



“Having this new evidence and learning what administrators value will help the profession strengthen advocacy efforts with school decision makers.”

# Achieving Academic Standards through the School Library Program

## Administrator Perceptions and Student Test Scores

KEITH CURRY LANCE, RSL RESEARCH GROUP AND DEBRA KACHEL, MANSFIELD

As part of a larger school library impact study recently conducted in Pennsylvania, survey responses of almost three hundred school administrators were examined regarding key library practices and how well school library programs help students master academic standards.

The instructional role of the school library program proved to be essential in teaching both the American Association of School Librarian’s (AASL’s) *Standards for the 21st Century Learner* and the Common Core (CC) state standards. This article explores the perspectives shared by administrators—principals, superintendents, and others—about library practices and student achievement. Having this new evidence and learning what administrators value will help the profession strengthen advocacy efforts with school decision makers.

In 2011–2012, a group of Pennsylvania organizations—HSLC (a statewide library cooperative), the Pennsylvania School Librarians Association (PSLA), and the Education Law Center of Pennsylvania—received a National Leadership Grant from the Institute of Museum and Library Services (IMLS) to conduct a statewide study of the impact of school libraries and librarians on student achievement. In Phase 1 of the study, the 2011 Pennsylvania System of School Assessment (PSSA) reading and writing scores were correlated with existing library infrastructure—staffing, budget, collections, digital resources, and library access. In Phase 2, some of which is presented in this article, surveys of school administrators, teachers, and school librarians were examined relating to the achievement of academic standards and what administrators valued or what library-related activities they engaged in (librarians and teachers). In the absence of test data specifically assess-

ing student attainment of the AASL and CC standards as adopted in Pennsylvania (hereafter referred to as PA/CC standards), the survey responses were compared to the schools’ PSSA reading and writing test scores to verify the survey data.

### LIBRARY PRACTICES AND ACHIEVEMENT OF 21ST CENTURY LEARNER STANDARDS

Administrators were asked how much they value the following key library practices. Their response options were “Essential,” “Highly desirable,” “Desirable,” “Not desirable,” or “Don’t know.” They were also asked to rank the instructional impact of the school library in teaching academic standards with response options of “Excellent,” “Good,” “Fair,” “Poor,” or “Don’t know/not applicable.”

### KEY LIBRARY PRACTICES

- Flexibly scheduled library access
- Librarians and teachers coteaching units of instruction
- Librarians providing in-service professional development opportunities



