

Breaking Down Barriers

Breaking Barriers with Student-Centred Teaching and Learning Using Library Books in the United States' Poorest Schools

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An analysis of a random sample of the 2930 applications for library books to a private U.S. Foundation from schools having 75% or more of students on free or reduced lunch identifies characteristics of these poorest schools and demonstrates how they would use the newly acquired books in relation to student and collection needs. Results reveal the impact of national and state legislation, the widespread use of the Accelerated Reader System, and the need for bilingual and multicultural books. These libraries appear more focused on improving student achievement test scores than on promoting general information literacy.

Purpose of the study

Lack of academic success in schools of children living in poverty and accompanying inadequate library resources are issues that all countries potentially have in common. An ongoing grant program by a private Foundation in the United States¹ is attempting to address this situation by providing schools with funds to purchase library books. The goal of the Foundation is to promote academic achievement and to help develop a life-long love of reading for students who may otherwise fail in school and life. The Foundation solicited its first round of applications in 2003.

According to the most recent data (1999-2000) from the National Center for Education Statistics (NCES), in the United States there are 112,135 schools serving 50.7 million students; school libraries/media centers are in 84.3% (94,529) of the schools (U.S. Department of Education, Center for Education Statistics, 2002). Of the students served, 35.7% (18 million) are eligible for the government's Free and Reduced-Price Lunch Program (FRL)² ; 82.6% (92,623) of the schools have students participating in the program (U.S. Department of Education, National Center for Education Statistics, 2002). In the current grant competition, the application clearly stated that preference would be given to those with 75% or more of students eligible for FRL. The response to this initial round was a total of just over 6000 applications, 51% of which fell into the 75% or above FRL eligibility range. Awards were up to USD 5,000, an amount that far exceeds most annual budgets of the applicants studied.

The purpose of this study is to analyze the results of competition for the applicants with more than 75% of children on FRL. The applications present an unprecedented opportunity to observe documented need in the poorest school libraries throughout the United States and to ascertain how these schools would use a one-time infusion of funds.

Background to the study

The relationship between poverty and reading success

Poverty in the United States is a barrier to achievement in school and life-long enjoyment of reading. Children under 18 comprise 35.6% of the over 32.9 million residents of the United States who live below the poverty line (U.S. Census Bureau, 2002). Children from low-income families score 27 points below the mean reading level score for

all students. Students from wealthy families score 15 points above the average (U.S. Department of Education/National Center for Education Statistics, 1993).

What barriers to reading achievement exist for poorer children?

Children from low-income families perform poorly on reading tests because they do not have access to an adequate supply of books to read at home as well as at school. In 1996 in the U. S., approximately 61% of low-income families had no books at all for the children in their homes (U.S. Department of Education, 1996). Not only at home, but ironically, also in classrooms and libraries, poorer children have been found to have less access to books – for a variety of reasons.

Both classroom research (Allington, 1996; Duke, 2000) and library system research (Neuman, 2002) demonstrate that even when the environment is relatively print rich, restrictions placed on poorer children due to federal, state, and local school or classroom policies give them less intellectual and physical access to books, including less time with a teacher or librarian and fewer hours to spend reading. Other studies (Neuman, 2001; Smith & Kraschen, 1997; Neuman & Celano, 2001) support the evidence of a direct relationship between low income and low access to books.

What difference does a print rich environment make?

Two seminal studies by Elley (1983, 1992) provide substantial evidence that students with access to books (in home, community, school, and book stores) progress best in reading comprehension. Across cultures, Elley (1992) found that large school libraries, classroom libraries, access to books at home, silent reading and reading aloud by teachers made the difference between high-scoring and low-scoring countries. This importance of a print rich environment for reading success reaches down to preschool children (Neuman, 2001).

Four decades ago, Gaver (1963) established a relationship between the adequacy of school library collections and student achievement in reading. Recent research focused specifically on school libraries has demonstrated that a good ratio of books to students in school libraries, when used in collaboration with teachers for student-centred teaching and learning, correlates positively with higher reading scores on state reading tests, even when controlling for the poverty level of the community (Lance, 2002). Lance *et al.* (1993) demonstrated a correlation between higher test scores and increased spending for library media in Colorado. In the decade that has followed he and others have built upon the knowledge gained in the first Colorado study, with studies in Alaska, Iowa, Massachusetts, Oregon, Pennsylvania, Texas, and New Mexico (Library Research Services, 2003). Krashen (1995) documented, in each of the U.S. states, a significant positive correlation between the 1992 fourth-grade reading comprehension scores on the National Assessment of Education Progress (NAEP)³ and the number of books per student in school libraries, regardless of how much money each state spent on education per pupil.

