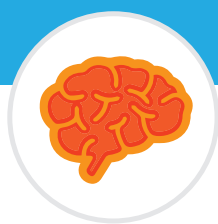


PROMISING PRACTICES

# Educational Research Applied to the Shared Foundations

An Executive Summary of the  
CLASS II Research Project



American Association  
of School Librarians  
**TRANSFORMING LEARNING**



# TABLE OF CONTENTS

<b>2</b>	<b>Background and Objectives</b>
<b>4</b>	<b>Research Process</b>
<b>6</b>	<b>Overview of Findings</b>
<b>8</b>	<b>I. INQUIRE</b>
<b>10</b>	<b>II. INCLUDE</b>
<b>12</b>	<b>III. COLLABORATE</b>
<b>14</b>	<b>IV. CURATE</b>
<b>16</b>	<b>V. EXPLORE</b>
<b>18</b>	<b>VI. ENGAGE</b>
<b>20</b>	<b>Future Directions</b>
<b>21</b>	<b>Works Cited</b>

## Acknowledgments

This research was funded by the American Association of School Libraries and Institute of Museum and Library Science grant RE-OO-15-O114-15.

## Research Teams

FLORIDA STATE  
UNIVERSITY

**Marcia Mardis, Ph.D.**

**Faye Jones, Ph.D.**

**Lenese Colson, Ph.D.**

OLD DOMINION  
UNIVERSITY

**Sue Kimmel, Ph.D.**

**Shana Pribesh, Ph.D.**

**Lois Wine, Ph.D.**

**Kristen Gregory, Ph.D.**

UNIVERSITY OF  
NORTH TEXAS

**Barbara Schultz-Jones, Ph.D.**

**Laura Pasquini, Ph.D.**

**Laura Gogia, M.D., Ph.D.**

# Background and Objectives

The American Association of School Librarians' (AASL) Causality: School Libraries and Student Success II (CLASS II) project (IMLS RE-00-15-0114-15, 2015–2020) was the first step in developing a long-term, three-phase school library research agenda (figure 1) to investigate causal relationships between school libraries staffed by professionally prepared school librarians and student learning.

This report, designed for school library researchers and practitioners, features:

- an executive summary of the CLASS II objectives and research process;
- an overview of select research findings as they relate to the Shared Foundations from AASL's *National School Library Standards for Learners, School Librarians, and School Libraries* (2018); and
- recommendations for future research directions.

## OBJECTIVES

The goal of this research was to identify what educators were doing in the classroom related to positive learner outcomes.

Further developing and testing these promising practices would be the basis for an ongoing research agenda for school library researchers and practitioners to investigate using causal designs in their own schools and school libraries.

Such empirical evidence would enable library and information practitioners, researchers, supporters, and advocates to meaningfully connect with education policy decision-makers and lawmakers for partnerships to improve learning for all K–12 learners.

The complete CLASS II report is available at:  
[www.ala.org/aasl/research](http://www.ala.org/aasl/research)

