



**Haves, Halves, and Have-nots:
School Libraries and
Student Achievement in California**

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CSLA Conference
November, 2008**

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<http://www.sbhsd.k12.ca.us/sbhslib/library.htm>

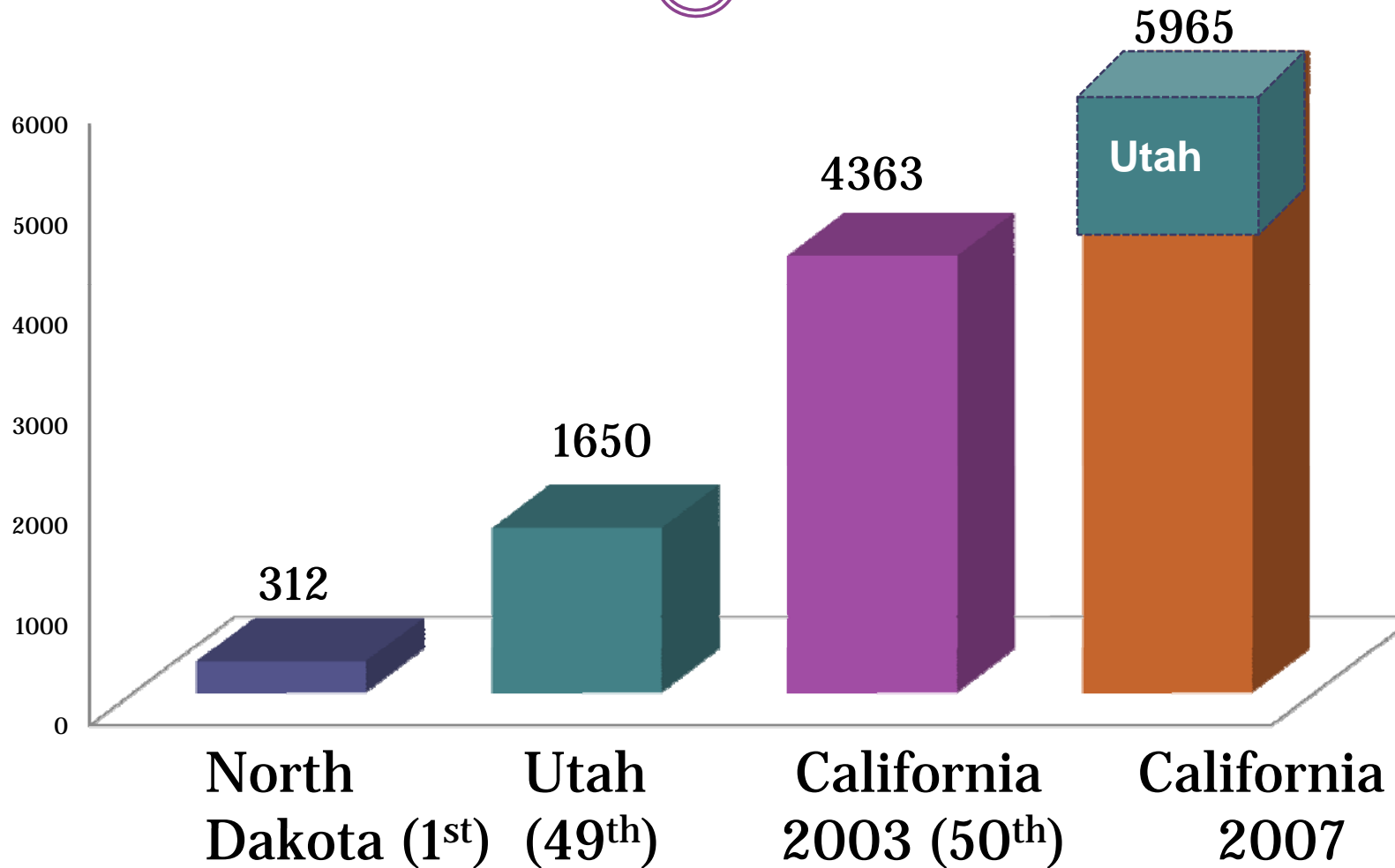
Make a List

2

- What library services are provided *through your library* that you believe contribute to student achievement?
- Beyond services, what other library program elements *at your library* do you believe contribute to student achievement

Students per LMS

3



Everhart, 2003; CA Dept. of Education, 2007

So What?

