Action research offers a powerful advocacy strategy for teacher librarians to address a local issue/challenge. Teacher librarians can use action research on their own timetables to solve library-related issues, improve practice, and enhance student learning.

According to teacher librarians Harper and Deskins (2015), “Action research is a natural fit for systematically evaluating and documenting thoughtful improvements in school library programs” (p. 26). It is an advocacy strategy based on reflection, data collection and analysis, and planned action. “Understanding the concept and process of action research will prepare the library media specialist to take a leadership role in improving both the library media center and the entire school program” (Howard & Eckhardt, 2005b, p. 32).

Today’s teacher librarians are successfully applying action research to bring about change on such issues as library design, scheduling, staffing, makerspaces, library program evaluation, and collaboration to impact student academic success and meet state standards. Though research in library literature related to these topics provides some understanding, unless action research is conducted in one’s own school, teacher librarians will not know if a proposed or considered change will be effective in their setting.

**FOUR STAGES**

Sagor and Williams (2017) identify four steps or stages of action research to impact a school library program and student academic success:

1. Clarifying vision and targets
2. Articulating theory
3. Implementing action and collecting data
4. Reflecting on data and planning informed action.

**Clarifying Vision and Targets**

*What is the problem/issue, and why does it need to be addressed? Does the issue directly relate to student outcomes and achievement? Would the action research serve as an advocacy strategy for the teacher librarian?*

The teacher librarian, in collaboration with the school library stakeholders, determines what needs to be addressed at the local level. It is essential that key stakeholders—faculty, students, administrators, parents, and specific community members—be involved in the action research process and support this advocacy strategy to ensure that the school library is the hub of the school community and beyond (Harper & Deskins, 2015). In other words, the focus of the action research should be an identified priority that is supported by the stakeholders. According to Farmer (2003), there are five characteristics of the issue/challenge to be researched:

1. **Significant.** The teacher librarian pinpoints the issue/challenge that directly relates to student outcomes and achievement.
2. **Priority.** The teacher librarian...
selects an issue/challenge that most likely will result in buy-in and support from the stakeholders.

3. Controllable. The research topic and implementing the final results must be within the control of the teacher librarian.

4. Feasible. The result of the action research is reasonable and can be put into practice.

5. Intriguing. The issue/challenge should be one that excites, perplexes, absorbs, or fascinates the teacher librarian and the stakeholders so that the motivation to conduct, implement, evaluate, and reflect does not diminish (p. 6).

Articulating Theory

What is the problem statement? How can the problem be resolved? What questions need to be asked?

Howard and Eckhardt (2015a) suggest brainstorming a variety of questions around the problem in order to help narrow the research focus. Forming solid research questions is critical to designing a study, because the questions describe the purpose for the action research and guide the teacher librarian through the research process. Questions will help specify what data to collect and how to collect that data. The teacher librarian will develop a theory for proceeding with the action research, so that the final advocacy result will impact the target audience: the students.

Review of the literature is also part of this stage, and the teacher librarian may find it difficult to find articles to support the problem statement. It may become necessary to find a balance between traditional studies published in research journals and recommendation articles from librarians in practitioner journals. Action research projects representing this balanced approach are published in journals like Knowledge Quest and Teacher Librarian.

Implementing Action and Collecting Data

How and what kinds of data should be collected?

The teacher librarian gathers and organizes information to understand the problem and how it relates to an advocacy strategy. Research can be divided into three categories depending on the type of data being collected:

1. Quantitative. Research is objective and empirically based, usually data/statistics. Examples would include test scores, circulation rates, and survey responses using a Likert scale (1-strongly disagree to 5-strongly agree).

2. Qualitative. Research is more subjective, based on people’s perceptions and actions, and cannot be as empirically defined as quantitative data. Examples would include interviews and observations.

3. Combination of quantitative and qualitative. The third category is mixed methods, which combines data sources from quantitative with qualitative origins.

There are pros and cons for the various quantitative and qualitative data collection tools. Questionnaires and surveys provide a significant amount of information in a short time span and can be distributed quickly to a large number of respondents. Electronic surveys, such as Zoomerang.com or

THE UNDERGROUND RAILROAD


Glatzer, Jenna. Beacon to Freedom: The Story of a Conductor on the Underground Railroad (Encounter: Narrative Nonfiction Picture Books). Capstone, 2017. 40p. LB $20.11. 9781515734963. Grades 3-5. The Underground Railroad was the term used for any travel method to help slaves find safe havens. This biographical story of John Rankin describes how he helped people escape to freedom by keeping a light burning as a symbol for a welcoming and helping home. This home in Ohio is now an historic landmark.

Kennon, Caroline. Depots of the Underground Railroad (Hidden History). Gareth Stevens, 2017. 32p. LB $22.95. 9781482457964. Grades 2-5. Here is an overview of some places that gave safety and assistance to escaping slaves. Photos, drawings, and fact boxes make this an interesting read about this time period. A glossary, more information, and an index are included.