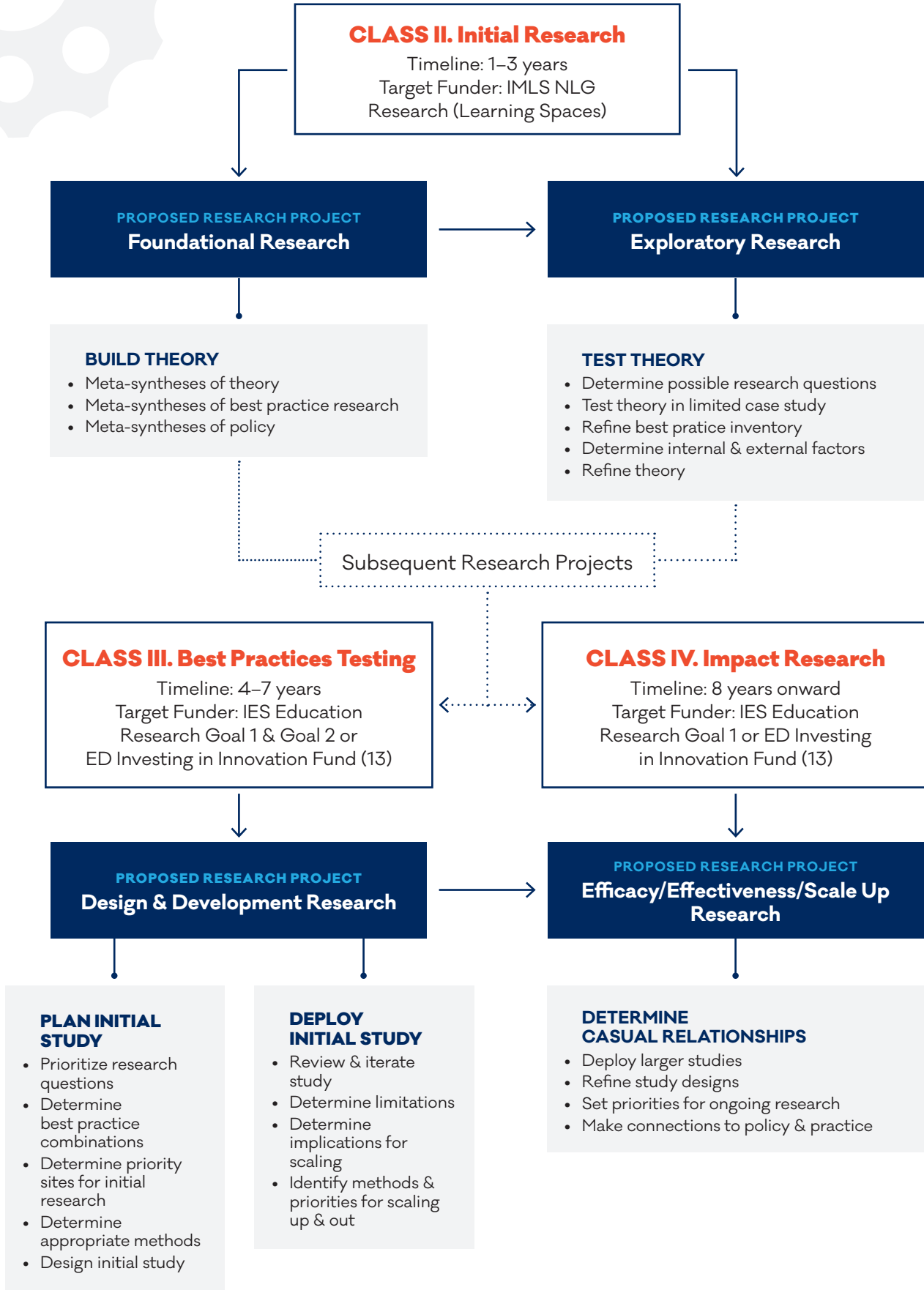


FIGURE 1. CLASS research agenda phases.

# Research Process

AASL engaged researchers from three universities to further a national school library research agenda based on causal analysis showing how school librarians can positively impact learners.

## THE RESEARCH QUESTION

What causal relationships between school-based malleable factors and student learning are present in published research?

### SCHOOL-BASED FACTORS:

Learning activities that occur within school, such as classroom practices, after-school programming, or other factors that might be manipulated within a school.

Using a Mixed Research Synthesis (MRS) method (figure 2), researchers aggregated and synthesized high-quality published research.

Each study was evaluated for relevance to the research question and grouped according to Every Student Succeeds Act (ESSA) tiers of evidence for causal research (figure 3).

Researchers identified promising classroom practices and assigned Shared Foundations from the AASL Standards to each study.

A final phase of the project included testing promising research findings in small-scale field studies to spark further research development.

See the complete research report for full abstracts, additional findings and queries, field studies, and conjecture maps illustrating each of the Shared Foundations. Visit [www.ala.org/aasl/research](http://www.ala.org/aasl/research)

