Consistently, PSSA student test scores in both reading and writing are higher where the school library program includes:

- a full-time certified librarian
- library support staff
- flexibly-scheduled access and more frequent opportunities for students to visit the library in groups
- library access beyond the school day
- more and newer computers
- more digital resources, i.e., electronic databases and ebooks
- better library resources funding (over $11 per student)

This is true of all students, regardless of their socio-economic, racial/ethnic, and disability status. Indeed, generally, students who are economically disadvantaged, Black, Hispanic, and have IEPs benefit proportionally more than students generally.

STAFFING
- Consistently, reading scores are higher at all three grade levels for students who have a full-time certified librarian than those who do not.
- For schools with full-time librarians, below basic reading scores not only improve, but improve more from elementary to middle to high school level.
- The impact of librarians on writing scores is stronger than on reading scores. For all students, those with full-time librarians are almost three times as likely to have advanced writing scores as students without full-time librarians.
- Consistently, across all grade levels, students whose libraries have a full-time librarian with support staff are more likely to have advanced writing scores.
- At elementary and high school levels, students whose librarians have support staff are almost twice as likely to have advanced writing scores.
- Students who are Hispanic and whose librarians have support staff are three times as likely to earn advanced writing scores.

LIBRARY ACCESS
- Consistently, students with flexibly-scheduled access to their school libraries are more likely to earn advanced and less likely to earn below basic scores in reading and writing.
- For all students as well as students who are economically disadvantaged, Black, or Hispanic, the advanced reading score difference is around 10%.
- With flexibly scheduled library access, students at all grade levels are more likely to earn advanced and less likely to earn below basic reading scores.
• The association between flexible scheduling and writing is more pronounced. All students and those who are Black and have IEPs are four times more likely to earn advanced writing scores with flexible scheduling. Students who are Hispanic are seven times more likely to earn advanced scores with flexible scheduling.
• All students and subgroups are at least twice as likely to earn advanced writing scores if their libraries are open beyond the school day. Students who are Hispanic are three times as likely to have advanced writing scores under such conditions.

COLLECTIONS
• Students tend to perform better on reading and writing where school libraries provide more access to book, video, and audio collections.
• Larger book collections (over 12,000 titles) improve the odds of advanced reading and writing scores and reduce those of below basic scores of all students, including students who are economically disadvantaged, Black, Hispanic, and have IEPs.
• The positive impact of larger book collections grows with grade level.
• For writing scores, the positive impact of book collection size is stronger than for reading scores.
• High school students whose libraries have smaller book collections are almost four times more likely to earn below basic scores.
• Consistently, at all grade levels, students at schools with larger video collections (over 150 titles) are more likely to earn advanced and less likely to earn below basic scores in reading.
• All students are more likely to earn advanced scores in reading, if they have access to audio collections. Such access is only associated with more advanced writing scores for students who are economically disadvantaged, Black, Hispanic, and have IEPs.

TECHNOLOGY & DIGITAL RESOURCES
• Consistently, all students averaged higher advanced and lower below basic reading and writing scores if their school libraries had at least 10 newer (less than 5 years old) computers.
• Students who are economically disadvantaged, Black, or Hispanic and have access to more newer computers were twice as likely to have advanced writing scores.
• Digital resources—databases and eBooks—are associated with higher advanced reading and writing scores for all students. At schools with database access, the incidence of advanced writing scores is twice as high or more.
• From elementary to secondary level, differences associated with database access indicate that its positive impact is cumulative.

BUDGETS
• Investments in instructional library resources benefit all students, both high- and low-achievers. It is associated with better reading and writing scores—more advanced and less below basic scores.

CLOSING THE ACHIEVEMENT GAP
• Library staff is an investment that benefits all students, both high- and low-achievers and helps to close achievement gaps. Both full-time librarians and support staff are associated with better reading and writing scores—more advanced and less below basic scores.
• Consistently, students who are economically disadvantaged, Black, Hispanic, or have IEPs and who have full-time librarians are at least twice as likely to have advanced writing scores as their counterparts without full-time librarians.
• For students who are Black or Hispanic, access to more books more than doubles their odds of advanced writing scores and cuts their likelihood of below basic writing scores in half.
• Generally, the benefits associated with database access are proportionally greater for students who are economically disadvantaged, Black, Hispanic, or have IEPs.
• Investments in school library resources--books, video, audio, databases, ebooks, and technology--help to close achievement gaps.
• None of the above findings can be explained away by socio-economic, racial/ethnic, and disability factors.

ABOUT THE PROJECT
“Supporting the Infrastructure Needs of 21st Century School Library Programs” is an Institute of Museum and Library Services (IMLS) grant-funded research project designed to provide new research on the impact of Pennsylvania school library programs on student learning—specifically,

1. what infrastructure, defined as staffing, budgets, collections, technology, access hours, and professional development for librarians, contributes most to student achievement
2. the costs and benefits associated with them, and
3. the gap between current Pennsylvania school library programs and what is needed to develop students with 21st century skills.

Additionally, the project will create communication tools, such as sample press releases, letters and editorials, and short podcasts and webinars that are easily understood by laypersons, that can be shared and used to develop partnerships among stakeholder groups beyond the traditional library community.

Project partners: Pennsylvania School Librarians Association (PSLA) represented by Debra Kachel; HSLC, represented by Joseph Scorza; the Education Law Center (ELC) of Pennsylvania, represented by Sandra Zelno. The RSL Research Group, Louisville, CO, conducted the study for this project; principal investigator, Dr. Keith Curry Lance.

Other participating organizations: School of Information Sciences, University of Pittsburgh, represented by Dr. Mary Kay Biagini, and the PALM (Partnerships Advancing Library Media) Center, Florida State University, represented by Drs. Nancy Everhart and Marcia Mardis, who will conduct an external evaluation of the project.

For more information: PA School Library Project Website  http://paschoollibraryproject.org

Although this project is being funded by the U.S. Institute of Museum and Library Services (IMLS), any views, findings, conclusions or recommendations expressed in this website do not necessarily represent those of the Institute of Museum and Library Services.