Powering Achievement

The Impact of School Libraries & Librarians on Academic Achievement

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Outline

- Background
  - States involved, Info Power context

- Results
  - Library predictors of academic achievement
  - Controlling for school & community conditions

- Implications
  - Recommended actions
  - Other research questions
  - What you can do
Previous Research

1950s-1980’s: largely experimental research
- Librarian as teacher, co-teacher, tutor
- Collections, technology, interlibrary cooperation
- Library staff, budgets, teacher & principal support

1992/3: 1st Colorado study: statistical analysis
- School Match episode
- “School Match Revisited” aftermath
- The Big Question … and the answer
Information Power Model

Successor to earlier IP & Library Power

Themes
- Collaboration
- Leadership
- Technology

Roles
- Learning & Teaching
- Information Access & Delivery
- Program Administration
Standards-Based Education

Standardized, norm-referenced tests
- Reading tests
- Library/study skills tests
- Percentile rankings (grading “on the curve”)

Standards-based tests
- Content standards
- Information literacy standards
- Percent who meet or exceed standards
Technology

- Rapid growth in availability of computers, Internet access, World Wide Web capabilities in schools
- Changing nature of teacher-librarian & technology specialist jobs
- Common ground: “information literacy”
Challenge to Recent Studies

Take into account

- Info Power/Library Power movements
- Standards-based education
- Technology developments

Get message out beyond “the choir”

- Principals, teachers
- Technology specialists
- Parents, students
Schools & Libraries Studied

- Since 2000, 14 states
  - AK, CO, FL, IA, IL, MA, MI, MN, MO, NC, NM, OR, PA, TX
- Over 8,700 schools
- Elementary, middle and high school libraries serving an estimated 2.6 million students
Library Predictors of Academic Achievement

Library staffing

Professional staff (teacher-librarians)
- Master’s/bachelor’s degrees
- Teacher certification & experience
- Library endorsement

Support staff
- Library aides, technology aides
Library Predictors of Academic Achievement

- Staff Activities
  - Learning & Teaching
  - Information Access & Delivery
  - Program Administration
Library Predictors of Academic Achievement

Staff Activities

Learning & Teaching

- Planning with classroom teachers
- Teaching students with classroom teachers
- Teaching information literacy skills to students (without classroom teachers)
- Providing in-service training to classroom teachers
Library Predictors of Academic Achievement

Staff Activities

Information Access & Delivery

- Developing collections
- Identifying print & electronic resources for classroom teachers
- Motivating students to read
Library Predictors of Academic Achievement

Staff Activities

Program Administration

- Meeting regularly with principal
- Attending faculty meetings
- Serving on key committees
- Meeting with other school librarians
Library Predictors of Academic Achievement

- School library hours of operation
  - Before, during & after school
  - In summer
  - Flexible access/scheduling

- School library usage
  - Group visits
  - Individual visits
  - Both for information literacy skills instruction
Library Predictors of Academic Achievement

Technology

**Numbers of computers**
- In library
- Elsewhere in school

Providing access to
- Library catalogs
- Licensed databases
- State-specific packages of databases
- Internet/World Wide Web
The Latest Results: sample Illinois findings

- Test scores higher at schools with more:
  - Flexible scheduling (+10-11% elem.)
  - Library staffing (+17-18% elem., middle)
  - Librarian/teacher collaboration (+8% elem.)
  - Current collections (+13-14% middle)
  - Library & other connected computers/100 (+8-11% middle)
  - Library spending (+5% elem., +9% middle, +12% high)
  - Circ (+11%, elem.), group visits (+9-10%, middle)
Controlling for Other School & Community Conditions

- School library development factor
  - Staffing, collections, expenditures
- Other school conditions
  - Per pupil spending
  - Teacher-pupil ratio
- Community conditions
  - Poverty (NSLP eligibility)
  - Minority enrollment
  - Adult educational attainment (age 25+ graduated from high school)
**Academic Achievement**

*Predictors Ranked*

Ranked by percent of test score variation explained:

- **Poverty** (NSLP eligibility): 50-65%
- **School library development**: up to 8%, typically 3%

Variables that don’t explain any test score variation consistently:

- Adult educational attainment
- Minority enrollment
- Per pupil spending
- Teacher-pupil ratio
Recommended Actions

- Staff school libraries with professional & support staff
- Stock them with current books & licensed databases as well as Internet computers
- Fund them to support school’s curriculum and state’s standards
- Adopt flexible scheduling
- Utilize school computer network to extend library program’s reach into every classroom
Other Research Questions

- How best can leadership and collaboration skills of teacher-librarians be developed?
- What do teachers and administrators know—and need to learn—about the role of school libraries?
- How can information literacy and technology dovetail to maximize library’s impact?
What You Can Do

- Collect and share meaningful numbers annually
- Record and share success stories
- Respond to appeals from researchers
- Pursue “action research” projects yourselves
For more information...


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