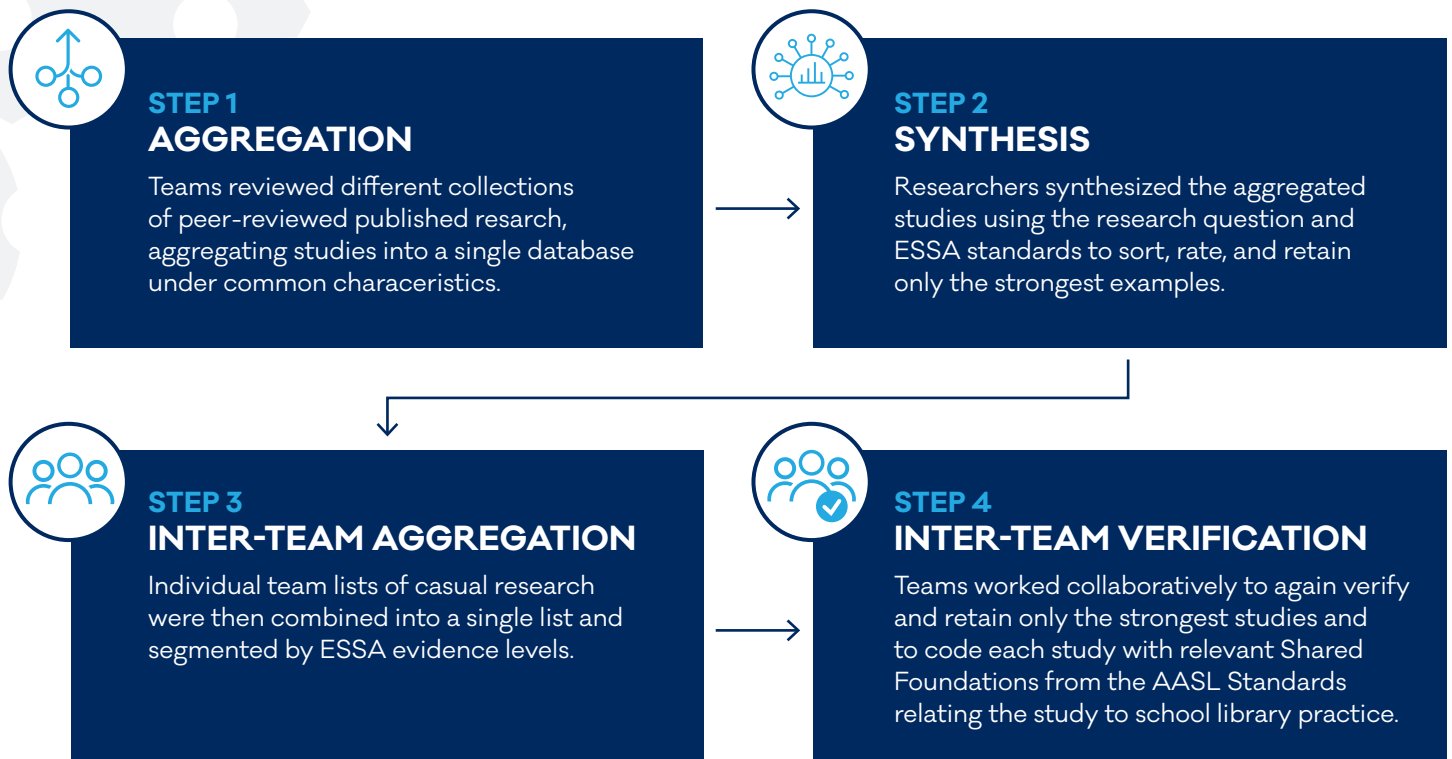


FIGURE 2. Mixed Research Synthesis (MRS) methodology

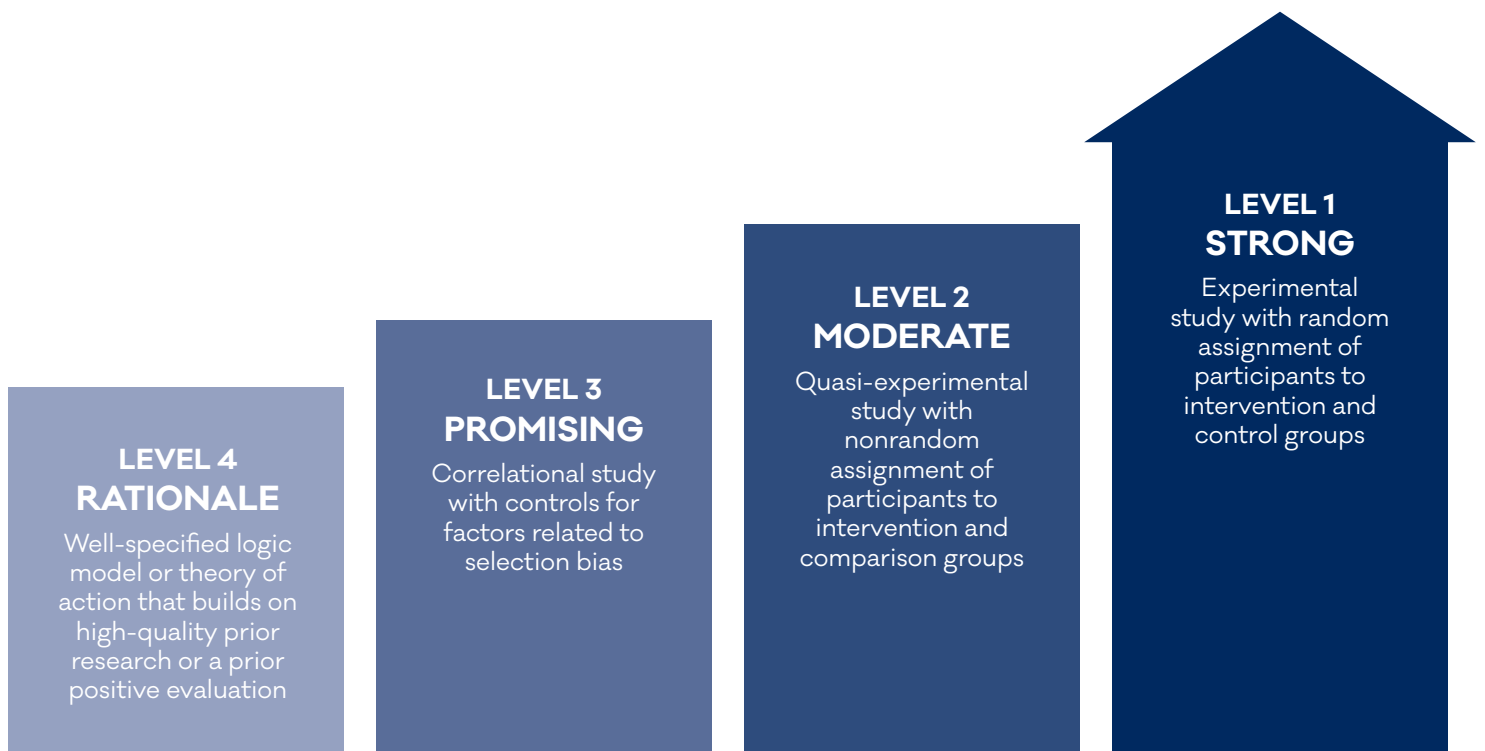


FIGURE 3. ESSA levels for evidence (adapted from Herman et al. 2017)

# Overview of Findings

While the CLASS II project results do not provide definitive answers to the causal link between school librarianship and learning, they do offer promising directions for school library practice.

