

FAST FACTS

Recent Statistics from the
Library Research Service

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Stronger High School Libraries —Especially Those With More Extensive Networks and Licensed Databases—Linked to Higher CSAP Scores



In 2000, **How School Librarians Help Kids Achieve Standards: *The Second Colorado Study*** identified characteristics of library media programs associated with higher levels of academic achievement for elementary and middle school students. That report did not address the impact of libraries on high school students because test score data for those grades were not yet available.



Now that test scores for grades 9 through 11 are available, characteristics of successful library media programs at the high school level can be identified.

High school test scores tend to increase with:

- the number of total library staff hours per typical week, including both endorsed library media specialists and aides ($r=.228$ for grade 11, $p<.05$);
- individual student visits to library media centers ($r=.280$ for grade 11, $p<.05$); and
- loans of books and other materials between libraries ($r=.230$ for grade 10, $p<.05$).

High school students also tend to earn higher CSAP reading scores and higher composite ACT scores where library resource sharing activities facilitate teaching and utilization of information literacy skills. This is more likely to occur where high schools employ school-wide computer networks to extend the availability of reference works, periodical literature, and other databases into classrooms, labs, and offices. (See Table 1.)

High schools with higher scoring students average two to three times the levels of library media program resources of less successful schools. (See Table 2.) For example, compared with lower scoring schools, higher scoring ones average:

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Highlights

- Colorado high school students with stronger library media programs tend to score better on assessments.
- More successful high schools invest two to three times as much in their library media programs as less successful ones, particularly in networking and resource sharing activities that foster information literacy.



Table 1. Correlation Coefficients for Test Scores and Computers Networked with LM Programs

Test/ Grade	Networked computers
CSAP Reading, Grade 9	.364
CSAP Reading, Grade 10	.351
ACT, Juniors (Grade 11)	.328

$p < .05$

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- 2.5 to 3.0 full-time equivalents (vs. only 2.0 FTEs);
- three to four times as many interlibrary loan transactions;
- twice as many group visits for information literacy instruction and three times as many individual visitors;
- two to three times as many computers, both in the LMC and throughout the school, providing access to the library catalog, the Internet, and licensed databases; and
- spend at least one-third more on information resources, including electronic access to information as well as books and other traditional print materials.

Table 2. Characteristics of Library Media Programs for Higher and Lower Scoring Colorado High Schools, 2001

Library media program characteristics	Grade 9 CSAP Reading		Grade 10 CSAP Reading		Juniors on ACT (Grade 11)	
	Average & above	Below average	Average & above	Below average	Average & above	Below average
Average LM staff hours per typical week	109	80			115	80
Average weekly interlibrary loans	8	3				
--to others						
--from others					15	4
Average LMC visits						
--total individual					1,640	595
--groups for information literacy instruction					19	10
Average number of LMC computers					42	17
--with Internet access					41	16
--with library catalog					36	12
--with licensed databases					124	55
Average number of networked computers	165	84	159	92	170	93
--with Internet access	162	89			167	96
--with library catalog	119	49			124	55
--with licensed databases	136	67	155	97	145	70
Average annual expenditures on						
--books					\$10,100	\$7,292
--electronic access to information					\$4,486	\$2,829
--Total	\$21,949	\$15,071	\$21,442	\$15,708		

NOTE: All reported averages indicate positive relationships between test performance and library media programs that are statistically significant at the .05 level or less. Shaded cells indicate results of comparison-of-means analysis that were positive but not statistically significant by that standard.

After other data are compiled, these data will be analyzed further to confirm the findings of previous research. In a half dozen states, such relationships could not be explained away by total per pupil spending, teacher-pupil ratio, or poverty (i.e., National School Lunch Program eligibility).