## AASL'S 21ST CENTURY LEARNER STANDARDS

**Inquiry-Based Learning** refers to Standard 1: "Inquire, think critically, and gain knowledge."

**Informed Decision-Making** refers to Standard 2: "Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge."

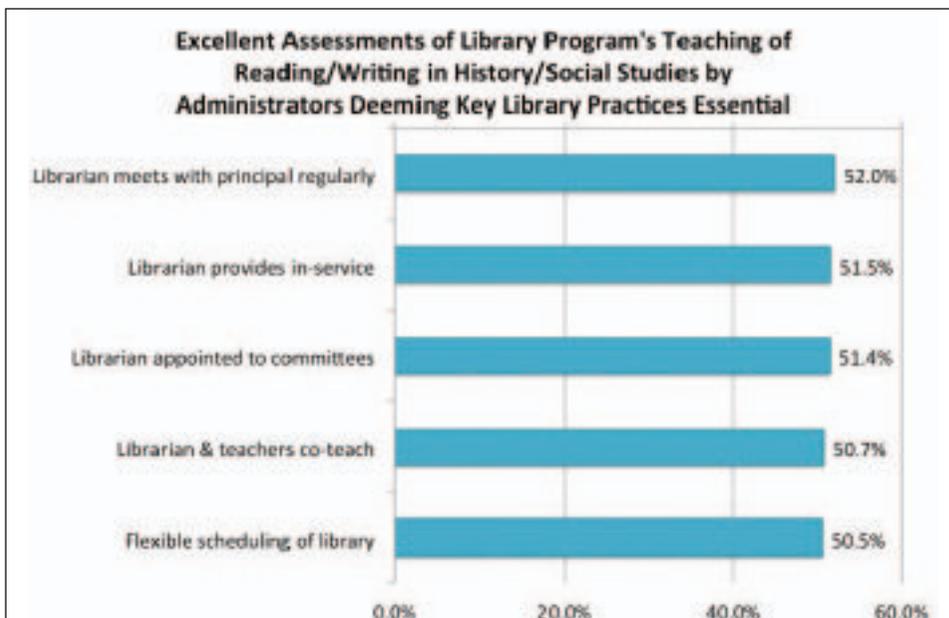
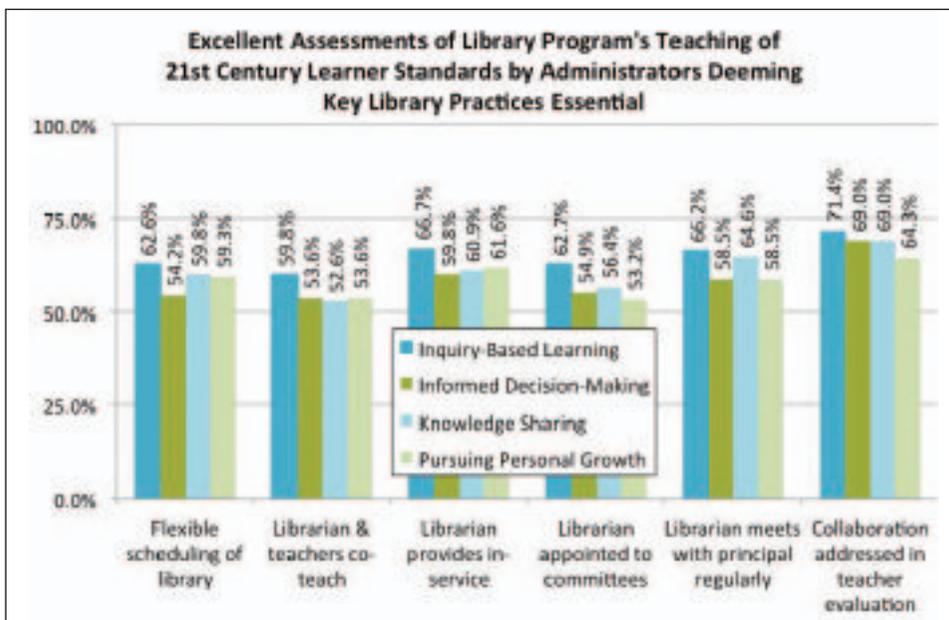
**Knowledge Sharing** refers to Standard 3: "Share knowledge and participate ethically and productively as members of our democratic society."

**Pursuing Personal Growth** refers to Standard 4: "Pursue personal and aesthetic growth."

- Librarians being appointed to school committees
- Librarians meeting regularly with their principals
- Librarian-teacher collaboration being addressed in teacher evaluations

Three trends emerged in school administrator responses:

- Majorities of administrators who consider key library practices as "Essential" also gave "Excellent" ratings to the library program's instructional role in teaching AASL standards. This trend is consistent



## JUNIOR NONFICTION

Borgert-Spaniol, Megan. **Healthy Eating.** (Blastoff! Readers: Eating Right with MyPlate. Level 2). Bellwether Media, 2012. 24p. LB \$15.95. 978-1-60014-757-9. Grades K-2. The five food groups are described to young readers in simple text and vibrant pictures. Other titles in the series focus on dairy, fruit, grains, vegetables, proteins, and fitness. A glossary, a learn more section, and an index conclude the title.

Larson, Jennifer S. **Perfect Pizza Recipes.** (You're the Chef). Lerner, 2013. 32p. LB \$26.60. 978-0-7613-6637-9. Grades 3-5. Opening with a list of items needed for pizza making and specific safety tips, step-by-step directions and pictures start the recipes which include Breakfast Pizza, Mashed Potato Pizza, and dessert pizzas. Back matter has definitions of special ingredients, websites, and an index.

Sullivan, Jaclyn. **What's in Your Hamburger?** (What's in Your Fast Food?) PowerKids Press, 2012. 24p. LB \$16.95. 978-1-4488-6209-2. Grades 2-5. Not just about the contents of hamburgers, the readers will learn about other ingredients in the meat, such as preservatives and spices. Also included in this brief book is information about reading labels and preparing healthier burgers. A glossary, an index, and websites round out the book.

Tuminelly, Nancy. **Cool Sugar-free Recipes: Delicious & Fun Foods without Refined Sugar.** (Cool Recipes for Your Health). ABDO, 2013. 32p. LB \$21.66. 978-1-61783-585-8. Chocolate fudge with no refined sugar! Cake made with applesauce rather than sugar. Yummy. These easy to follow recipes make cooking with an eye toward low sugar much more fun and healthy.