Research Questions

- What are the demographic characteristics of students in the poorest schools in the United States and how do these schools compare to all schools in the U.S.?
- How do schools in the United States with the most needy children perceive children's needs for books?
- How do poor schools document the needs in their book collections and what they are?
- What use do these schools propose to make of books to address student and collection needs?
- Do schools propose uses of the books that promote understanding between cultures?
- How do poor schools perceive possible outcomes of their proposed use of books in terms of student achievement and life-long love of reading?
- How student-centred are the proposals?

Methodology

A total of 5701 applications (see Appendix I) were received through the Foundation web site of which 2930 (51%) fell in the poverty range targeted by the Foundation. Not included here are 300 sent via regular mail. Using 75-100% of students FRL-eligible, is a much more stringent level of poverty than is required by other grant programs for schools that consider the student neediness.⁴

From this poorer 51% of the total applicant population, a sample of 100 applicant schools were selected using the random numbers generating feature of Excel®. The 100 schools in this sample (mean=87.25, S.D.=8.27) did not differ significantly (student's $t=0.08$, $p=0.93$) in percentage of FRL-eligible students from the underlying population of 2930 (mean=87.32, S.D.=8.05).

Schools were grouped by grade level into elementary schools (preK-5, ages 5-10) and secondary schools (6-12, ages 11-18). Schools also were grouped by state into four geographical regions as defined by the U.S. government: Northeast, Midwest, South, and West (U.S. Government Fedstats, 2003). Job titles were grouped into 2 categories (Library staff and Other) depending on whether the person identified him or herself as a librarian, or someone with non-library responsibilities.

School setting and student body ethnicity data were obtained from the Common Core of Data at the National Center for Education Statistics (NCES) (Gross, 1999). The nine NCES categories for setting were collapsed into 3: urban, suburban, and rural. In some schools, the student body consisted predominately (at least 85%) of a single ethnic group. In others, no single group predominated; these were termed "multiethnic" schools.

Students' t-tests, analyses of variance (ANOVA) for differences among means, and regression analyses to detect relationships between variables were performed on the number of students, the number of books, and the current year's book budget.

Chi-square tests for relationships between variables and homogeneity of distributions, Spearman's correlations for assessing the relationship between variables, and Kruskal-Wallis tests for homogeneity of medians were performed on the variables of region, setting, ethnicity, special program use, grade level, and responsible person. In order to determine whether the schools in the sample differed from the entire population of U.S. schools, data on region, setting, ethnicity and grade level were obtained from the U.S. Department of Education (2002). For a brief comparison, a random sample of 100 schools was drawn from the richest quartile (0-24% of students eligible for FRL) of the pool of applicants.

All statistical tests were performed using the Statistical Package for the Social Sciences (SPSS®). The open-ended responses to questions were imported into NUD*IST,® a tool for performing qualitative analyses of text.

Results and Analysis

Quantitative results describe "what" the schools are like but do not answer the question "why". The 94 qualitative themes and issues identified provide another perspective on these schools, and focuses more on the "why" and "how" linked to the "what" of the quantitative profiles. Only the most salient themes are chosen for this initial analysis. Throughout the analysis, attention is paid to how student-centred applicants are.

Demographic characteristics of some of the poorest schools and students in the United States.

Students

The sample of 100 schools with 75-99%⁵ of students eligible for FRL included 71% elementary schools and 28% secondary schools. The one comprehensive school (K-12) in the sample was dropped from the analysis. This proportion of elementary to secondary to comprehensive schools approximates the overall proportion of 69% elementary to 21% secondary (with 10% comprehensive) in the U.S. regardless of poverty level (U.S. Department of Education, 2002). In the sample, the mean number of students per school was 552.96 ($N=100$, $S.D.=288.5$), whereas the overall U.S. average is 451.88 students per school (U.S. Department of Education, 2002). Data to explain this 100 student per school difference are not available; it may be that schools serving the poorest students are larger or it may be that the difference is attributable to the time periods during which the data were collected (U.S. data apply to 1999-2000, sample data apply to 2002-2003). There was no significant difference between the poorest and richest samples in mean size of student body.