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Alaska

Delaware

Colorado*

Massachusetts

Ohio

Florida

Michigan

Oregon

Illinois

Minnesota

Pennsylvania

Indiana*

Missouri

Texas

Iowa

New Mexico

Wisconsin

N. Carolina

Ontario, Canada

CA Study: Haves, Halves and Have-Nots: School Libraries and Student Achievement in California

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- **Student achievement measured by:**
 - Grade 4 ELA California Standards Test (CST)
 - Grade 8 ELA CST, Social Studies CST
 - Grade 11 ELA CST, U.S. History CST

Library Data

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- **California Department of Education
School Library Survey 2006-2007**

School and Community Variables



- **Percentage of students eligible for free and reduced lunch**
- **Average parent education**
- **Percent English language learners (ELL)**
- **Percent minority students**
- **Average teacher salary**
- **Percent of teachers fully credentialed**
- **Data from API, SARC**

Data Sources

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- All data from 2006-2007 school year
- 2006-2007: 5,442 out of 8,153 comprehensive public schools (67%) had data from all 4 sources.

Results: Certificated Library Staff Hours, Grade 4

10

Certificated Staffing Level	Number	%
No certificated staff	2986	84.6
Less than half-time	206	5.8
Half-time or more, but not full-time	180	5.1
1 FTE	138	3.9
More than 1 FTE	18	0.5
Total	3528	100.0

Results: Certificated Library Staff Hours, Grade 8

11

Certificated Staffing Level	Number	%
No certificated staff	757	63.2
Less than half-time	49	4.1
Half-time or more, but not full-time	64	5.3
1 FTE	280	23.4
More than 1 FTE	47	3.9
Total	1197	100.0

Results: Certificated Library Staff Hours, Grade 11

12

Certificated Staffing Level	Number	%
No certificated staff	435	44.1
Less than half-time	34	3.4
Half-time or more, but not full-time	46	4.7
1 FTE	402	40.7
More than 1 FTE	70	7.1
Total	987	100.0