## YA NONFICTION

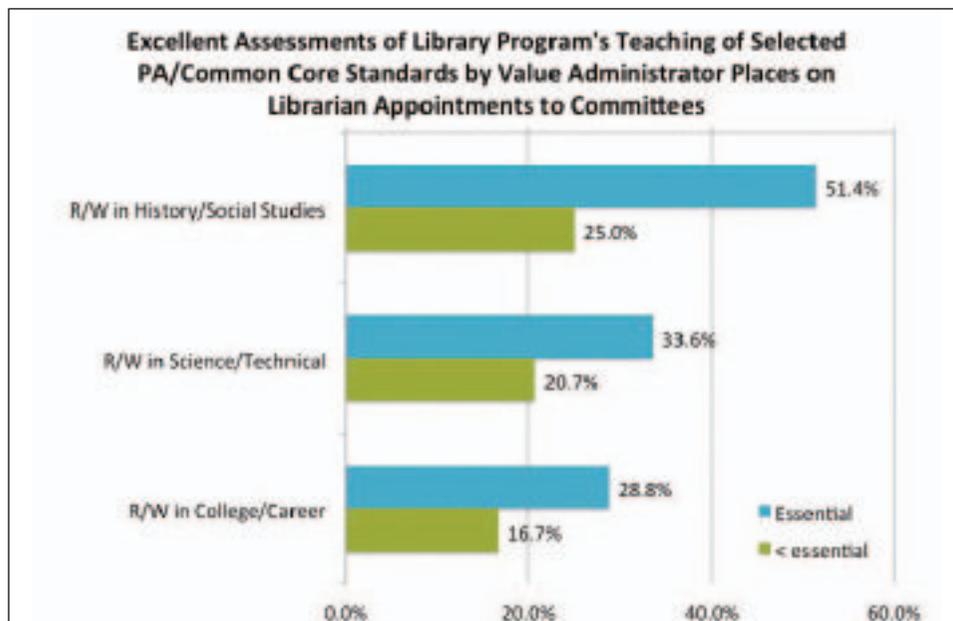
### MORE GOOD READS AND RESEARCH, TOO!

Aronson, Marc, and Lee R. Berger. **Skull in the Rock: How a Scientist, a Boy, and Google Earth Opened a New Window on Human Origins.** National Geographic, 2012. 64p. LB \$18.95. 978-1-4263-1010-2. Grades 6-10. Here is a fascinating read about the discovery of two ancient fossils by the son of Professor Berger while fossil hunting. Matthew, then nine-years-old, stumbled on a rock which led to this find. Back matter includes a combined glossary and index, time line, suggested reading and a personal note from co-author Marc Aronson.

Dittmer, Lori. **Future of Transportation.** (What's Next?) Creative Education, 2012. 48p. LB \$35.65. 978-1-60818-224-4. Grades 6-10. The introduction gives a brief overview of transportation and poses the possibility of the reader going to school on their own flying transporter. The chapters include fuels, safety, and a peek into the future. A glossary, an index, source notes, and a selected bibliography make this a welcomed resource.

Hollar, Sherman, ed. **Pioneers in Medicine: From the Classical World to Today.** (Inventors and Innovators). Britannica Educational, 2013. 156p. LB \$32.90. 978-1-61530-669-5. Grades 7-10. This series includes concise biographical information about prominent people in the fields of astronomy, climatology, technology, and the green movement. A detailed glossary, further reading, and an index conclude the title.

Walker, Richard. **Who Am I?: The Amazing Science of Existence.** Kingfisher, 2012. 96p. LB \$16.99. 978-0-7534-6711-4. Grades 5-10. This ambitious one-volume look at the meaning of being human is successful thanks to clever text, bright colors, photographs, sidebars, and Q&A.



with at least the past two decades of research about the impact of school libraries and librarians.

