeda

I would love to set up a meeting to talk about doing even better in my library and budgeting for books.

We all dream of receiving requests like this one from a school principal hoping to initiate a conversation about the school library. I was pleased when our library services team received several invitations from principals to meet with them individually. However, these principals only took this step after we'd made our presence known with presentations to school leaders with library data specific to their schools.

Advocating as district-level personnel for library budgets at the building level to support student needs and interests can make a difference, especially in those districts that do not have established library funding formulas or requirements. While it takes time to work with each person individually, there can be a snowball effect. As individual principals begin to enhance their budgets, this can lead to system-wide change as principals and district leaders frequently interact with and duplicate one another's work.

Our library services team began working on a project during the 2017-18 school year to prepare data on library materials expenditures, circulation, and attrition and determine how to best share reports with minimum funding recommendations with principals. These first steps were chronicled in a *Knowledge Quest* article (Takeda 2019). You can see a product of our work in Figure 1. Getting to this product required planning, trial and error, feedback from stakeholders, and more. We have continued to explore ways to improve our process, such as honing in on the best data to include, creating a more visual report format, and seeking more opportunities to speak directly to groups of principals.

I present our process and story in this article, including ideas and steps that can be replicated and modified to launch or fine-tune library funding advocacy efforts within your own district.

Gathering Data

What types of data about the school library are compelling to principals? What format will work best to convey the data effectively and efficiently? We know that principals have many demands on their time and work with data on a regular basis, so information

must be presented clearly and concisely. An infographic-style approach works well for presenting library data to principals in a quick and professional manner that highlights key information. For example, the Elementary Library Report image above represents the first page of a two-page report about the library collection. It includes details regarding per-student spending, checkouts per student, funding sources, and attrition (lost and weeded materials).

To begin, consider the types of data that will be useful to share with principals and identify what to track over the course of a school year so an annual report can be prepared. When gathering data, try to keep it simple by using something like a Google Form. School library staff can provide some information, or it can be compiled at the district level using reports from the library catalog and by tracking library expenditures.

Depending on the number of schools in the district, the data can be tracked within one spreadsheet with separate tabs for each level or by using multiple spreadsheets if needed. Assign one row for each school and compile the data with column headings representing various types of data to track. Here are some examples:

- Funding sources
 - These may include allocations or spending from general fund school budgets, parent organization support, book fair profits, Title I, etc.
 - This information paints a detailed picture of funding differences amongst schools and may identify inequities in areas such as support from parents' groups.
 - Tracking the number of and total value of books added to library collections using the library catalog is another option if the funding sources cannot be tracked. A drawback to this approach is that these numbers may make the funding support appear to be higher than it truly is if donated books are included.
- Number of students in each school
- Total expenditures
- Total expenditures per student (determined by using a formula dividing total expenditures by the number of students)
- Checkouts
 - Categories to include:
 - Total number of print checkouts
 - Number of print checkouts per student
 - Number of digital checkouts
 - When checkouts are lower than anticipated, this provides an opportunity to have conversations about multiple factors that might lead to these numbers and possible ways to change practices in order to improve them.
 - Potential solutions might include modifying checkout limits by grade level, scheduling more frequent opportunities for students to visit the library, purchasing new books and sequels that aren't available in classroom libraries, and interviewing students and staff for additional suggestions.

- Lost books (number and value of books lost during a school year)
 - These figures demonstrate that library materials are lost by patrons or go missing from the library shelves each year.
 - This builds awareness that library budgets should include funds to replace lost materials each year.
- Weeded books (number and value of books weeded during a school year)
 - This information demonstrates that libraries require constant attention in both de-selecting old materials and purchasing new titles. Materials must be continuously evaluated for relevance, currency, and appeal.
 - After a significant weeding project, these figures can be overwhelming. This is more about an opportunity to have a conversation about areas of the collection needing improvement rather than requesting a dollar for dollar match to replace all weeded materials.