## MAJOR THEMES AND PROMISING PRACTICES

AASL introduced the *National School Library Standards* in 2017, after the CLASS II research was under way. Researchers' work was not prescribed by the AASL Standards; however, the standards provide a useful lens through which to view the project's research findings.

Table 1 provides an overview of the major areas in educational research identified by CLASS II researchers that provide promising directions for causal research in school librarianship. Each area is detailed within the corresponding Shared

Foundation synthesis in the full research report. This executive summary highlights only a few key findings in each Shared Foundation.

The CLASS II findings also provide researchers and practitioners with many opportunities to identify and further evidence-informed, sustainable, precedent-setting strategies for learners.

## RESEARCHERS AND PRACTITIONERS TOGETHER

The CLASS II research seeks to have researchers and practitioners work together to connect findings from educational causal research to school librarianship. At this stage, theory building involved three funded field studies designed as requests for proposals (RFPs) and three conjecture maps drawn from the aggregated database with application to the AASL Shared Foundations.

### FIELD STUDIES

CLASS II researchers recruited field study teams charged with implementing one or more of the CLASS II research findings' promising practices through small-scale, design-based causal studies in a school library field context. Field studies occurred over eighteen months, between 2017 and 2018, with plans developed for future research.

### CONJECTURE MAPPING

As the CLASS II research moved into a theory-building phase, conjecture mapping offered an iterative framework for applying the findings to school library settings. Researchers anticipate that field testing these designs and conjectures would lead to revisions and further testing and refinement of theory.



SHARED FOUNDATION	RESEARCH SYNTHESIS AREA		
	LEARNER	SCHOOL LIBRARIAN	SCHOOL LIBRARY
<b>INQUIRE</b>	Strengthening Intellectual Tools <ul style="list-style-type: none"> <li>• Goal Setting</li> <li>• Inquiry Processes</li> <li>• Problem-Solving Skills</li> <li>• Interdisciplinary Curriculum Integration</li> <li>• Self-Regulated Learning</li> </ul>	Instructional Approaches <ul style="list-style-type: none"> <li>• Conceptual Challenges</li> <li>• Creativity Training</li> <li>• Explicit Instruction</li> <li>• Learner Directed</li> <li>• Resource-Based Instruction</li> <li>• Assessment</li> <li>• Feedback</li> <li>• Domain Dependence</li> <li>• Questioning</li> <li>• Metacognitive Conversation</li> </ul>	Climate
<b>INCLUDE</b>	Self-Concept Inclusive Learning	Knowledge of Learners <ul style="list-style-type: none"> <li>• Learning Trajectories</li> <li>• Educator Perception of Learners</li> <li>• Individualized Instruction</li> </ul>	Opportunities to Learn <ul style="list-style-type: none"> <li>• Access to Resources</li> <li>• Access to Instruction</li> </ul> Interdisciplinary Instruction
<b>COLLABORATE</b>	Shared Learning Experiences	Co-planning and Co-teaching Strategies  Professional Developer, Mentor, and Leader	Leadership  Parent Involvement
<b>CURATE</b>	Thinking Skills and Strategies <ul style="list-style-type: none"> <li>• Concept Mapping</li> <li>• Visual Skills</li> <li>• Skill Development</li> <li>• Note-Taking</li> </ul>	Challenging Learners <ul style="list-style-type: none"> <li>• Youth Development Model</li> <li>• Educator-Led Strategies</li> </ul> Expert Curation	School Library as Instructional Resource  Access to Resources <ul style="list-style-type: none"> <li>• Online Information</li> <li>• Media Rich and Curriculum Related</li> <li>• Access to Computers</li> <li>• Resources at Home</li> </ul>
<b>EXPLORE</b>	Opportunities to Explore with Concrete Materials <ul style="list-style-type: none"> <li>• STEM Learning</li> <li>• Technology-Aided Instruction</li> </ul>	Interventions Disrupt Low Reading Achievement <ul style="list-style-type: none"> <li>• Integrating Reading with Content</li> <li>• Talking about Reading</li> <li>• Modeling Reading</li> </ul>	Space for Social Learning  Readers Need Practice <ul style="list-style-type: none"> <li>• Reading Is Learned Outside School</li> <li>• Access to Reading Materials</li> </ul>
<b>ENGAGE</b>	Socio-Emotional Learning <ul style="list-style-type: none"> <li>• Parent Involvement</li> <li>• Self-Perception</li> <li>• Structured Curriculum</li> </ul> Life Beyond School <ul style="list-style-type: none"> <li>• Mentored Learning</li> <li>• Adventure-Based Curricula</li> </ul>	Experts in the Field	Opportunities to Lead and Communicate  Support for College Success  School Day Configurations

TABLE 1. Major areas from research syntheses.