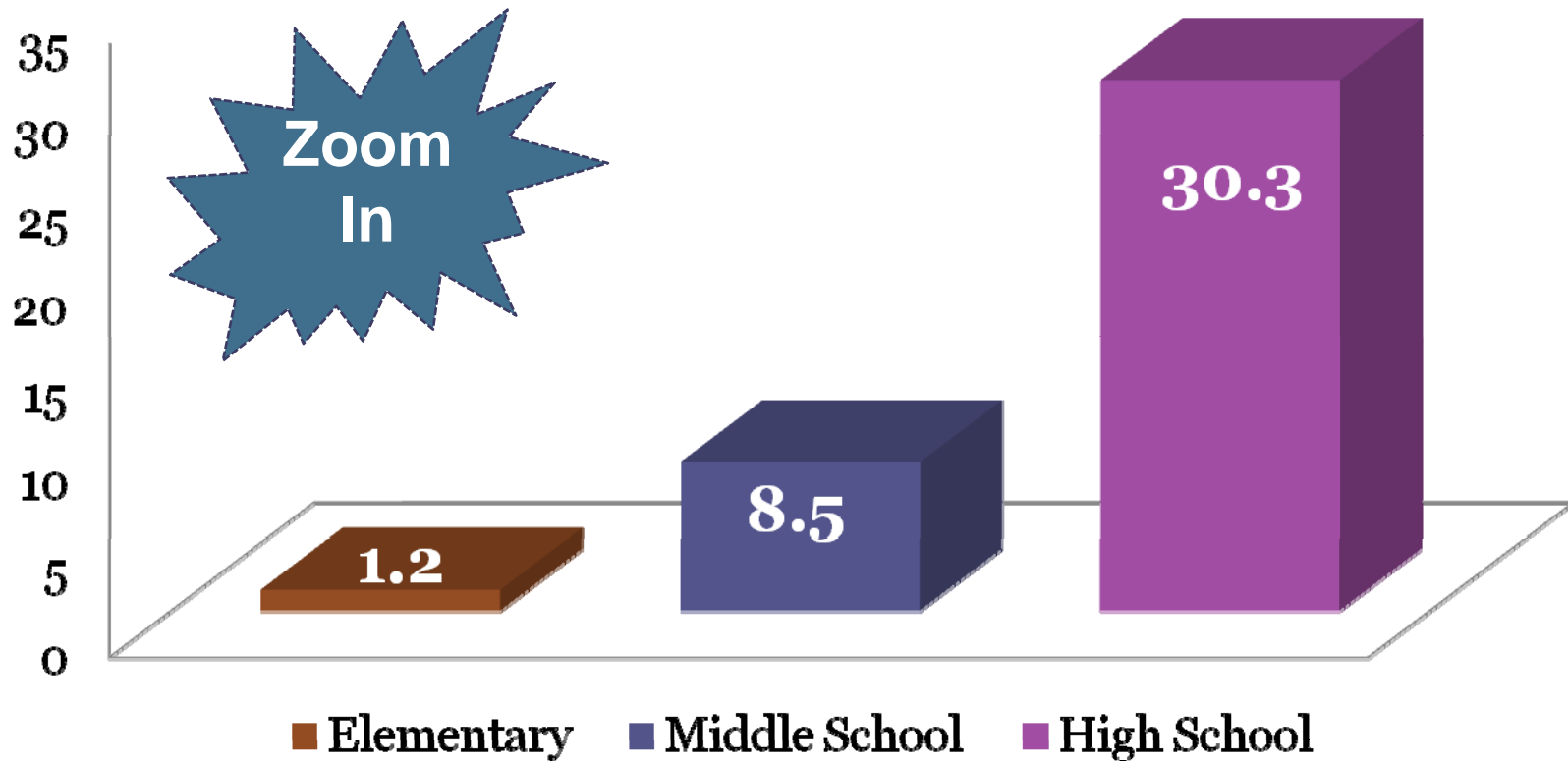
Full-Time Librarian and Full Time Clerk

13

- **Grade 4: 43 of 3528 libraries (1.2%)**
- **Grade 8: 102 of 1197 libraries (8.5%)**
- **Grade 11: 292 of 965 libraries (30.3%)**

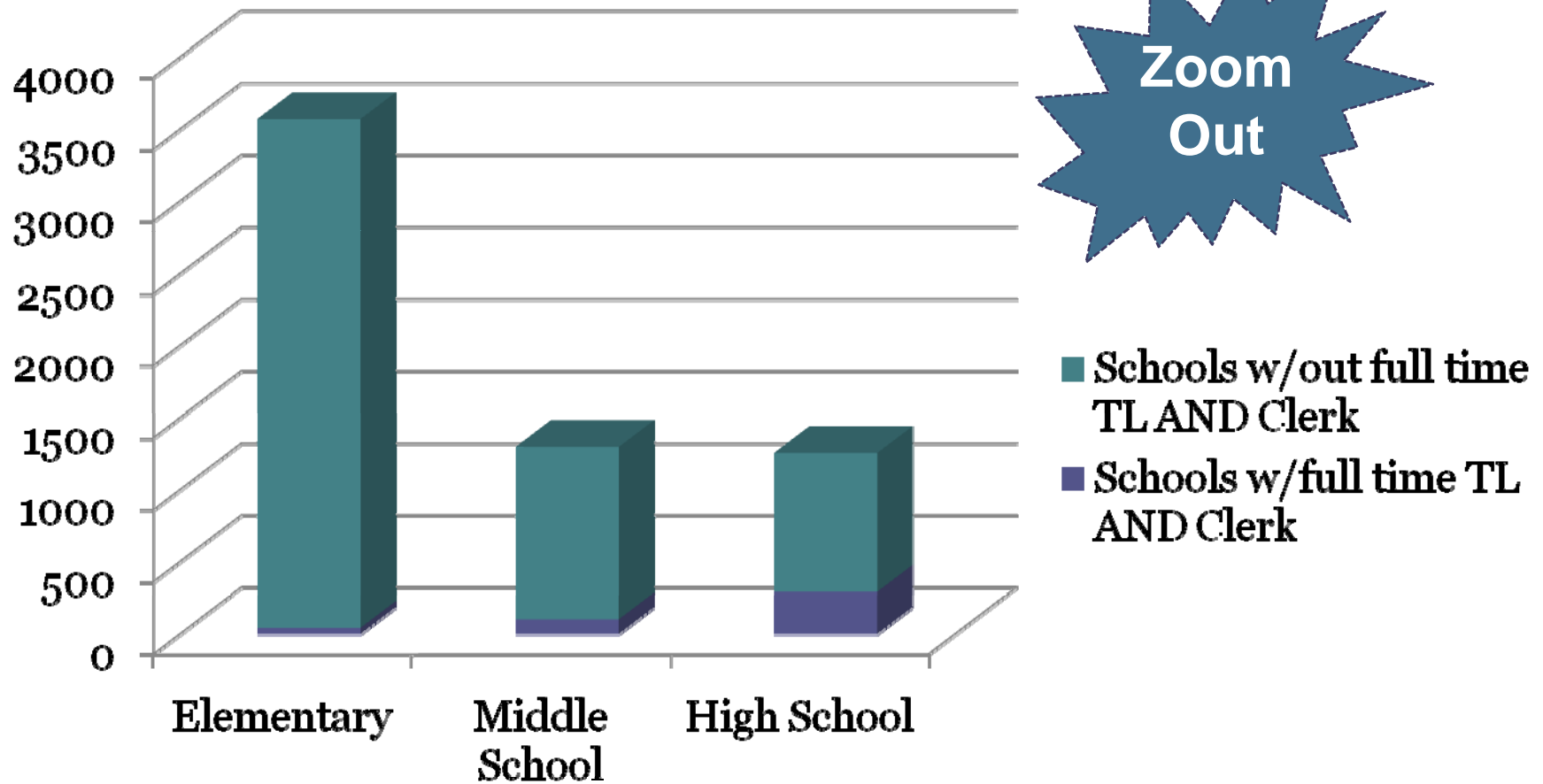
% Schools w/Full Time TL, Full Time Clerk