Preparing Data

With the data collected, determining the best way to present it is key to others' taking action. A tool like Canva or Easely would work well for individual schools. To select a consistent format when preparing data for a number of schools, consider a tool already used heavily by staff and administrators in your district, which will make it easy to replicate and modify the information from school to school.

A G Suite for Education district can create a report template using Google Slides and make a copy of it for every school. After each school's data is entered into the report, it can be printed and shared digitally with principals. When compiling the template, colorful charts can be created using data from Google Sheets pasted into the reports. The Noun Project's Google Slides Add-on (Noun Project 2020) is a quick way to add simple icons, for example the people and books representing checkouts per student.

In addition to the data, including a budget recommendation within this infographic is a great way to draw attention to the need that accompanies the story being told by the data. An accompanying page with explanatory information can follow the infographic and provide principals with background information about the data, the rationale behind practices like de-selecting/weeding books, and state and national sources for further information.

Before finalizing and duplicating the report template, seek feedback from several others for clarity and edits that may be needed. Asking a district administrator or lead from a different area to be a thought partner will ensure that the information is clear, focused, and avoids using library lingo that may not be clear.

Presenting Data

As the reports are being prepared, pursue opportunities to schedule a time during principals' meetings to present the data and have small group discussions. Prepare

individual school packets for each principal with their library's report. Comparison charts can also be included that are based on school level, similar size student populations, or other factors such as Title I/non-Title I status. This information can be presented anonymously by replacing each school name with a code such as a color and letters (e.g. Purple, AA). Provide each principal with their code so they can see where their school fits (see the Library Book Spending example above).

When you are able to meet with principals, the following question prompts for small group conversations may be useful:

- After reviewing the data, what do you notice and wonder? What questions do you have?
- How can we work together to create a district-wide model for equitable library funding for all the readers in the district?
- How do we put the equity lens on library fines?
- Is there a way to address equity regarding access to library materials when we look at library budgeting and library fines for lost materials?

Principals may also express interest in reviewing longitudinal data over time. If you are just beginning to collect data in some areas, it may be easiest to compile a simple report showing historical checkouts per student over a period of several years. You may find when sharing this information with principals that a competitive nature may surface with each wanting their school to have the highest checkouts. Looking at these numbers can lead to good discussions of the various factors that may lead to differences. To provide principals with best practices for creating a welcoming environment in their school library, a simple one-page document such as the Making Your Library the Hub of the School (Beaverton School District Library Services 2020) resource shown here can be included in their reports.

Provide principals with opportunities for more in-depth conversations and individual follow-up meetings specifically for their school. Share a simple Contact Us form at the conclusion of the presentation where principals can sign up for someone from the library services team to reach out to them and schedule a time to visit their school. During a meeting with the principal quoted at the beginning of this article, she made a commitment to allocate \$3000 that year for new library books with a focus on diversity and shared a goal of a similar funding amount for the next year.

Looking Ahead

After the initial steps of preparing and presenting the data, what comes next? One strategy recommended by Fran Glick (Baltimore City Public Schools) during the Future Ready Librarian Summit (Collection Development in the School Library, August 6, 2020), is to complete the circle with principals by following up after new book orders are received and sharing which priorities were met. This reactivates the conversation with principals and provides an opportunity to discuss ongoing goals and needs.

Beyond presenting to principals, approach other leaders who may support change efforts that will improve access to resources and experiences for students. Offices of equity and inclusion may already be reviewing district systems and funding models for equity and may be unaware of the budgetary needs to maintain quality, current, and inclusive school library collections. Business services departments may support establishing library budgeting formulas for principals so they have guidance when crafting their annual budgets.

As schools move forward with modified learning models during COVID-19, this prompts additional questions for the future. With school budget reductions in many areas, conversations about funding increases may be paused or priorities may shift to a temporary increase of digital content over print materials. School libraries must continue to be responsive in finding the best ways to engage students as lifelong readers and learners.

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