## SHARED FOUNDATION

# Inquire



School librarians and other educators engage learners in the use of inquiry-based models, and learners benefit from guides to their inquiry processes. Instructional design, learning activities, a collaborative approach, and development of critical thinking skills are fundamental to research related to this Shared Foundation.

## LEARNER

### STRENGTHENING INTELLECTUAL TOOLS



Successful treatments to equip learners with the skills to inquire, think critically, identify problems, and develop strategies for solving problems include:

**Goal Setting.** Goal setting impacts performance, with the strongest effect for less-complex tasks and increased specificity of tasks, especially if learners participate in goal setting.

**Inquiry Processes.** Combining explicit instruction with experimentation is much more effective than experimentation alone, even for learners in low-performing schools; learners benefit from guides to their inquiry processes.

**Problem-Solving Skills.** A learner-centered, hands-on, and phenomenon-based curriculum approach improves knowledge of content and higher levels of learner engagement; learners benefit from learning new content in a problem context; visualization is an important problem-solving skill.

**Interdisciplinary Curriculum Integration.** Challenging learners through interdisciplinary curriculum integration reveals positive evidence of various forms of curricular integration, including sequenced, parallel, partial, enhanced, and total.

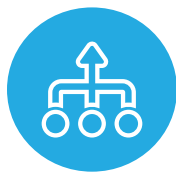
**Self-Regulated Learning.** Providing learners with knowledge and skills about how to self-regulate their learning helps them to self-initiate motivational, behavioral, and metacognitive activities to control their learning.



To what extent do learners benefit from guides to their inquiry processes, and where are these guides best positioned for optimum results?

## SCHOOL LIBRARIAN

### INSTRUCTIONAL APPROACHES



How educators construct instructional approaches may depend on the skills that need to be developed, but research finds that educators should not take an either/or approach to information literacy instruction. The range of instructional approaches should include both the problem-based method for content knowledge and process frameworks for the application of information practices. Among the approaches explored:

**Creativity Training.** Training that emphasized cognitive processing skills was particularly effective, and the development of problem-solving and information-processing skills is very relevant for information literacy.

**Explicit Instruction.** Mixed instructional approaches that combined content and explicit critical thinking instruction were significantly better than other approaches. Intensive programs proved more effective than programs providing only periodic training in critical thinking.

**Learner Directed.** Reading is key to implementing more learner-directed teaching and learning models. Use of technology in problem solving did not result in dependency on technology; learners who used technology and learners who did not achieved the same results at the same rate.

**Questioning.** Learners who were taught to generate questions while reading improved reading comprehension.

**Metacognitive Conversation.** An instructional model with a central dynamic of talking about the reasoning and problem-solving processes that accompany reading as learners carry out learning tasks was effective for reading, content, and standardized test scores.



To what extent does routine metacognitive conversation affect learning as learners carry out learning tasks in the school library's makerspace area (science curriculum)?

## SCHOOL LIBRARY

**Climate.** Support is shown to improve a school's academic climate and is a more promising way to enhance learners' attachment to school and their academic achievement.



## SHARED FOUNDATION

# Include



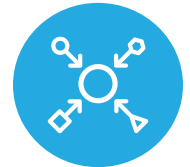
Several best practices for the classroom that are applicable to the school library address inclusion and diversity through attention to individual differences: time for learning, differentiation or adaptive instruction, reinforcement, cooperative learning, and feedback.

## LEARNER

**Self-Concept.** The attitudes and beliefs learners build about themselves as learners impact their learning achievement and may also impact group work as learners view their own capabilities relative to others in the group. The relationship of self-concept to achievement may be reciprocal but is also likely malleable and contextual.



**Inclusive Learning.** Several interventions have proven especially effective with lower socio-economic groups, including effective educators, access to books for summer reading, peer-assisted learning, and a well-prescribed preschool curriculum.



Are there patterns in how subgroups respond to school library instruction, activities, etc.? What about learner differences, socio-economic status, racial, cultural, linguistic, etc.?

## SCHOOL LIBRARIAN

**Learning Trajectories.** Behavioral problems in early grades may continue to impact student success. Early interventions including strong educators may interrupt a negative trajectory or ensure the success of a positive one. Follow up related to an intervention through the grade levels is also important.



How does a school librarian's knowledge about individual learners and grade-level curricula impact educator planning to differentiate instruction?

**Individualized Instruction.** When educators individualize and monitor learning through formative assessments, student achievement improves. Learning outcomes improve when educators are trained to implement interventions with “flexible fidelity” where they have options to respond to individual learning differences while remaining faithful to the intervention.



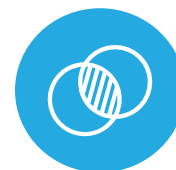
## SCHOOL LIBRARY

**Access to resources.** Access to resources through the school, in the home, and in the child's neighborhood has consequences for student learning. Studies have shown a relationship between access to educational resources and science achievement. Access to books over multiple summers improves reading achievement. Students from disadvantaged neighborhoods were a year or more behind in verbal ability.