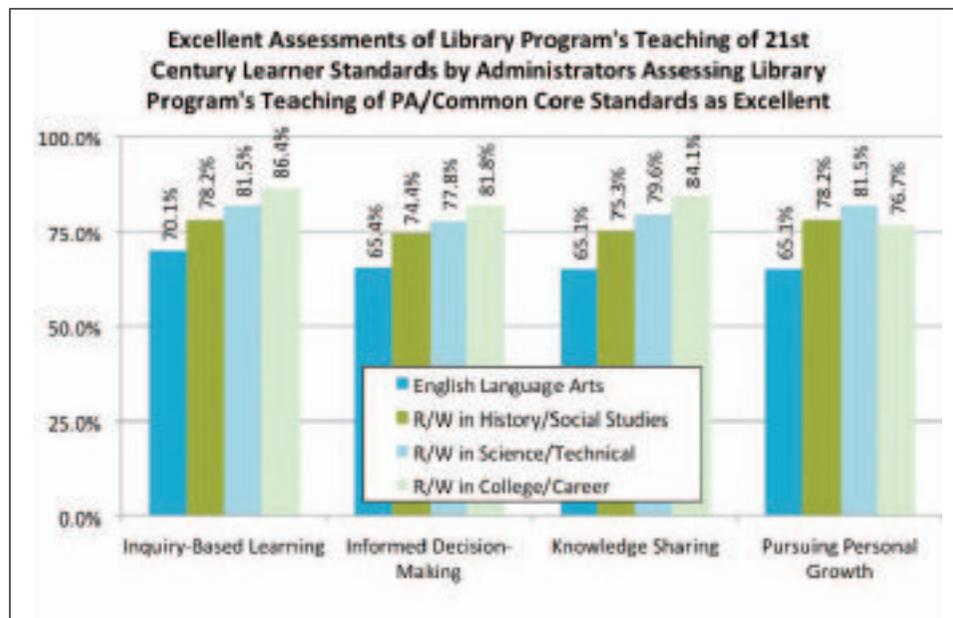
- For all four AASL standards, librarians were most likely to get "Excellent" ratings from administrators who consider it essential to address librarian-teacher collaboration in teacher evaluation. This finding suggests that when collaboration with the librarian is something on which teachers are evaluated individually, it is more likely to happen and produce positive results.

- Consistently, administrators who rated each of the key library practices as "Essential" are more likely to give "Excellent" teaching ratings for Standard 1: Inquiry-Based Learning than any other AASL

standard. This trend is consistent with the growing body of research about the role of inquiry in learning, especially via library programs.

### LIBRARY PRACTICES AND ACHIEVEMENT OF PA/CC STANDARDS

The survey data collected also suggests a relationship between what school administrators value about libraries and how well they believe librarians teach the PA/CC standards. Obviously, the English Language arts (ELA) standards of the CC align most closely with what librarians teach. However, other CC standards, including literacies in history/social studies, science



and technical subjects, and college and career readiness, are particular contexts for secondary students.

Administrators who rated their librarian's teaching of ELA standards as "Excellent" also rated all six of the key library practices as "Essential" as follows:

- Librarian provides in-service to teachers (72.3%)
- Librarian and teacher coteach (68.5%)
- Librarian meets with principal regularly (67.7%)
- Librarian appointed to committees (66.7%)
- Librarian-teacher collaboration addressed in teacher evaluation (63.4%)
- Flexible scheduling (58.8%)

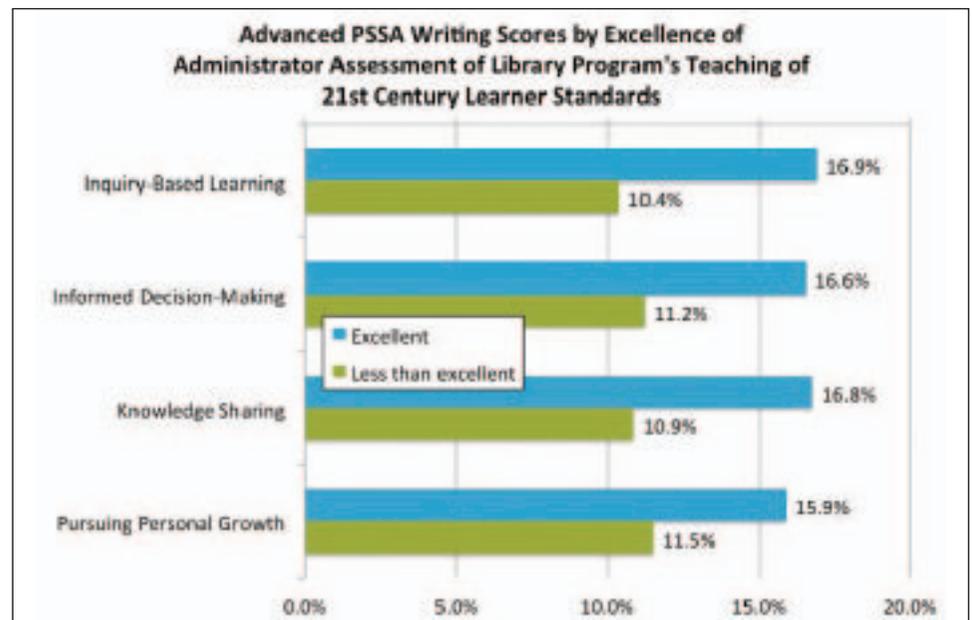
The majority of these administrators also identifies the first five of those practices as "Essential" for achieving reading and writing in history/social studies CC standards.