The proportions of predominate ethnic groups in schools in the sample appear to deviate greatly from proportions of ethnic groups in the overall U.S. population of school-aged (5-17 years of age) children (Annie E. Casey Foundation, 2003)

Table 1:

Ethnic Group	Schools in Sample	Overall U.S. Population of School-Aged Children
Native American	3.0%	1.2%
Asian American	0.0%	3.6%
African American	22.0%	15.2%
Hispanic American	14.0%	16.2%
White	7.0%	69.1%
Multiethnic/Other	51.0%	10.9%
Missing data	3.0%	0.0%
TOTALS	100.0%	NA

Percentages of ethnic groups in the sample of poorest schools compared to the percentage of ethnic groups in the United States population of school-aged children (5-17 Years). NA: not applicable because the Hispanic American category is not mutually exclusive to the other categories for the overall U.S. data thus the total percentage exceeds 100.

It appears as though the poorest schools disproportionately serve students of color. Statistical methods are inappropriate to test this relationship because of differences in ethnicity data collection: in schools, students are categorized into mutually exclusive categories whereas in the U.S. census, the category “Hispanic” is not mutually exclusive to other categories of race/ethnicity. However, a comparison of the richest sample to the poorest sample of grant applicants reveals a very strong association (Cramer’s $V=0.716$, $p<0.01$) of children of color with poor schools (Chi-square=97.40, d.f.=4, $p<0.01$).

Schools

The settings⁶ of the sample of poor schools differs significantly from those in the population of U.S. schools (Chi-square=18.86, d.f.=2, $p<0.01$) (Table 2) and from those in the sample of rich schools (Chi-square=38.66, d.f.=2, $p<0.01$).

Table 2:

Region	Sample	Overall U.S. Population
Urban	56.0%	28.5%
Suburban	19.0%	43.4%
Rural	24.0%	28.1%
Missing	1.0%	0.0%
TOTALS	100.0%	100.0%

Percentages of schools by setting in the sample of poorest schools and in the population of schools in the U.S.

The poorest schools in the U.S. are disproportionately set in urban areas and absent from suburban areas. The distribution of the sample schools among the four geographic regions does not differ from the distribution of the population of schools in the U.S. (Chi-square=3.22, d.f.=3., $p>0.05$). In the sample, there is a relationship between school setting and geographical region (Chi-square=23.56, d.f.=6, $p<0.01$).

Table 3:

Region	Urban		Suburban		Rural		TOTALS	
	N	%	N	%	N	%	N	%
Northeast	13	81.3%	3	18.8%	0	0.0%	16	100.0%
Midwest	21	77.8%	3	11.1%	3	11.1%	27	100.0%
South	14	33.3%	9	21.4%	19	45.2%	42	100.0%
West	8	57.1%	4	28.6%	2	14.3%	14	100.0%
<i>TOTALS</i>	<i>56</i>	<i>NA</i>	<i>19</i>	<i>NA</i>	<i>24</i>	<i>NA</i>	<i>99</i>	<i>NA</i>

Distribution of the sample of the poorest schools across region and setting. The percentages given are the percentages within regions. NA = not applicable.

In the south, the largest proportion of poor schools (N=19, 45.2%) is rural, in other regions, the largest proportions are urban.

A comparison of the poorest sample to the richest sample revealed that the person responsible for administration of grant funds is significantly more likely to be a library staff member (89.8%) in wealthier schools than in poorer schools (73.0%) (Chi-square=9.19, d.f.=1, $p<0.01$).

Book Collections and Budgets

In the sample, the mean number of books was 7,888.81 (N=100, S.D.=4455.6), and the mean book budget for the current year was USD 4,115.58 (N=100, S.D.=3602.4). The number of books in a school's collection varies significantly across setting ($F=3.79$, $p<0.05$). Suburban schools (Mean= 8,745.58, S.D.=3335.22) have larger book collections than do urban (Mean=5,989.48, S.D.= 4770.93) or rural (Mean=5665.28, S.D.=4004.63) schools.

The median number of books per student is 14.6 (interquartile range=12.43), less than the 16-25 books per student cited as a desirable standard by the California Department of Education (California Department of Education, 2003). However, this median exceeds the requirements of various regional school accreditation organizations. For example, the Southern Association of Colleges & Schools (SACS) requires 10 books per student in conjunction with size of overall collection (Southern Association of Colleges and Schools, 2000, 2002).

In their biennial surveys of school libraries/media centers, Miller and Shontz (1999) survey school libraries randomly sampled nationwide regardless of poverty level. In three regions of the country, the medians for books per students of schools in the current sample are below the medians of schools most recently surveyed by Miller and Shontz (2000).