Do learners from lower-socio-economic neighborhoods who have access to school libraries with increased staffing and hours (after-school, weekends, vacations, summers) perform differently on reading assessments than similar learners from similar neighborhoods with practice as usual (open only during school hours)?

**Interdisciplinary instruction.** When combined with ongoing training and coaching for teachers and school leaders, instruction inclusive of multiple disciplines often leads to higher student achievement. Similarly, metacognitive strategies that are integrated with content improve learning compared with teaching those strategies in isolation. And the inclusion of reading or writing instruction with content improves reading and writing achievement, often with a positive impact on the content.



## SHARED FOUNDATION

# Collaborate



In education research, collaboration may be seen a bit differently than how school librarians see it. For example, educators may consider working with parents as collaboration. In some schools, a building-wide commitment to collaborative decision making is a form of collaboration. While collaboration is a frequently discussed and researched topic in school librarianship, it has not been the focus of many causal research studies.

## LEARNER

### Shared Learning Experiences.

Collaboration is a key academic success and life skill. Higher achievement and more-positive peer relationships were associated with cooperative, rather than competitive or individualistic, goal structures. Learners do



better when they understand and share learning goals. Grouping may be done in a variety of different ways. However, research showed that many educators find group facilitation and teaching difficult to implement.



In schools without a collaborative culture, how do school librarians contribute to learning?

## SCHOOL LIBRARIAN

### Co-Planning and Co-Teaching

**Strategies.** Collaboratively taught groups that used an inquiry project-based learning (PBL) approach fared much better than over collaboratively taught groups that did not use PBL. Although PBL increased educators' workload, learners enjoyed the projects and perceived them to be relatively easy, regardless of gender or academic ability. Collaborations between teaching staff were most effective when supported by school



administration and others. With the school librarian's help, these educators were also effective at improving learners' information literacy and information technology skills.



What are the features unique to school librarianship that enhance collaborative relationships? How large of a part of the successful collaborative relationship are these features?

### Professional Developer, Mentor, and Leader.

Educators who engage in summer professional development, have access to materials and manipulatives, and receive in-school support are significantly better able to implement math and science achievement improvement initiatives. Professional development is also most effective on an educator-to-educator basis, because educator-level change is more linked to learner outcomes than school administration-level change.



What are the differences between collaborations with classroom teachers that include school librarians who were former teachers and collaborations with school librarians who were not? How does classroom teaching experience improve or impede successful school librarian-educator collaborations?

## SCHOOL LIBRARY

**Leadership.** Whole-school leadership and school-wide commitment to cooperation is effective in some contexts. School librarians can act as leaders who work with all grade levels to support standards-based, data-driven, effective practices, and instill a professional learning community. Shared leadership, over time, builds the academic capacity of schools and reinforces academic goals throughout learning experiences. When a school librarian works with other educators to reinforce classroom goals, learning improves. School-wide leadership practices include school librarian-valued practices such as providing resources for teaching, communication, outreach, and knowledge of curriculum.



How and why does school librarian-educator collaboration improve learners' experiences? How do these advantages compare to educator-only instruction?

**Parent Involvement.** The results of a randomized controlled trial suggested that low-income Hispanic middle school learners benefited from an integrated program of 1) parent involvement, including feedback from teachers; training parents to address issues; and help using supportive community services; 2) attendance monitoring; 3) learner training in social and learning task problem-solving skills; and 4) deep involvement with school counselors. School librarians are often the bridge between the classroom and home; strategies to effectively collaborate with both groups is sure to benefit learners.

## SHARED FOUNDATION

# Curate



The Curate Shared Foundation involves the effective use of ideas and information as a result of finding, evaluating, selecting, and organizing resources appropriate to a given task. A vital component of this foundation includes providing access to resources. What the school librarian does to curate a collection of resources for the school's information and curricular needs, is scaled to the learner's level of need to evaluate and select resources.

## LEARNER

### Thinking Skills and Strategies.

Across several instructional conditions, settings, and methodological features, the use of concept maps was associated with increased knowledge retention. Strategies to further assist student learning through skill development include behavior competency, language development, literacy skills, and note-taking skills. The use of note-taking had a particularly positive impact on high school learners when instruction and examples of procedures were provided.



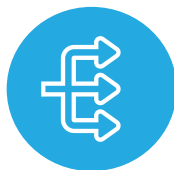
What nonverbal and engaging activities could enhance reading skills through instruction in the visual arts?

Which curation skills can the school librarian model for learners to impact learning?



## SCHOOL LIBRARIAN

**Educator-Led Strategies.** Educator-led concept mapping was even more effective than learner-led mapping because educators helped learners construct meaning. Results showed that learners' achievement and attitudes toward mathematics improved through the long-term use of and instruction with concrete materials provided by educators knowledgeable about their use.



