Chapter 2. Pennsylvania School Library Staffing & PSSA Scores

The relationship between available data on school library staffing and Pennsylvania System of School Assessment (PSSA) Reading and Writing scores is examined in this chapter. Data from the Pennsylvania School Library Study regarding certified school librarians, library support staff, and hours of library access were analyzed with PSSA Reading and Writing scores for each responding school. These scores were chosen for analysis because of their strong relevance to 21st Century Learner and Pennsylvania (PA)/Common Core standards.

To avoid repetition in this and succeeding chapters, see Chapter 1 for detailed methodological information, including details about the variety of PSSA score data employed in this phase of the study, its source, and an explanation of associated terminology as well as a description of comparison-of-means analysis (t test) and its statistical significance.

At the end of the chapter, its findings are discussed in relation to the Guidelines for Pennsylvania School Library Programs, a 2011 document of the Office of Commonwealth Libraries in the Pennsylvania Department of Education.

Throughout the chapter, the findings are illustrated by quotes offered by respondents to the project’s surveys.

Library Staffing Components

Two staffing analyses were conducted, using different benchmarks.

First, mean PSSA Reading and Writing scores were compared for students with and without a full-time certified librarian. Full-time status is defined as at least 35 hours per week (a minimal indicator of full-time status).

Second, for students with a full-time certified librarian only, mean scores were compared for those with and without library support staff at least 20 hours per week (the approximate median among responding libraries for such staffing). The hours per week figures used in these analyses were based on prevailing realities in Pennsylvania. Thirty-five hours per week is a minimal indicator of full-time status, and 20 hours per week is the approximate median for library support staff.

For each of these analyses, findings are reported for:

- All students
- Students who are economically disadvantaged (i.e., poor), Black, Hispanic, and have Individualized Education Programs (IEPs—i.e., special education students)
- Students at elementary, middle, and high school levels.

PSSA Reading Scores by Student Cohort by Librarian Staffing

Librarian staffing levels are associated with better PSSA Reading scores for all students as well as major cohorts of students at both ends of the achievement spectrum (i.e., Advanced and Below Basic scores).

- Consistently, Reading scores are better for students who have a full-time certified librarian than those who do not. With a full-time librarian, students are more likely to score Advanced and less likely to score Below Basic.
- This is true of all students, regardless of their socio-economic, racial/ethnic, and disability status.
Indeed, students who are Economically Disadvantaged (i.e., Poor), Black, Hispanic, and have IEPs (i.e., students with disabilities) benefit proportionally more than students generally.

Note: Charts in this chapter compare the PSSA scores of students with and without key indicators of school library staffing—here, schools with and without a certified librarian for at least 35 hours per week (i.e., full-time) and later, for schools with a full-time certified librarian, those with and without at least 20 hours per week of library support staff. Example: schools with a full-time certified librarian average 39.8% of all students scoring Advanced in Reading, while schools without such a librarian average only 31.9% of students scoring Advanced.

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Our librarians have transformed our library to make it an inviting and exciting place for students to learn using all available media resources. They go above and beyond each day to support curriculum and student learning as well as develop a love for reading.
- Elementary School administrator

I know that I can always count on our librarian to help me with finding up to date resources for use with my students. She has also been instrumental in securing texts not offered in our library. She aids special needs students when they are doing classwork or homework in the library. She is an essential member of the teaching staff here
- High School teacher

Our librarian is a key resource to help students find appropriate, high-interest reading that will engage them. We could not experience the success we have without her.
- High School administrator
Librarian staffing levels are also associated with better PSSA Reading scores, regardless of grade level, and at both ends of the achievement spectrum (i.e., Advanced and Below Basic scores).

- Consistently, Reading scores at all three grade levels are better for students who have full-time certified librarians.
- The proportional difference in Advanced Reading scores associated with a full-time librarian grows from elementary to middle to high school level.
- For schools with full-time librarians, below basic scores not only improve, but improve more from elementary to middle to high school level.

**READING: Percent of Advanced & Below Basic PSSA Scores by Level of Librarian Staffing (35+ Hours Per Week) by Grade Level**

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Advanced</th>
<th>Below Basic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>32.9%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Middle</td>
<td>42.4%</td>
<td>8.3%</td>
</tr>
<tr>
<td>High</td>
<td>37.3%</td>
<td>13.0%</td>
</tr>
</tbody>
</table>

I believe having a knowledgeable and qualified librarian in our school has contributed greatly to success of our students in all grade levels. Our librarian is the ultimate professional. She is a great resource for the teacher and the students. Our building would not be the same without her and her expertise.
- Elementary School teacher

Our librarian knows the curriculum for each of the subjects within each grade level, which is no easy task. She is familiar with the state standards and eligible content for the PSSA. She is also a Certified Reading Specialist; therefore she often works with students identified as struggling readers.
- Elementary School teacher
PSSA Writing Scores by Student Cohort by Librarian Staffing

As for Reading, the presence of a full-time certified librarian is associated with more Advanced PSSA Writing scores for all students as well as major cohorts of students.