Table 4:

Region	Number of Books per Student				Book Budget per Student			
	Miller and Shontz, 2000		Present Study		Miller and Shontz, 2000		Present Study	
	Median	I.R.	Median	I.R.	Median	I.R.	Median	I.R.
Northeast	20	-	16.9	21.6	9.1	-	6.4	4.2
Midwest	18	-	10.0	16.1	7.5	-	5.0	6.7
South	14	-	16.1	8.8	6.9	-	7.6	7.2
West	14	-	11.5	8.8	5.9	-	8.6	11.7

Comparison of number of books per students and book budget per student in the Miller and Schontz (2000) sample and in the sample of the poorest schools. NR indicates that the interquartile range was not reported.

In the South, the median of schools in the present sample is higher than that of the Miller and Shontz (2000) sample.

The median book budget per student was USD 6.68 (interquartile range= 6.66). In two regions, the medians were lower than those of Miller and Shontz (2000) but in the South and the West, they were higher (Miller and Shontz, 2000). The average cost of a children's or young adult book in the United States in 2003 is USD 19.18 (St. Lifer, 2003) thus the poorest schools are not able to provide even one new book per student in the current budget year. Yet this does not differ from the plight of school libraries throughout the United States which has a median per student spending overall of USD 8.09 per student (Miller and Shontz, 2001). It is interesting to note that the richest and poorest samples did not differ significantly either in mean books per student or mean book budget.

The collective picture

Based on the data in this study, we can say that the poorest schools are urban except in the South where the poorest schools are rural. Students of color are over-represented compared to their proportion of the youth population, reflecting the relationship between race (or ethnicity) and poverty. It is not surprising that the median number of books per student is less than the national median in three of the four regions of the U.S. It is surprising that, as a region, the South, with the largest number of poor schools, has more books per student and a higher budget than the U.S. medians. It may be that southern schools have noted the discrepancy and are trying to catch up. It also may be the result of accreditation requirements. The Southern Association of Colleges and Schools (SACS) has only recently raised its standards to require ten books per student. Overall, the size of the collections in this study seems to measure up to most regional and state standards in books per student. However, the amount spent per student is less than one book per student, pointing to aging collections, doomed to get older. The national picture for both the poorest and for all school libraries is not what is considered desirable to support adequately student reading and learning.

The influence of national and state legislation

The impact of the *No Child Left Behind Act of 2001 (NCLB)* demonstrates that the effect of national legislated policy on local conditions is inescapable. The content of these applications affirm that one cannot study school collections without taking into account the national and state political context. The *No Child Left Behind Act of 2001* (U.S. Congress, 2002), signed into law on January 8, 2002, is a reauthorization of the original *Elementary and Secondary Act of 1965 (ESEA)*, which for many years provided large quantities of funds for school libraries. NCLB incorporates far-reaching revisions to previous iterations of this legislation, with a much greater focus on student achievement and school accountability. NCLB has a grant program entitled *Improving Literacy through School Libraries*. Although an important source of support for school libraries, these grants are large and the application requires a considerable amount of time and effort to complete, so this is not a program that ultimately will benefit most of the nation's 94,529 school libraries directly.⁷

Eleven percent of the applicants in the present study mentioned *NCLB* by name in justifying their requests. However, comments referring to specific requirements or programs within *NCLB* were far more common than a general reference, e.g., 239 in the 100 applications referred to students reading at grade level. A provision of the *Reading First* section of *NCLB* is that all children shall read at grade level by third grade and within twelve years all students tested are to be reading at grade (U.S. Department of Education, 2003c). *NCLB* spells out the progressively more severe consequences for schools that do not reach this goal in one to five years. Often, applicants documented the neediness of their student population by stating how many students read below grade level.

The requirement that reading programs be developed from scientifically-based research permeates *NCLB*, including the *Improving School Libraries Through Literacy* program. The emphasis is on phonemic awareness, phonics, fluency, vocabulary, and comprehension, skills that were studied by the National Reading Panel (NRP).⁸ The report of this National Reading Panel (International Reading Association, n.d.; National Reading Panel, 2000) led to inclusion of these five skills as foundational in *NCLB*. Numerous applicants referred to one or more of these skills, particularly fluency and comprehension. Numerous applicants alluded to the achievement tests upon which their students had to improve. Doing well on achievement tests was the most frequently mentioned expectation of the impact of the new books. "Our faculty is very focused on increasing our students' reading achievement, and this funding will help us provide one more resource to our students to promote that achievement," wrote one applicant.