**Expert Curation.** Findings suggest that books for elementary school libraries must be selected by trained school librarians who are aware of the reading needs in the school community. Simply providing educators with a generous supply of children's books had little effect on the educational outcomes of learners.



## SCHOOL LIBRARY

**School Library as Instructional Resource.** The school library has been identified as another instructional resource that may significantly influence learner achievement. Learners who reported that they used the library more frequently performed at higher levels.

### ACCESS TO RESOURCES

Access to resources is important to learner achievement in science, and access to a supply of books over three summers improved reading outcomes for disadvantaged learners.



When students could check out multiple books without restrictions and the librarian engaged with learners, student achievement saw positive improvement.

**Online Information.** The use of online information had a positive effect when purposely distributed rather than simply made available.

**Media Rich and Curriculum Related.** Integrating print through a variety of digital and technological applications with a curricular focus has demonstrated benefits for learners.

**Access to Computers.** Computers alone are not enough to improve learning; technology-rich environments must also include engaged educators and be accompanied by instructional components.

**Resources at Home.** Researchers found that the availability of educational resources at home strongly predicted learners' science achievement both at the learner and classroom levels.



Will the effect of a one-to-one laptop program impact student learning in subjects where the school librarian is included in the selection and introduction of online resources?

What school library learning environment changes could help promote science achievement?

## SHARED FOUNDATION

# Explore



Studies in the CLASS aggregation supported the use of manipulatives, real-world materials, and other hands-on explorations and models related to learning in content areas like math, science, or social studies. Reading as “the core of personal and academic competency” (AASL 2018, 13) is also explicitly addressed in the Explore Shared Foundation.

## LEARNER

**Experiential Learning.** Learners benefit from the inclusion of hands-on learning, including non-linguistic activities and other symbolic representation such as drawings and graphs. Real-world materials and activities or technology animations are effective in many learning contexts. Board games, for example, increase mathematical skills.



How do school libraries facilitate hands-on learning through the provision of spaces for exploration and discovery such as makerspaces?

## SCHOOL LIBRARIAN

### Exposure to Books and Reading.

Learners benefit from increased exposure to reading and books. Interdisciplinary lessons planned collaboratively offer opportunities to expand both reading and content knowledge. While explicit teaching of phonological skills and word study are effective for new readers, they are not sufficient; experience with real and engaging texts is also a necessary component of learning to read. Vocabulary is an important component of reading comprehension that is best taught explicitly with repeated exposure to new vocabulary and opportunities to experience it in real contexts such as read-alouds.



What is the impact of one-on-one conversations between the school librarian and learners on reading interests, motivation, and achievement?

## SCHOOL LIBRARY

### Access to Reading Materials.

Research suggests that part of reading achievement is acquired outside of formal classroom instruction. Classroom collections of reading materials are not sufficient; instead learners need access to a wide variety of reading materials, including during summer months when school is not in session, along with educator modeling, conversations, and promotion of titles.



How might the practice of read-alouds by the school librarian be enhanced through attention to phonemic and phonological structures, word study, and vocabulary through authentic texts?



What is the impact of summer access to the school library, library materials, and/or a school librarian on retention and improvement in reading achievement?

**Talk about Reading.** Learners benefit from interactions with adults and peers surrounding books and reading. Struggling readers benefit from one-to-one tutoring from teachers, trained volunteers, and peers. Adults can model reading through read-alouds, but also by engaging in conversations about texts with learners.



## SHARED FOUNDATION

## Engage



Engage is the most outward facing Shared Foundation and pertains to learners' engagement within and beyond the school community. Learner engagement has affective, attitudinal, and socio-emotional dimensions. From a school librarian and school library perspective, this Shared Foundation also encompasses relationships with parents and community organizations, including extracurricular, service, and informal learning.

## LEARNER

**Parent Involvement.** Working together, educators and parents improve learners' socio-emotional outcomes. When educators engage with parents to systematically address elementary learners' behavior, all learners' academic and conduct problems improve, regardless of gender and race.



**Self-Perception.** Learners' self-beliefs about intelligence have a small but significant impact on achievement, particularly if those beliefs are aligned with the learning domain or subject area. Learners with positive beliefs about effort have better socio-emotional and academic outcomes. Supporting positive self-perception is especially effective when working with minority children from disadvantaged, urban neighborhoods.



**Structured Curricula.** When learners are encouraged and given tools to self-regulate and communicate through structured socio-emotional curricula and activities, their behavior improves. Children can improve their ability to avoid violent situations and solve problems nonviolently by strengthening their social relations with peers, learning how to interpret behavioral cues, and improving their conflict resolution skills. Improving learners' self-regulation also reduced student suspensions and discipline referrals.

**Mentored Learning.** At-risk youth particularly benefit from a highly structured, mentored learning environment in which they engage with life preparation activities. These environments lead to strong educational attainment and less criminal activity among learner participants.



Which theories explain the value of learners' engagement with the community beyond the school?