- The impact of librarians on Writing scores is stronger than on Reading scores. The differential impact of librarians on PSSA Writing relative to Reading suggests that Writing rather than Reading scores may be a better indicator of a student’s mastery of 21st Century Learner and PA/Common Core standards.

- For all students, those with full-time librarians are almost three times as likely to have Advanced scores as students without full-time librarians.

- Consistently, students who are poor and minority, and have IEPs, but who have full-time librarians, are at least twice as likely to have Advanced Writing scores as their counterparts without full-time librarians. These findings suggest that staffing libraries with certified librarians could contribute to closing achievement gaps.

I believe that having a school librarian is essential to the overall success of all students. In my past eleven years of teaching, I have collaborated with many librarians. … Without the help of the librarian, I would not be able to provide the resources that my students need to write an acceptable paper. … Having a school library, with a full-time certified librarian, is imperative to the overall education of our students.

- Middle School teacher

I teach emotional support/learning support. During Read Across America Week, our librarian had a contest that encouraged students to write. Based on Dr. Seuss books, she provided two writing prompts and gave all students the opportunity to submit a writing sample … I required all of my students to pick one of the prompts to write about and then took them to [the librarian]. This got them writing and a few were proud that their work was [put] on display. [Our librarian] is very encouraging to students.

- Middle school teacher
The presence of a full-time certified librarian is also associated with more Advanced PSSA Writing scores, regardless of grade level.

- Consistently, Writing scores at all three grade levels are better for students who have full-time certified librarians.
- As percentages of Advanced Writing scores grow from elementary to middle to high school level, the difference in Advanced scores associated with full-time certified librarians grows from 2% to 4% to 8%.

One of the most recent successes I had in one of my small reading groups is a direct result from the help of our school librarian. She frequently used technology to enhance her instruction. The school librarian showed me how to implement blogging in my classroom. Students were more engaged and were not as reluctant to write in response to their reading. Blogging especially motivated one of my students who rarely wanted to share his responses with others. Students could easily respond to others without the fear of "speaking in front of the class." The students loved the activity. She has been an invaluable resource to our school.

- Middle School teacher

Our library is one of the reasons I enjoy teaching as much as I do. [Our librarian] is really something special. We collaborate on a daily basis and I feel we compliment each other quite well. Whether she is helping with research or creative writing, she works magic. She motivates the students and her non-threatening, comforting style makes her so accessible. She has certainly taken the work I do in my classroom and elevated it to a new level, teaching my students to publish and share their talents. Work that used to be just "turned in" is now a celebration of sharing. Our library is a joyous place to be.

- High School teacher
PSSA Reading Scores by Student Cohort by Library Staffing Level

The presence of at least half-time library support staff in addition to a full-time certified librarian is associated with better PSSA Reading scores for all students as well as major cohorts of students at both ends of the achievement spectrum (i.e., Advanced and Below Basic scores).

- Consistently, across all student cohorts, those with libraries staffed by a full-time certified librarian with at least half-time support staff are more likely to have Advanced Reading scores and less likely to have Below Basic ones than those with a librarian without support staff.

- A student’s socio-economic status does not explain away this difference.

- Generally, these differences in Reading scores are greater for students who are minority and have IEPs than for all students. This finding underscores the potential impact of a fully-staffed school library (i.e., a full-time certified librarian with support staff) in addressing achievement gaps for some groups of students.

**READING: Percent of Students with Advanced & Below Basic PSSA Scores by Level of School Library Staffing (35+ HPW Librarian With/Without 20+ HPW Support Staff) by Student Cohort**

The library and our trained library staff is an essential tool in delivering the curriculum. It is essentially a laboratory where students can “test out” their reading, writing and research skills. Most importantly, our library staff provides a supportive environment where students are developing lifelong learning skills and a love for reading.

- Middle School teacher

I do not know where to begin in trying to explain how valuable our school librarian … has been to my students and me. [She] has helped me every year teach the Freshman Research Project. She spends two days in my classroom teaching bibliography, and the research process. Then the class spends a day or two in the library gathering information. She and her aides help the students narrow their search criteria, and locate resources. Frequently throughout the project students will go to the library for assistance. … In the age of the Internet, people have forgotten how important libraries and librarians are.

- High School teacher
PSSA Reading Scores by Grade Level by School Library Staffing

The presence of at least half-time library support staff in addition to a full-time certified librarian is also associated with better PSSA Reading scores, regardless of grade level, and at both ends of the achievement spectrum (i.e., Advanced and Below Basic scores).

- Consistently, across grade levels, students whose librarians have at least half-time support staff are more likely to have Advanced Reading scores and less likely to have Below Basic ones than students whose librarians lack such support.

- For Advanced scores, the differences between grade levels associated with librarians having at least half-time support staff are 8% to 9%.

- For Below Basic scores, the differences are 3% to 5%.

