### **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 IIILRS



### 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 III LRS



- Staff Activities
  - Learning & Teaching
  - Information Access & Delivery
  - Program Administration

## Library Predictors of Academic Achievement ....LRS



#### 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 IIILRS



#### Staff Activities

#### Information Access & Delivery

- Developing collections
- Identifying print & electronic resources for classroom teachers
- Motivating students to read

## Library Predictors of Academic Achievement ....LRS



#### 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 IIILRS



- 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 IIILRS



#### 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 teacherlibrarians 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...



□ Visit <a href="http://www.LRS.org/impact.asp">http://www.LRS.org/impact.asp</a>

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