## SCHOOL LIBRARIAN

**Experts in the Field.** The school librarian's role in Engage is multi-faceted, including modeling and teaching ethical behavior, providing opportunities for learners to connect with external stakeholders, and ensuring that learners understand, respect, and practice ethical information practices. Often, though, the choice of opportunity is strongly linked to educators' preferences, beliefs, and experiences. Indeed, educators' perceptions of the utility of these external relationships are key to their motivation to making these relationships happen. Learner-educator-professional partnerships enhance educator and learner understandings of and about scientific inquiry and improve learner attitudes toward science and scientists.



How can school counselors and school librarians work together to ensure that learners understand their post-graduation options?

## SCHOOL LIBRARY

**Opportunities to Lead and Communicate.** When a learning environment is structured around school goals and enables learners to make real-world connections, they thrive. Many learners in traditional classrooms experience high communication apprehension,

which puts them at a distinct learning disadvantage. When learners in STEM academies engage in peer-led activities, their attitudes toward science improve and their science knowledge increases, especially among learners of diverse backgrounds who live within large urban centers. Further research is needed into the match between the learning task, the learning style, and the learning environment.

### Support for College Success.

Learners who successfully complete core college preparatory courses in high school have better attendance and lower suspension rates than learners who do not take college-level courses. Many learners struggle to engage with life beyond high school because they face college application barriers, including a lack of information, application assistance, fee waivers, and aid.



### School Day Configurations.

Overall, learners who attended full-day kindergarten had significantly greater achievement than did learners who attended half-day kindergarten. School day and time usage had particular benefits, and these benefits were particularly noticeable in schools that had implemented a comprehensive behavioral system.



What is the role of external engagement and awareness of the world beyond school in digital literacy teaching and learning?

# Future Directions

Each Shared Foundation synthesis featured in the full report includes queries or questions that might provoke practitioners and researchers to apply the findings to practice.

- Practitioners are encouraged to use these queries for reflection and as a basis for action research to improve their practice.
- The queries could also form the basis for research questions to be applied by researchers in the field.
- The queries encourage school library researchers and practitioners to probe for ways in which the *National School Libraries Standards* can improve practice and promote learning in both practice and research.
- Practitioner and researcher partnerships can truly leverage the power of these findings in applying the Shared Foundations.

In addition to reflection, conjectures, and research concerning the impact of school libraries and school librarians on learner outcomes, the CLASS II researchers recommend several directions for continuing this work.

**Pursue funding to advance research conjectures and researcher-practitioner partnerships to further investigate the areas addressed**

**in this publication.** Feedback from attendees at conference presentations indicates that scholars and practitioners are very interested in pursuing conjecture mapping and researcher-practitioner partnerships for future research.



**Continue to frame research through the application of the Shared Foundations from the AASL Standards.**

The Shared Foundations, derived from a deep understanding of educational research findings in the context of school librarian practice, provide a framework through which to identify rigorous research opportunities.

NATIONAL  
SCHOOL  
LIBRARY  
STANDARDS

**Create a dedicated online space and project team to advance ongoing research and assist with the construction and dissemination of research activities.**



This would further support the third goal in AASL's strategic plan, "AASL advances research that informs school librarian practice," and its objectives to:

- Facilitate evidence-informed school librarian practices.
- Increase visibility of research related to school librarians.
- Communicate research findings to practitioners and other leaders. (2019)

Causal research, by its nature, depends on the specific context in which it is applied. AASL and the CLASS II researchers encourage scholars and practitioners to partner for robust and rigorous research that further defines the elements of school librarianship that advance learning.

## Works Cited

American Association of School Librarians. 2019. "American Association of School Librarians Strategic Plan." <[https://alair.ala.org/bitstream/handle/11213/10819/AASL\\_Strategic\\_Plan.pdf?sequence=1&isAllowed=y](https://alair.ala.org/bitstream/handle/11213/10819/AASL_Strategic_Plan.pdf?sequence=1&isAllowed=y)> (accessed Nov. 16, 2020).

American Association of School Librarians. 2018. *National School Library Standards for Learners, School Librarians, and School Libraries*. American Library Association: Chicago

Herman, R., S. M. Gates, A. Arifkhanova, M. Barrett, A. Bega, E. R. Chavez-Herrerias, E. M. Han, M. Harris, K. Migacheva, R. Ross, J. T. Leschitz, S. L. Wrabel, et al. 2017. *School Leadership Interventions under the Every Student Succeeds Act: Evidence Review*. <[www.rand.org/content/dam/rand/pubs/research\\_reports/RR1500/RR1550-3/RAND\\_RR1550-3.pdf](http://www.rand.org/content/dam/rand/pubs/research_reports/RR1500/RR1550-3/RAND_RR1550-3.pdf)> (accessed Oct. 27, 2020).

See the complete report of the CLASS II research project for citations and references. Additional CLASS publications and products are also featured. Visit [www.ala.org/aasl/research](http://www.ala.org/aasl/research)



American Association  
of School Librarians  
**TRANSFORMING LEARNING**

©2021 AMERICAN ASSOCIATION OF SCHOOL LIBRARIANS

[www.ala.org/aasl](http://www.ala.org/aasl)