14



% Schools w/Full Time TL, Full Time Clerk

15



Teacher Librarian Staffing Levels Make a Difference ...

16

Grade	CST Test	Pearson r
4	English Language Arts	.06**
8	Social Studies	.07*
11	English Language Arts	.44**
11	U.S. History	.45**

*p<.01

**p<.001

Total Staffing Levels Make a Difference ...

17

Grade	CST Test	Pearson r
8	English Language Arts	.12**
8	Social Studies	.19*
11	English Language Arts	.54**
11	U.S. History	.56**

*p<.01

**p<.001

All remained significant when controlling for all school and community variables

Library Services as Predictors of Student Achievement

18

Offering a program of curriculum-integrated information literacy instruction

Grade	CST Test	r
4	ELA	.12**
8	Social Studies	.14**
11	U.S. History	.39**

*p <.01, **p <.001

All remained significant when controlling for school and community variables

Curriculum-integrated information literacy instruction

19

- Why does this factor show up? How could we make it stronger?
- What is something you do in your library program that might help explain the relationship between this factor and student achievement?
- What kind of data could we collect to demonstrate that impact?

Library Services as Predictors of Student Achievement

(20)

Informally instructing students in the use of resources

Grade	CST Test	r
4	ELA	.16**
8	Social Studies	.22**
11	U.S. History	.47**

*p <.01, **p <.001

All remained significant when controlling for school and community variables

Informally instructing students in the use of resources

21

- **Why does this factor show up? How could we make it stronger?**
- **What is something you do in your library program that might help explain the relationship between this factor and student achievement?**
- **What kind of data could we collect to demonstrate that impact?**

Library Services as Predictors of Student Achievement

(22)

Providing reference assistance to students and teachers

Grade	CST Test	r
4	ELA	.11**
8	Social Studies	.22**
11	U.S. History	.47**

*p <.01, **p <.001

All remained significant when controlling for school and community variables

Providing reference assistance to students and teachers

23

- Why does this factor show up? How could we make it stronger?
- What is something you do in your library program that might help explain the relationship between this factor and student achievement?
- What kind of data could we collect to demonstrate that impact?

Library Services as Predictors of Student Achievement

(24)

Collaborating with teachers to develop, plan, implement, evaluate student learning

Grade	CST Test	r
4	ELA	--
8	Social Studies	.08**
11	U.S. History	.29**
**p <.001		

Correlations remained significant at grades 8, 11 when controlling for school and community variables

Collaborating with teachers to develop, plan, implement, evaluate student learning

25

- Why does this factor show up? How could we make it stronger?
- What is something you do in your library program that might help explain the relationship between this factor and student achievement?
- What kind of data could we collect to demonstrate that impact?

Library Services as Predictors of Student Achievement

(26)

Providing instruction on Internet searching and research

Grade	CST Test	r
4	ELA	.06**
8	Social Studies	.17**
11	U.S. History	.47**
**p <.001		

Correlations remained significant at grades 8, 11 when controlling for school and community variables

Providing instruction on Internet searching and research

27

- Why does this factor show up? How could we make it stronger?
- What is something you do in your library program that might help explain the relationship between this factor and student achievement?
- What kind of data could we collect to demonstrate that impact?

Library Services as Predictors of Student Achievement

(28)

Providing reading, listening and viewing guidance for students

Grade	CST Test	r
4	ELA	.09**
8	Social Studies	.14**
11	U.S. History	.35**
**p <.001		

Correlations remained significant at grades 8, 11 when controlling for school and community variables

Providing reading, listening and viewing guidance for students

29

- Why does this factor show up? How could we make it stronger?
- What is something you do in your library program that might help explain the relationship between this factor and student achievement?
- What kind of data could we collect to demonstrate that impact?