In addition, administrators who consider it "Essential" to appoint librarians to school committees are also far more likely to assess as "Excellent" the library program teaching of reading and writing in relationship to science and technical subjects, and, overall, in terms of college and career readiness.

### LINKS BETWEEN THE TWO SETS OF STANDARDS AS PERCEIVED BY ADMINISTRATORS

School librarians believe there are very strong connections between *Standards for the 21st Century Learner* and the Common Core standards. AASL developed *Crosswalk of the Common Core Standards and the Standards for the 21st Century Learner* (<http://www.ala.org/aasl/guidelinesand-standards/commoncorecrosswalk/>). Since this study was completed, the Pennsylvania Department of Education and PSLA have drafted *Model Curriculum for PA School Library Programs* that outlines forty-four standards in the PA Common Core standards that librarians teach (<http://www.pamcslp.org/>).

Because the IMLS research grant project took place early in Pennsylvania's adop-



tion of the Common Core state standards and because AASL's *Standards for the 21st Century Learner* are less familiar to administrators, their assessments of the library program's teaching of these standards are necessarily impressionistic, though still quite valuable as indicators of the extent to which administrators share a consensus about the connections between the two sets of standards.

According to administrator assessments of how well their library programs teach, both sets of standards are highly correlated with each other. If administrators believe library programs excel at teaching PA/CC standards, they tend also to believe that library programs excel at teaching each

of the four AASL standards. For example, 70.1% of surveyed administrators who rated their library's teaching of PA/CC English language arts standards as "Excellent" also rated its teaching of AASL's Standard 1: Inquiry-Based Learning as "Excellent."

So far, the findings from administrators are clear and very largely consistent. When administrators believe in the value of key library practices, they are likely to assess as "Excellent" the instructional program of the school library in teaching both AASL and PA/CC standards.

As these assessment data are impressionistic and self-reported, how seriously should they be taken? One could be for-



