Library Media Programs and Student Achievement

Research and Research-Based Practices for
Library Media Specialists and Education Leaders

General Findings

Research has repeatedly shown that strong library media programs increase student achievement.

In dozens of large-scale studies, involving over 8,700 schools and over 2.6 million students, research has consistently demonstrated that students score an average of 10-20% higher on reading and achievement tests when their school has a strong library media program.[1,2,3] This effect holds, regardless of other school conditions such as student-teacher ratio, overall per-pupil spending, student demographics and community socio-economic conditions.[1,2,3] Furthermore, qualitative research shows that the relationship is causal: Effective library media programs *directly contribute* to higher student achievement.[4,5]

Factors Impacting Student Achievement

A successful library media program is made up of numerous important elements, and researchers have identified a number of specific factors that correlate with higher student achievement. However, these individual factors can be categorized into the following four main categories. Research has shown that student achievement is higher when…

A. **Library media centers are staffed at higher levels (more positions, more hours).**

B. **Library media centers have larger collections of better quality information resources.**

C. **Library media centers and resources are used more frequently by students and staff.**

D. **Library media specialists spend more time collaborating with classroom teachers to teach information literacy curriculum standards.**

The following sections examine the specific research findings in each of these general areas of impact.

A. Staffing Levels

Achievement is higher in schools with higher levels of certified staffing in the library (more certified library media specialists and more hours worked by these professionals).[6,7,8,9] A professionally-trained library media specialist can optimize each of the other impact factors (quality of information resources, level of patron usage, and level of instructional collaboration), maximizing their program's impact on student achievement. More certified staff hours result in greater optimization of these impacts.[3]

Library media centers operated *solely by uncertified staff* do not contribute to achievement,[1,2] but when the program is led by a certified library media specialist, increased support staff hours *do* increase student achievement.[3,7,9] If uncertified staff are employed to support certified library media specialists, they can

perform required clerical and operational tasks, allowing the library media specialist to focus on tasks (such as resource selection and collaborative instruction) that impact student achievement.

B. Quality of Information Resources

Test scores are higher when students have access to library media collections with more accurate and up-to-date information (newer books and more current periodicals).[8,10] Also, achievement is higher in schools where the library media center provides access to online information.[6,9,10] Two primary factors contribute to the quality of a library media center's information resources:

- ❖ Funding: Student achievement is higher in schools with greater library media funding.[8,10] If these are spent on well-selected information resources, more spending on library media materials results in a higher-quality collection.

- ❖ Staffing: Certified library media specialists are specially trained in information resource selection. Having the selection process guided by a professional ensures that the media materials funds are spent in the most effective way and that the library media collection is well-balanced, supports the curriculum, and satisfies patron needs.

C. Usage of Library Media Facility and Resources

Student achievement is higher in schools where the library media center and its resources are used more often, both by individual students and by whole classes.[3,6,10,11] The level of usage is partially a function of the accessibility of the facility and its resources, and this level of accessibility is also associated with higher student achievement.[3]

- ❖ Student achievement is higher in schools where the library media center is open longer hours.[9]

- ❖ Test scores are higher when computer networks make high quality information resources available outside the library media center.[7,10]

- ❖ Test scores are also higher in schools where the library operates on a flexible schedule instead of a fixed rotation[11,12]. Fixed scheduling guarantees that classes will visit the library media center, but it can limit the most educationally-productive kinds of usage: individual student visits[6,10] and collaborative information literacy instruction.[7,10]

D. Collaborative Information Literacy Instruction

One of the most important roles of the library media specialist is teaching information literacy (the ability to effectively find, evaluate, and apply information). The more often students receive information literacy instruction from their library media specialist, the higher their test scores.[6] Several factors contribute to the instructional effectiveness of the library media specialist:

- ❖ Student achievement is higher when information literacy instruction is integrated with the subject-area curriculum.[7,10] (Rather than teaching "library skills" in isolation, library media specialists teach content area standards that entail information literacy.)

- ❖ Student achievement is also higher when library media specialists collaborate with classroom teachers to teach information literacy.[6,7,10,11,12] (That is, when teachers and library media specialists work together to co-plan, co-teach, and co-assess a learning experience.)

