

An Essential Connection

How Quality School Library Media Programs Improve Student Achievement in North Carolina

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Background

- Principal investigators: Dr. Robert Burgin and Dr. Pauletta Brown Bracy
- Financial assistance of North Carolina Library Association
- Other support from
 - State Library of North Carolina
 - NC School Library Media Association
 - NC Department of Public Instruction
- <http://www.rburgin.com/NCschools2003>

Methodology

- Based on the survey instrument from 2000 Pennsylvania study by Lance, Rodney, and Hamilton-Pennell
- 206 usable responses
- About half from elementary schools, one-fourth each from middle and high schools

Student Achievement

- Defined as the percentage of students who scored at or above achievement level III on ...
 - End-of-grade composite reading exam (for elementary and middle schools)
 - End-of-course English I exam (for high schools)

School Performance

- We defined high and low performing schools as the top and bottom one-third of responding schools
- Mean student achievement:
 - High-performing schools = 87.9 %
 - Low-performing schools = 66.1 %

Library Staffing

- Defined as total paid school library staff hours in a typical week
- Significant correlation with student achievement ($r = 0.272$)
- Mean hours per week:
 - High-performing schools = 83.2
 - Low-performing schools = 64.6
- Mean student achievement:
 - “More staff hours” = 82.0 %
 - “Fewer staff hours” = 75.2 %

Hours Open

- Defined as hours open in a typical week
- Significant correlation with student achievement ($r = 0.196$)
- Mean hours open per week:
 - High-performing schools = 36.3
 - Low-performing schools = 28.7
- Mean student achievement:
 - “Open more hours” = 80.7 %
 - “Open fewer hours” = 76.0 %

Collection Age

- Defined as mean copyright date of the collection
- Significant correlation with student achievement ($r = 0.203$)
- Mean copyright date:
 - High-performing schools = 1988.0
 - Low-performing schools = 1985.6
- Mean student achievement:
 - “Newer collection” = 79.7 %
 - “Older collection” = 75.2 %

Expenditures on Print Materials

- Defined as annual expenditures per 100 students from the school budget
- Significant correlation with student achievement ($r = 0.196$)
- Mean expenditures per 100 students:
 - High-performing schools = \$1,051
 - Low-performing schools = \$825
- Mean student achievement:
 - “Larger book budget” = 80.2 %
 - “Smaller book budget” = 76.5 %

Expenditures on Electronic Access to Information

- Defined as annual expenditures per 100 students from the school budget
- Significant correlation with student achievement ($r = 0.405$)
- Mean expenditures per 100 students:
 - High-performing schools = \$270
 - Low-performing schools = \$109
- Mean student achievement:
 - “More electronic access” = 80.7 %
 - “Less electronic access” = 75.2 %

Online Periodicals

- Defined as whether library subscribed to online periodical services (e.g., FirstSearch, InfoTrac, and UMI)
- Significant impact on student achievement
- Percentage subscribing:
 - High-performing schools = 45.0 %
 - Low-performing schools = 22.0 %
- Mean student achievement:
 - With online services = 79.2 %
 - Without online services = 77.4 %

CD ROM Services

- Defined as whether library subscribed to CD ROM services (e.g., SIRS, Gale's "Discovering..." series, NewsBank, and SuperTOM)
- Significant impact on student achievement
- Percentage subscribing:
 - High-performing schools = 31.1 %
 - Low-performing schools = 14.8 %
- Mean student achievement:
 - With online services = 78.9 %
 - Without online services = 77.6 %