## YA FICTION

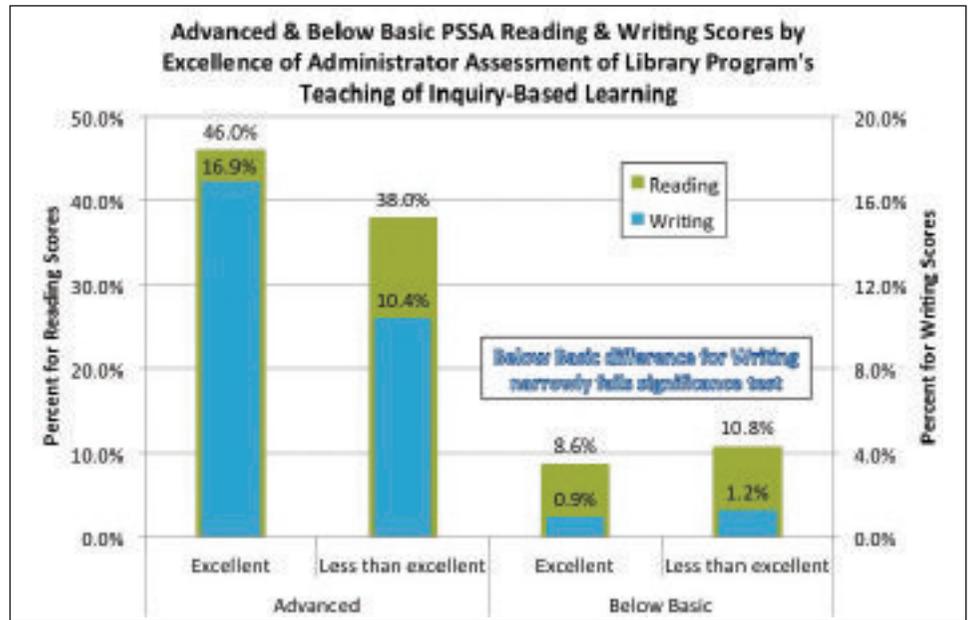
### FINDING THE COURAGE

Hughes, Shirley. **Hero on a Bicycle**. Candlewick, 2013. 244p. \$15.99. 978-0-7636-6037-6. Grades 5-8. Living near Florence in Nazi-occupied Italy, Paolo Crivelli, thirteen, sneaks out at night, hoping to join the resistance movement, but has no success. His opportunity to defy the Germans comes instead in an unexpected way that involves his mother and older sister, and risks everything they have. A gripping novel from a renowned picture-book creator.

Larson, Kirby. **Hattie Ever After**. Delacorte, 2013. 240p. \$16.99. 978-0-385-73746-3. Grades 6-10. Hattie Brooks, who homesteaded in Montana in **Hattie Big Sky** (Delacorte, 2006), has always wanted to be a writer. She seizes her chance when she lands in San Francisco in 1919. She succeeds in getting a job at a newspaper, but only as a cleaning woman. Can she catch a break in such a male world and prove herself? And what about the boy from back home? Readers will be rooting all the way for Hattie and her dreams.

Sepetys, Ruta. **Out of the Easy**. Philomel, 2013. 352p. \$17.99. 978-0-399-25692-9. Grades 9 up. In this richly detailed, absorbing novel set in 1950, Josie, seventeen, is determined to make a new life for herself. The daughter of a narcissistic prostitute who consorts with gangsters, Josie has always had to rely on herself. Her goal is to go to college in New England but that takes money—and the courage to untangle herself from her life in New Orleans.

Timberlake, Amy. **One Came Home**. Knopf, 2012. 272p. \$16.99. 978-0-375-86925-9. Grades 5-8. In Placid, Wisconsin, in 1871, the largest passenger pigeon nesting ever in the U.S. took place, a financial windfall for the small town. But for thirteen-year-old Georgie Burkhardt, something more important happens. Her older sister flees town—maybe because of something Georgie said—and word comes that she has died. Georgie sets out to learn the truth, a dangerous journey that makes for an excellent read.



given for wondering if administrators told the researchers what they wanted to hear. That is unlikely, though, or all survey respondents would have responded that all of the key library practices are “Essential,” and that is not what happened.

Ultimately, then, how can one know how seriously to take these qualitative data about the library’s—and the librarian’s—contribution to teaching these two important sets of standards? This question is answered by analyzing the relationships between the school administrators’ assessments and the only more objective data available to validate them: the PSSA reading and writing test results.

### 21ST CENTURY LEARNER STANDARDS AND PSSA READING AND WRITING SCORES

One of the ultimate questions addressed in this study is: When administrators rate librarians’ teaching of *21st Century Learner* standards as “Excellent,” are students more likely to score advanced and less likely to score below basic on PSSA reading and writing tests?

To the extent that the answer to this question is positive, the validity of administrator ratings of how well librarians teach these standards is confirmed.

Indeed, administrator ratings of the librarian’s role in teaching AASL standards

are associated with PSSA reading and writing scores in three noteworthy ways.

- More students score advanced on reading and writing when administrators rate as “Excellent” (versus less than excellent) the library program’s teaching of all four AASL *21st Century Learner* standards.
- The positive impact of the library program’s teaching of *21st Century Learner* standards on PSSA scores is more dramatic on writing than reading.
- When administrators believe students receive excellent library instruction in inquiry-based learning, students are consistently more likely to score advanced and less likely to score below basic on both reading and writing tests.

Note: This chart and the following one compare the PSSA scores of schools whose administrators assess as “Excellent” and less than excellent (“Good,” “Fair,” “Poor,” or “Don’t know/need more information”) the teaching of *21st Century Learner* standards by their library programs. The first chart addresses reading scores, and the second, writing scores. Example: Where administrators indicate their libraries do an “Excellent” job of teaching inquiry-based learning, schools average 46.0% of students scoring advanced on PSSA reading tests. Where they indicate their libraries do less than an excellent job teaching this standard, schools average 38.0% of students scoring advanced.