- ❖ Research has shown that giving students timely , constructive feedback and guidance based on formative assessment of their progress ("assessment for learning") is one of the most effective instructional practices in any context.[13] Other researchers have noted that this is one of the hallmarks of information literacy instruction and is a common practice among effective library media specialists.[14]

- ❖ When library media specialists exhibit leadership in the school, it increases collaboration with other teachers.[7,10] Participating in leadership opportunities increases media specialists' level of interaction with their colleagues, puts their expertise on display, and builds relationships throughout the school.[15]

- ❖ As noted above, achievement is higher in schools where the library operates on a flexible schedule instead of a fixed rotation.[11,12] Flexible scheduling encourages collaboration, whereas fixed scheduling inhibits it. (In the worst cases, library media centers are placed in a "specials" rotation, in which teachers have planning time while their classes visit the library media center. Since the library media specialist is occupied with the class during the teacher's planning time, collaboration is nearly impossible.)

- ❖ As noted above, higher levels of staffing allow library media specialists more time for collaboration, consequently enhancing student achievement.[6,7,8,9]

Implications for Practice

The research reviewed above suggests a number of actions that library media specialists, principals, and other leaders can take to maximize the impact of their library media programs on student achievement.

Implications for Library Media Specialists

Library media specialists must spend their time wisely, *focusing on activities that enhance student achievement*:

❖ Collaborate with teachers to provide students with as much curriculum-based information literacy instruction as possible.

➢ Ensure that your instruction is focused on standards by using the "backwards-design" model for instructional planning: Work with teachers to choose curriculum standards to be addressed, design assessments to measure student mastery, and then plan the instructional strategies to help students master the standards.

➢ Collaborate with teachers to assess student progress. At every opportunity, provide formative feedback to students that will help them achieve curriculum standards.

➢ Employ other research-based strategies in the learning experiences you create.

➢ Build relationships within the school by participating in building leadership opportunities.

❖ Use the funds available to purchase information resources that will have the maximum impact on student learning.

➢ Plan your budget carefully so as to spend the majority of your program's allotted funds on information resources.

➢ Use the school library media committee and other means to solicit input from library stakeholders regarding resource selection.

➢ Maintain a broad knowledge of the curriculum and spend time interacting with students and teachers to ensure that the resources selected for purchase have maximum value.

❖ Manage the library media center in a way that maximizes patron access and increases usage.

➢ Adjust circulation policies, printing restrictions, and other rules to maximize access to information resources for all patrons.

➢ If possible, schedule your day in a way that provides maximum student access outside of class time (i.e., before school, after school, during lunch), especially for low SES students who might not have access to books and computers at home.

➢ Create a warm, inviting atmosphere in the library media center that encourages students and staff to use the library media center more often.

Implications for Principals and Other Educational Leaders

The effectiveness of library media programs depends a great deal on the administrative support they receive. Recent research has shown a strong relationship between test scores and the degree to which the principal values and supports the library media program.[12] Principals and other educational leaders should be sure to take actions and make decisions that support and enhance the student achievement impact of library media programs.

Some of these actions have essentially no cost:

➢ Promote the benefits of library media instruction to teachers and encourage them to collaborate with the library media specialist.

➢ Let the library media specialist know that his/her time is valuable and should be focused on activities that contribute to student achievement.

➢ Avoid assigning tasks and duties (such as computer troubleshooting and bus duty) that prevent the library media specialist from collaborating, teaching, and keeping the library media center open to students. Also, avoid "pulling" library support personnel for other duties, as this also prevents the library media specialist from focusing on activities that impact student achievement.

➢ Make sure that the library media center operates on a flexible schedule and ensure that the library media specialist has an opportunity to collaborate with teachers.

➢ Try to make sure that the library media center facility is "open for business" every school day. Make an effort to find other places for testing, voting, picture day, and other activities that limit students' access to the facility and reduce the library media specialist's opportunity to provide instruction.

Some of the most important types of support for library media programs do have significant costs, but have the potential to multiply the impact on student achievement. (Because of the costs associated, schools should appeal to district leaders and elected officials for financial support in these areas.):

➢ Maximize library media staffing. Begin with a full-time, certified library media specialist and add as many more library media specialist and support staff hours as possible (by adding additional staff or paying existing staff to work extended hours).

➢ Maximize funding for library media information resources. (Remember that library media resources benefit *all* students and teachers, so they are an excellent investment.)

➢ Look for ways to maximize the accessibility of the library media center and the library media specialist to students and teachers.

➢ Ensure that the library media center has the computers, network connectivity, and other equipment needed to maximize access to information and provide instruction.

Conclusion

Library media programs have the potential to substantially impact the level of achievement of the students they serve, and at many schools, they already do. However, the student achievement impact of almost any library media program can be heightened by focusing on the practices that research has shown to be effective. Library media specialists, principals, and other educational leaders should consider the research findings summarized here (and additional research as it emerges) in their management of these programs.

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