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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.
How School Librarians Help Kids Achieve Standards

The Second Colorado Study

PRINCIPLES OF INFORMATION POWER

Leadership
- LMS meets regularly with principal
- LMS serves on standards committee
- LMS serves on curriculum committee
- LM staff meet at building level

Collaboration
- LMS identifies materials for teachers
- LMS teaches information literacy to students
- LMS provides in-service training to teachers

Technology
- Networked computers per 100 students
- Licensed database computers per 100 students
- Internet computers per 100 students

Library Media Program Development
- Total staff per 100 students
- Volumes per student
- Periodical subscriptions per 100 students
- Library media expenditures per student

Colorado Student Assessment Program (CSAP)
Reading Test Scores, Grades 3 & 4

Figure 1

How School Librarians Help Kids Achieve Standards
The 2nd Colorado Study
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

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