Note: This chart focuses on how well administrators believe library programs ad-

dress the inquiry-based learning standard and the relationships of those assessments to advanced and below basic scores on both reading and writing. Example: Where administrators assess the library program's role in teaching this standard as "Excellent," schools average 8.6% of students scored below basic on reading. Where they assess the library's role in teaching this standard as less than excellent, schools average 10.8% of students scoring below basic.

## SO NOW WHAT?

The preceding overview indicates that the latest Pennsylvania study begins to connect the dots between

- what administrators value about libraries and librarians
- how that shapes the school environment in which librarians teach *21st Century Learner* and Common Core standards
- how that, in turn, is reflected in students' state test scores on both reading and writing

So now what? Where do we go from here? Here are several "next steps" for school librarians, school library advocates, and school library researchers to consider:

- *We need more large-scale studies.* The latest Pennsylvania study is the very first to examine, on a statewide basis, the interaction between school libraries, the two sets of standards, and test scores. A single study does not a literature make, and these connections deserve closer and more intense scrutiny.

- *We also need more local action research studies—otherwise known as self-assessments—by school librarians themselves.* Many school librarians do not feel they have time to conduct self-assessments in the form of local, evidence-based studies of their practice. Yet this needs to be an integral part of the research. If we wish to see the kind of change in the public education policy that will establish firmly the future of school libraries and librarians, local decision-makers—administrators, school board members, and even parents—must be made aware not only of what we know from large-scale studies but also of

evidence of ways in which their own experience of school libraries and librarians matters. Only then will they internalize a deep understanding of the contributions that school library programs make and begin to make decisions consistent with a personal commitment to them.

- *We need to develop networks of educators, public officials, and parents who are informed and mobilized to advocate for school libraries and librarians with their peers.* As national and state efforts have proven repeatedly in recent decades (e.g., Reader's Digest's Library Power, Colorado's Power Libraries), these kinds of peer-to-peer advocacy efforts are generally far more fruitful than similar efforts by librarians alone—efforts that are too easily dismissed as merely self-serving.

- *We need administrators to understand that the success of school library programs depends very strongly on what they value about these programs and how they communicate those values to teachers, other staff, and students in their schools.* Most administrators understand their role when they are approached with requests for dollars and for staff positions. What far too many probably do not understand is how what they believe and how they communicate it, both explicitly and implicitly, in their schools make a very real difference to how successful a school library program can be on a day-to-day basis. We need a lot more from administrators than mere dollars and FTEs (i.e., full-time equivalents)—we need their hearts and minds!

The good news from the latest Pennsylvania study is that we have begun to document how important these connections are. Demonstrably, school library programs that have the greatest positive impact on students are those that have the most resources to offer in their schools—staff, spending, collections, technology, and access. But such resources are not sufficient for school library programs to succeed. The most successful programs are those in schools where administrators value libraries and librarians most highly—putting them where they belong: at the heart of teaching and learning, where they can pro-

mote and sustain inquiry, critical thinking, collaboration, and independent learning.

## REFERENCES

For more information on the Pennsylvania study, visit the website at <http://paschoollibraryproject.org/>.

For the complete report *How Pennsylvania School Libraries Pay Off: Investments in Student Achievement and Academic Standards* by Keith Curry Lance and Bill Schwarz, visit <http://paschoollibraryproject.org/research>

For information on the PA/Common Core standards, visit <http://paschoollibraryproject.org/standards>.

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Keith Curry Lance is a consultant who works with libraries and related organizations as a researcher, statistician, public speaker, proposal writer, and facilitator. He was founding director of the Library Research Service at the Colorado State Library in 1987. Since retiring from that position in 2007, he has focused on consulting both independently and with the RSL Research Group. Lance is best known in the school library community as the principal investigator of the most prolific research team studying the impact of school libraries and librarians on academic achievement and student learning. For more information visit [www.keithcurrylance.com](http://www.keithcurrylance.com).

Deb Kachel is an online instructor in Mansfield University's (PA) School Library & Information Technologies graduate program and the Legislation Co-Chair of the Pennsylvania School Librarians Association. She was the principal grant writer for the IMLS National Leadership grant that funded this research project. She also maintains the project website at <http://paschoollibraryproject.org>. For more than 30 years Deb was school librarian and district library supervisor in Ephrata, Lancaster County, PA.