Library Services as Predictors of Student Achievement

(30)

Communicating proactively with principal

Grade	CST Test	r
4	ELA	.15**
8	Social Studies	.21**
11	U.S. History	.45**
**p <.001		

Correlations remained significant at grades 8, 11 when controlling for school and community variables

Communicating proactively with principal

31

- Why does this factor show up? How could we make it stronger?
- What is something you do in your library program that might help explain the relationship between this factor and student achievement?
- What kind of data could we collect to demonstrate that impact?

Total Library Staff Services As a Predictor of Student Achievement

32

Grade	Test	r
4	ELA	.14**
8	ELA	.19**
8	Social Studies	.24**
11	ELA	.49**
11	U.S. History	.51**

****p <.001. All remained significant when controlling for school and community variables**

Survey feedback

33

- **What other library services should we be looking at?**

Other Library Program Predictors of Academic Achievement: Hours Open

34

Grade	Test	r
4	ELA	.08**
8	ELA	.16**
8	Social Studies	.20**
11	ELA	.52**
11	U.S. History	.54**

**p <.001

Significance persisted when controlling for all school, community variables.

Hours Open

35

- Why does this factor show up?
- How could we make it stronger?
- What kind of data could we collect to demonstrate that impact?

Other Library Program Predictors of Academic Achievement: Total Technology

36

Grade	Test	r
4	ELA	.11**
8	ELA	.19**
8	Social Studies	.22**
11	ELA	.49**
11	U.S. History	.51**

**p <.001

Significance persisted when controlling for all school, community variables.

Total Technology

37

- Why does this factor show up?
- How could we make it stronger?
- What kind of data could we collect to demonstrate that impact?

Other Library Program Predictors of Academic Achievement: Collection Size

38

Grade	Test	r
4	ELA	.08**
8	ELA	.05**
8	Social Studies	.10**
11	ELA	.44**
11	U.S. History	.46**

**p <.001

Significance persisted when controlling for all school, community variables.

Other Library Program Predictors of Academic Achievement: Total Non-Staff Budget

39

Grade	Test	r
4	ELA	.07**
8	ELA	.06**
8	Social Studies	.09**
11	ELA	.36**
11	U.S. History	.36**

**p <.001

Significance persisted when controlling for all school, community variables.

Total Library Program as Predictor of Academic Achievement

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- **Factor Analysis: 1 variable each for**
 - School
 - Community
 - Library
- **Multiple regression**

Total Library Program as Predictor of Academic Achievement

41

Grade	Dependent Variable	ΔR^2	Significance
4	ELA	.002	<.001
8	ELA	.02	<.001
8	Social Studies	.03	<.001
11	ELA	.19	<.001
11	U.S. History	.21	<.001

Best Predictors of Student Achievement

42

- **Middle school:**
 1. Community variables
 2. School variables
 3. Library variables
- **High School ELA**
 1. Community variables
 2. Library variables
 3. School Variables
- **High School U.S. History:**
 1. Library variables
 2. Community variables
 3. School variables

Staffing as a Predictor of Total Library Services

43

Grade	Certificated Staffing	Total Staffing
4	.18**	.38**
8	.46**	.59**
11	.70**	.79**

**p <.001

As staffing increases, so do library services.

As library services increase, so does student achievement.

Total Staffing as a Predictor of Library Services: Hours Open

44

Grade	Certificated Staffing	Total Staffing
4	.13**	.47**
8	.32**	.68**
11	.64**	.80**

**p <.001

Instruction in Online Research and Staffing

45

Grade	Certificated Staffing	Total Staffing
4	.15**	.27**
8	.36**	.48**
11	.64**	.71**

**p <.001

Reference Assistance and Staffing

46

Grade	Certificated Staffing	Total Staffing
4	.04**	.23**
8	.23**	.46**
11	.59**	.73**

**p <.001

Readers' Advisory and Staffing

47

Grade	Certificated Staffing	Total Staffing
4	.07**	.20**
8	.27**	.35**
11	.54**	.61**

**p <.001

Implications

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- **Certificated + Clerical Staffing = More Services**
- **More Services = Higher Student Achievement**

Implications

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- **Lack of equity in CA education**
- **90% of principals' knowledge of what library media specialists do comes from their experience on the job (Lance, Rodney & Russell, 2007)**

What Next?

50

Planning Template: Gathering Data to Share with School, Site Council, School Board, and Beyond

Program Element	National data?	CA data?	At my school?	So what?

What Next?

51

- Gather local data statewide
- Use fundourfuturestories.pbwiki.com as a model.
- Go to caschoollibraries.pbwiki.com, ask to join.
 - Tell the story from your own school about how your library program boosts student achievement.