How School Librarians Help Kids Achieve Standards

The Second Colorado Study

Keith Curry Lance
Marcia J. Rodney
Christine Hamilton-Pennell

April 2000

CONTACT

Keith Curry Lance, Director
Library Research Service
Colorado State Library
Colorado Department of Education
201 East Colfax Avenue, Suite 309
Denver, Colorado 80203-1799

Telephone: (303) 866-6737
Fax: (303 866-6940
E-mail: klance@sni.net
Web site: http://www.lrs.org

Executive Summary

Colorado Student Assessment Program (CSAP) reading scores increase with increases in the following characteristics of library media (LM) programs: LM program development, information technology, teacher/library media specialist (LMS) collaboration, and individual visits to the library media center (LMC). In addition, as participation increases in leadership roles, so does collaboration between teachers and LMSs. The relationship between these factors and test scores is not explained away by other school or community conditions. (See Figures 1 and 2, pp. 10-11.)

Library Media Program Development

CSAP reading test scores increase with increases in:

- LMS hours per 100 students (7th grade),
- total staff hours per 100 students,
- print volumes per student,
- periodical subscriptions per 100 students,
- electronic reference titles per 100 students (7th grade), and
- library media expenditures per student.

Information Technology

Where networked computers link library media centers with classrooms, labs, and other instructional sites, students earn higher CSAP reading test scores. These higher scores are particularly linked to the numbers of computers enabling teachers and students to utilize:

- LMC resources, either within the LMC or networked to the LMC,
- licensed databases, and
- Internet/World Wide Web.

Collaboration

A central finding of this study is the importance of a collaborative approach to information literacy. Test scores rise in both elementary and middle schools as library media specialists and teachers work together. In addition, scores also increase with the amount of time library media specialists spend as in-service trainers of other teachers, acquainting them with the rapidly changing world of information.

Test scores increase as library media specialists spend more time:
- planning cooperatively with teachers (7th grade),
- identifying materials for teachers,
- teaching information literacy skills to students,
- providing in-service training to teachers, and
- managing a computer network through which the library media program reaches beyond its own walls to classrooms, labs, and offices (7th grade).

Flexible Scheduling

Students have greater freedom in middle school, and are often able to choose whether or not they visit their school's LMC and use the resources there or take them home. Choosing to visit the LMC as an individual, separate from a class visit, is also a strong indicator of higher test scores. Middle schools with high test scores tend to have LMCs that report a high number of individual visits to the LMC on a per student basis.

Indirect Effects

While not having a direct effect on test scores, leadership involvement on the part of the library media specialist (LMS) has a strong impact on whether or not the LMS is working closely with teachers and students. At both elementary and middle school levels, the more the LMS is involved in school and library media professional activities, the higher the level of collaboration. Collaboration, in turn, does have a direct impact on test scores.

Higher levels of collaboration result from:
- meeting regularly with school administration,
- serving on standards and curriculum committees,
- working with faculty at school-wide staff meetings, and
- meeting with library media staff at the building level.

At the elementary level, library media program development (levels of staffing, collections and expenditures) and technology are strong predictors of each other as well as of test scores. The seventh grade level sees a strong relationship between library media program development and flexible scheduling.

School & Community Differences

These predictors of academic achievement cannot be explained away by:

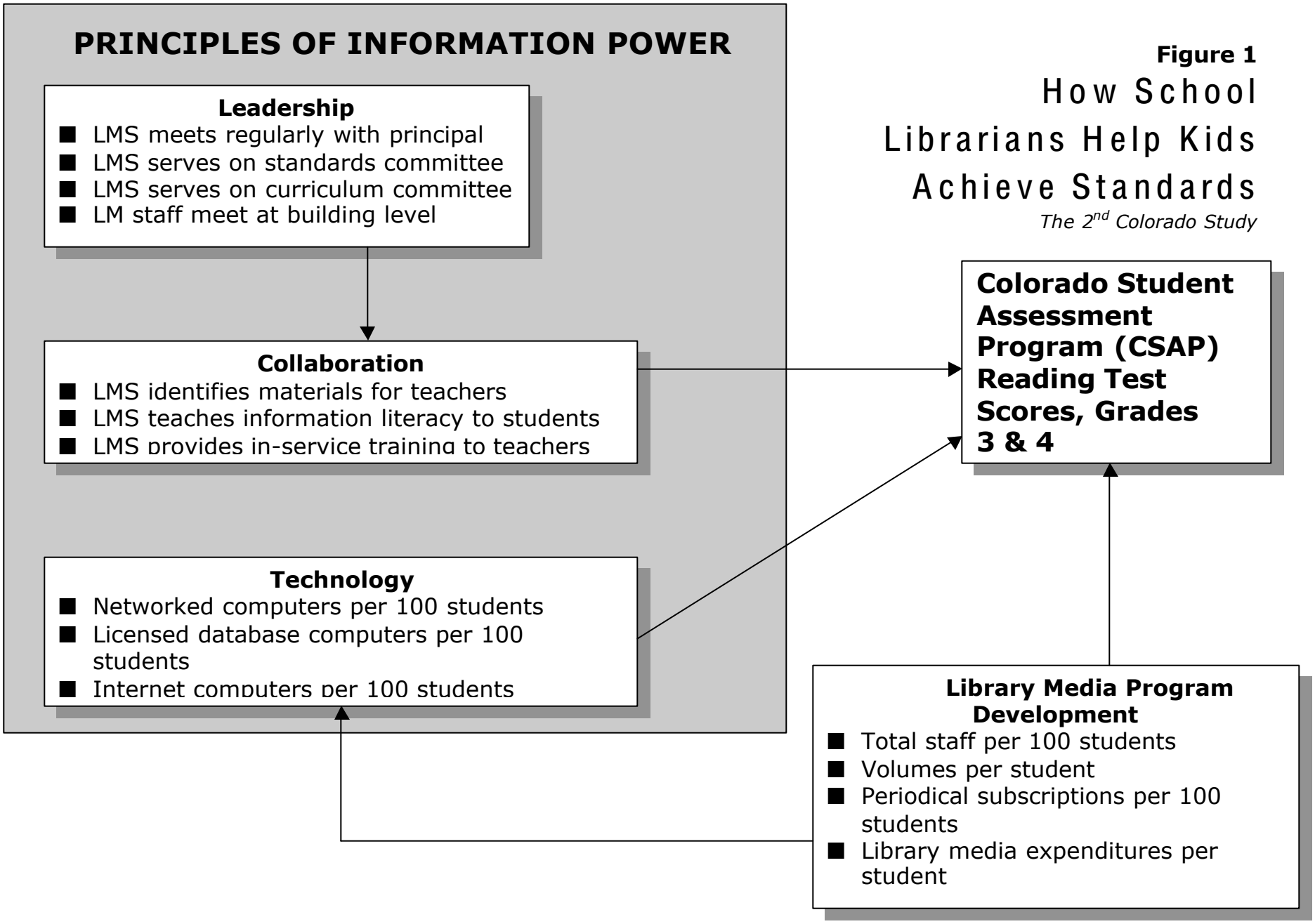
- school differences, including:
  - school district expenditures per pupil,
  - teacher/pupil ratio,
  - the average years of experience of classroom teachers, and
  - their average salaries; or
- community differences, including:
  - adult educational attainment,
  - children in poverty, and
  - racial/ethnic demographics.

How much will a school's test scores improve with specific improvements in its library media program? The answer depends on the library media (LM) program's current status, what it improves, and how much it is improved. When LM predictors are maximized (e.g., staffing, expenditures, and information resources and technology), CSAP reading scores tend to run 18 percent higher in fourth grade and 10 to 15 percent higher in seventh.

