

# **INFORMATION EMPOWERED**

**The School Librarian as an Agent of  
Academic Achievement in Alaska Schools**

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## **Executive Summary**

This study is an assessment of the impact of Alaska school librarians on academic achievement in the state's public schools. It examines the direct relationship between such staffing and student performance, and identifies selected activities of library media staff that affect test scores. Other conditions of library media center operation—hours open, available technology, relationship with the public library, and selected policies—are also considered as potential predictors of academic achievement.

### **New Information Power Principles & Previous Research**

This study's findings expand upon those of **The Impact of School Library Media Centers on Academic Achievement** (also known as “the Colorado study”), verify almost half a century of previous research on that topic, and demonstrate empirical support for the principles of **Information Power: Building Partnerships for Learning** (1998).

### **Methodologies**

During the 1997-98 school year, library media centers in 211 Alaska public schools were surveyed about their staffing levels, hours of operation, staff activities, usage, technology, policies, and cooperation with public libraries. To the survey results, other data were added. For grades four, eight, and eleven, each school reported the percentage of students scoring below proficient, proficient, and above proficient on Version 5 of the California Achievement Tests (CAT5) of reading, language arts, and mathematics.

Using three analytical techniques—crosstabulation, comparison of means, and correlation—each library media program characteristic was assessed as a potential predictor of academic achievement. Relationships among potential library media predictors that might create indirect effects on academic achievement were also examined. After the direct and indirect effects of librarians on academic achievement were assessed, their effects relative to other school and community factors were analyzed via multiple regression.

### **Findings**

School librarians are the “information empowered,” because they play three critical roles in the learning community. They are teachers, information specialists, and administrators. In each of these roles, they empower students and teachers to meet high standards of academic achievement.

Following is a summary of positive, statistically significant relationships confirmed by this study:

## **Library Media Specialist Staffing**

- Test scores tend to be higher where there is
  - a librarian,
  - a full-time librarian rather than a part-time one,
  - a part-time librarian rather than no librarian at all.

## **Library Media Center Hours Open**

- Higher levels of librarian staffing lead to
  - longer LMC hours of operation,
  - higher levels of library media staff activity,
  - higher student usage, and consequently
  - higher test scores.

## **Staff Activities**

- The higher the level of librarian staffing, the greater the percentage of library media staff hours dedicated to
  - delivering library/information literacy instruction to students,
  - planning instructional units cooperatively with teachers, and
  - providing in-service training to teachers and other staff.
- Regardless of level of librarian staffing, the more library media staff time devoted to these activities, the higher the test scores.

## **Library Media Program Usage**

- The more often students receive library/information literacy instruction in which library media staff are involved, the higher the test scores.

## **Partnerships, Technology & Policies**

Test scores also tend to be higher where

- there is a cooperative relationship between the LMC and the public library.
- the library media program provides online access to information—particularly the facilities required to reach the Internet and the World Wide Web—and
- the LMC has a collection development policy that addresses reconsideration of materials.

## **Controlling for Community and School Conditions**

In addition, this study weighed the relative effects on academic achievement of library media specialist staffing, other school characteristics (i.e., per pupil spending, teacher-pupil ratio), and community conditions (i.e., adult educational attainment, Alaska Native population, poverty). While community conditions proved to have the strongest impact, the librarian-pupil ratio outweighed both per pupil expenditures and teacher-pupil ratio at the elementary level and the teacher-pupil ratio at the secondary level. Throughout the study, school size was controlled for by using ratios, such as the librarian-pupil ratio (i.e., typical weekly hours of librarian staffing per 100 students).

The small size of the data set and correlation between explanatory variables prevent our being able to assess the effect of library media services relative to other explanatory variables, while also controlling for community conditions. However, given these limitations, the data generally support the hypothesis that library services are beneficial for students in all communities.

In tackling these issues, this study broke new ground by taking recommended next steps beyond previous research. Its assessments of the efficacy of specific staff activities and online access to information are two examples of this accomplishment. This study also verifies that relationships to academic achievement found previously for school libraries in other states and communities are not anomalous, but apply equally to Alaska's school libraries. Like earlier studies, this one demonstrates that its key finding—the positive relationship between school librarians and test scores—cannot be explained away entirely by differences in school size, funding, and teacher staffing levels.