The library staff coordinates school wide activities throughout the year to motivate children to read and to integrate reading into their daily routine. Three of the many school wide events include Read Across America Week, Pennsylvania Readers Choice Nominations and Voting, and the Summer Reading Program Certificates and Awards.

- Elementary School teacher

There should never, in my opinion, be just a library aide as the librarian. We need these highly trained experts to help students read. They are essential!

- Elementary School teacher
The presence of library support staff in addition to a full-time certified librarian is also associated with better PSSA Writing scores for all students as well as major cohorts of students at both ends of the achievement spectrum (i.e., Advanced and Below Basic scores).

- Generally and across student cohorts, students whose librarians have at least 20 hours per week of support staff are twice as likely to have Advanced Writing scores and half as likely to have Below Basic scores as students whose librarians lack such support staff.

- Students who are Hispanic and whose full-time librarians have support staff are three times as likely to earn Advanced Writing scores as their counterparts whose full-time librarians lack such support staff.

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At [this] High School, our library staff is one of our greatest resources. The librarian is extremely knowledgeable and helpful when students are conducting research. He knows what databases students could and should use and usually has knowledge of topics they are interested in. .... The library paraprofessional is also extremely knowledgeable and helpful when locating sources, materials, and other information in general. Our school would be at a great loss without them!
- High School teacher

At my school the full time librarian has taken on the role of facilitator of the ninth grade history term paper and has coordinated the creation of an instructional packet for the term paper for the ninth grade history teachers and students. She also provides help with the topic selection, thesis statement creation, and gathering of resources for the term paper. She has helped ease the ninth grade history teachers into the process of creating and grading a term paper at the honors and gifted/high potential levels.
- High School teacher
The presence of at least half-time library support staff in addition to a full-time certified librarian is also associated with better PSSA Writing scores, regardless of grade level, and at both ends of the achievement spectrum (i.e., Advanced and Below Basic scores).

- Consistently, across grade levels, students whose libraries have a full-time librarian with at least 20 hours per week of support staff are more likely to have Advanced Writing scores than those with a librarian without such support.

- At elementary and high school levels, students whose librarians have support staff are almost twice as likely to have Advanced Writing scores as those who librarians lack support staff.

- At elementary level, library support staff “haves” are half as likely as “have-nots” to score Below Basic in Writing.

- At high school level, the percentage of Below Basic Writing scores approaches zero for support staff “haves.”

I work with our school’s librarians on a regular basis. … They sit down with me to plan out the [research] process so that the essential questions are addressed, big ideas are a focus, and student learning takes place. I would not be able to complete a detailed research paper with the students without the assistance from the library. The students write detailed papers that are full of research because of the lessons provided by the library. The librarians show them how to use databases and books to find what they need to support their thesis statements. I know students at the college level who are still not able to do this. The library teaches them skills that they will need in college and beyond. Researching in a library is essential in college, but there is no instruction provided at that level. In order to prepare them for higher education, lessons in the library are crucial for their success.

- High School teacher
Summary

Whether or not students have a full-time certified librarian or whether or not their librarian has at least half-time support staff, there is consistent evidence that library staffing is associated with better PSSA Reading and Writing results. Notably, the proportional differences in Writing scores between students with better and more poorly staffed libraries are substantially greater than the proportional differences in Reading scores.

- Library staff are an investment that benefits all students, both high- and low-achievers. Full-time librarians with support staff are associated with better Reading and Writing scores—more students scoring Advanced and fewer scoring Below Basic.

- Students perform better when their schools have full-time librarians, and when those librarians have support staff.

- For several student groups that tend to experience achievement gaps, Reading and Writing results are markedly better when those students have the benefit of a librarian with support staff. These differences are not explained away by socio-economic, racial/ethnic, or disability status.

In Guidelines for Pennsylvania School Library Programs, minimum and exemplary staffing levels are specified for different levels of building enrollment.

For certified librarians, these guidelines call for a minimum of 1.0 full-time equivalent (FTE) librarian for all schools with enrollments up to 1,000, and 1.5 for larger schools. The exemplary level for FTE librarian staffing is 1.0 for schools with enrollments fewer than 500, 1.5 for schools with enrollments of 500 to 1,000, and 2.0 (plus another 0.5 librarian for each additional 500 students) for larger schools.

For library support staff, the guidelines call for 1.0 FTE of support staff for schools with enrollments under 500, 1.5 for schools with enrollments between 500 and 1,000, and 2.0 for larger schools. The exemplary level for FTE library support staffing is 1.5 for schools with enrollments fewer than 500, 2.0 for schools with enrollments between 500 and 1000, and 2.5 (with another 0.5 for each additional 500 students) for larger schools.

The findings of this analysis strongly support all school libraries having at least 1.0 FTE certified librarian. These findings also support the idea that library support staff—in addition to certified librarians—contribute further still to student learning and academic achievement.

When students have access to well-staffed school libraries—ones with full-time certified librarians with support staff—they are more likely to succeed in school than their counterparts who lack such libraries.