Figure 1

How School Librarians Help Kids Achieve Standards

The 2nd Colorado Study



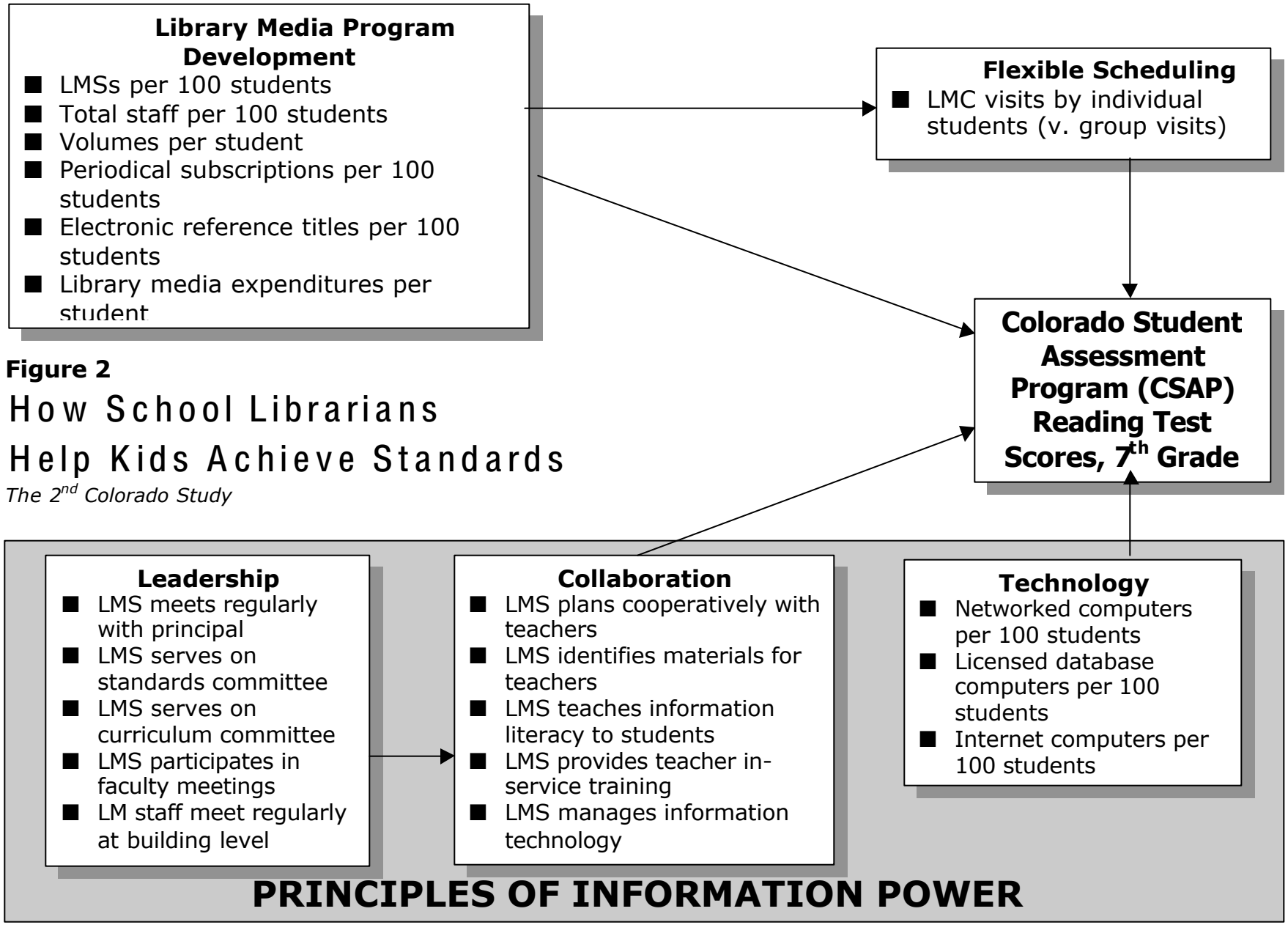

Library Media Program Development
LMSs per 100 students
Total staff per 100 students
Volumes per student
Periodical subscriptions per 100 students
Electronic reference titles per 100 students
Library media expenditures per student
Flexible Scheduling
LMC visits by individual students (v. group visits)
Colorado Student Assessment Program (CSAP) Reading Test Scores, 7th Grade
How School Librarians Help Kids Achieve Standards
The 2nd Colorado Study
Leadership
LMS meets regularly with principal
LMS serves on standards committee
LMS serves on curriculum committee
LMS participates in faculty meetings
LM staff meet regularly at building level
Collaboration
LMS plans cooperatively with teachers
LMS identifies materials for teachers
LMS teaches information literacy to students
LMS provides teacher in-service training
LMS manages information technology
Technology
Networked computers per 100 students
Licensed database computers per 100 students
Internet computers per 100 students
PRINCIPLES OF INFORMATION POWER

Figure 2

For information about how to obtain the complete report, visit http://www.lrs.org.