Taylor, Charlotte. The Underground Railroad (Our Shared History). Enslow, 2016. 128p. LB $37.27. 9780766070141. Grades 6-10. Brave men and women helped slaves reach slave-free states and Canada via secret networks. This title describes the dangerous ordeals during these journeys. Back matter includes a timeline, chapter notes, additional reading, and an index to support this research tool.
SurveyMonkey.com, are effective and easy to use. However, it is important to keep in mind that the use of surveys and questionnaires does not allow for follow-up or clarification of the questions.

Interviews require a significant amount of time and coordination of schedules. They allow the teacher librarian to ask follow-up questions and clarify what was discussed during the interview. Observations provide a deeper assessment, but the results may be subjective.

Archival documents or artifacts may include circulation statistics, library visit frequencies, and test scores including standardized tests. Statistics can be intimidating but can be used in understanding number data, supporting the findings, and making interpretations more credible, especially to administrators, grant funders, and other members of the community who often think in those terms. Statistics used to analyze quantitative data may include mean, median, mode, and frequency counts. Such descriptive statistics drill into the data collected. Inferential statistics and the tests used are more complex. These are data that may be used to demonstrate correlations and provide regression analysis.

A valuable advocacy resource based on quantitative and qualitative research is School Libraries Work (2016). This fourth edition document updates the 2008 volume, reinforcing the most relevant themes from that report while highlighting recent research at both the national and state levels.

The teacher librarian needs to determine which tools will be most effective in collecting the necessary data in the school library for the specific issue/challenge. A combination of both qualitative and quantitative research collection tools would be the best approach for the teacher librarian conducting action research for a school library. Each tool provides a different perspective, and when the data are compared and analyzed, the results of the findings may complement and extend what is learned during the research process.

**Reflecting on Data and Planning Informed Action**

What was learned after analyzing and reflecting on the data? What action will be taken? What format will be used to communicate the findings and to whom? Will the action research actually influence stakeholders and be an advocacy strategy? What is next?

After analyzing and reflecting on the data, the teacher librarian will organize the findings and develop a plan that identifies corresponding actions toward a solution. The teacher librarian will communicate the results of the action research to the primary stakeholders in the format of an advocacy action plan. The action plan will occur in three progressive stages:

1. Development (completed in the planning stage)
2. Implementation (taking action)

Finally, the teacher librarian must decide the most appropriate time to report the results and research to the stakeholders and in what format. Professional dissemination of the results of the action research by the teacher librarian is a form of advocacy and is also a demonstration of leadership, but only when the teacher librarian shares the process and the results.

The action research findings can be disseminated in print and/or electronic format to administrators, parents, teachers, and community members. It is essential to use a presentation format that will capture and maintain the interest of the stakeholders while emphasizing the impact on student achievement. Citations need to be in an acceptable format and the writing clear and grammatically correct.

Here are a few writing tips for action research:

- Create citations in an acceptable standard format. Purdue Online Writing Lab (OWL) site has online citation guides (https://owl.english.purdue.edu/owl/).
- Reference the sources correctly when doing the review of the literature.
- Do not use contractions.
- Do not interrupt the verb phrase with an adverb.
- Remember that *data* is a plural word and requires the plural verb form.
- Check punctuation on sites such as the Purdue Online Writing Lab (https://owl.english.purdue.edu/owl/section/1/6/) or the Punctuation Guide (https://www.thepunctuationguide.com/).
- Do not use words such as “great,” “super,” “wonderful,” or “awesome.” These words are considered trite and do not provide sufficient descriptive detail or add to the exposition or narrative.
- Do not assume your audience will know library jargon or acronyms.
SUMMARY

The action research can be conducted by the teacher librarian in the local school library on an identified issue/challenge that is supported by library stakeholders. Action research for problem solving is a continuous process, a spiral that lets the teacher librarian reflect on a problem that exists in the school library, analyze the problem through the collection of data, implement an improvement to that problem, evaluate the results, and then begin the process all over again: reflect, analyze, implement, and evaluate (Howard & Eckhardt, 2006).

REFERENCES


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For the inquiring student, here is a perfect overview of how instruments work, including strings, wind, and percussion. Each chapter has a star symbol to indicate a feature that could be used as a science fair project. Colorful fact boxes and illustrations add to the interest. Includes an index, glossary, and additional reading.

Hilton, Lisa. Inventions in Music: From the Monochord to MP3s (Art and Invention). Cavendish Square, 2017. 122p. LB $31.93. 9781422237144. Grades 7-12. Music has been a part of communication since the beginning of mankind. Here the evolution is presented through various technologies from past to present. The chronological order depicts the growing influence of each invention. Back matter includes a glossary, bibliography, additional material, and an index.

Kuhtz, Russell, editor. Music: Techniques, Styles, Instruments, and Practice (Britannica’s Practical Guide to the Arts). Britannica, 2017. 284p. LB $28.42. 9781680483727. Grades 7-12. This condensed volume gives the reader a true sense of how music has always been important for various celebrations and presentations. This title moves from composition, to instruments, and to the evolution of different genres of music. In addition to the usual references, the bibliography includes specific works as they relate to various styles.

Music Innovators, 3 vols. Salem Press, 2017. 1200p. LB $195.00. 97816192-8969. Grades 9-12. These encyclopedically arranged volumes provide biographical information for more than 350 influential people in the music industry, including “Early Life,” “Life’s Work,” Personal Information,” and “Further Reading” for each. Free online access is available.