Notably science was the non-fiction collection area most requested in the grant applications. Documented evidence of out-dated science collections appeared repeatedly. “Our science books are so outdated, the potential for our students to fall behind in their achievement is great.” Although achievement testing currently focuses on reading and math, science testing will also be required beginning in the 2007-08 school year (U.S. Department of Education, 2003b). So it is both the age of the collection and the impending need to demonstrate achievement that most likely drive some requests in this area. However, numerous requests cited age in combination with student interests and needs, e.g., science fair projects, so the impending required testing was not universal in applications for science books.

A reason for adding books to the collection, mentioned sometimes in relation to *NCLB*, was a need to meet state standards both for collection size and for achievement goals. “However, because approximately 29% of our students did not meet state standards of proficiency in reading, we need to develop the collection in a direction that will meet the needs of this target group.” *NCLB* allows states to determine what indicates proficiency at a particular grade level, but against whatever level that is, within twelve years all students must perform at a proficient level (U.S. Department of Education, 2003b).

In sum, there is no doubt that the poorest schools in the United States are struggling to improve the reading of their students and that they see library books as a legitimate and necessary means to that end. School personnel are aware of the national legislation and its requirements and that schools will lose both money and students if they fail to participate in prescribed testing or fail to reach the goals set by *NCLB*. No questions about the validity or importance of *NCLB* principles were raised by applicants. Often, these principles were praised, and many applicants demonstrated fervor to attain the goals set for children.

The Use of Computerized Reading Programs with Levels and Quizzes

The most unexpected issue to arise from analysis of the data is the pervasive use, to the extent of dependence on, computerized reading programs that incorporate a way to determine the specific reading level of library books, to assess the reading level of a student, and to test students on their comprehension after reading. Students receive points according to the length and the difficulty of the book. Extrinsic rewards are offered to students as they gain points.

The program that was mentioned most frequently is Accelerated Reader (AR) by Renaissance Learning (Renaissance Learning, 2003a). Special programs other than AR were mentioned too infrequently (N=8) to be included in the analysis. AR was mentioned in 38% of the sample applications, with 139 specific references in the narratives. There is a moderately strong relationship (Chi-square=14.22, 2 d.f., $p<0.01$) between school setting and the use of the AR program. Rural schools mention using AR more often (N=16, 66.7%) than do suburban (N=9, 47.4%) or urban (N=13, 23.2%) schools.

Table 5:

Region	Urban		Suburban		Rural		TOTALS
	N	%	N	%	N	%	N
Mention	13	23.2%	9	47.4%	16	66.7%	38
No Mention	43	76.8%	10	52.6%	8	33.3%	61
<i>TOTALS</i>	<i>56</i>	<i>100.0%</i>	<i>19</i>	<i>100.0%</i>	<i>24</i>	<i>100.0%</i>	<i>99</i>

Use of Accelerated Reader in the sample of the poorest schools by setting. The percentages given are the percentages within settings.

Not all applicants mentioned AR with the same degree of emphasis, so the cumulative number of references is somewhat misleading. A number of schools casually mentioned it at the end, almost as an aside, as one of many reading interventions and ways student success is measured. Many schools did not fixate on the tests, but rather cited AR as promoting student desire to read.

But some applicant schools gave AR so much emphasis that the lack of books to match quizzes was the major thrust of the application. “Our Accelerated Reader program needs to be expanded to include more current titles and replacement books for currently owned quizzes” was a recurring comment. It is not clear why these schools have quizzes with no matching books. Other schools noted that the students will read only books marked AR so they can take quizzes, and that they are ‘out of books’ that students will read. One school noted that only ten percent of the collection was AR books, portraying this as a condition to be remedied. One feature that may account for part of AR’s popularity is its assertion, in line with the national legislation, that it is research-based. A portion of the Renaissance Learning web site is called “Research and Success Stories.” Here one can look for studies according to school or grade level, demographics, and state or country.^{9,10}

AR apparently appeals in a number of ways to those who are struggling for acceptable documentation of reading at grade level. Books are identified by a label that is color-coded to indicate its level. Students locate books at the their identified reading level. Per-student-fee-based proprietary tests, focused on comprehension of facts (Renaissance Learning, 2003c), reveal whether students are making progress. Recalling that NCLB requires student to read proficiently at their grade level provides one clue to the popularity of this reading program.

Another appeal of AR may be its connection to state standards. The AR site provides an analysis of curriculum standards from twenty states, with notes indicating how the AR program addresses specific standards. The introductory material states, “Renaissance Learning recognizes the impact that the standards-based reform movement and high-stakes standardized testing are having on schools and shares the concerns of educators and administrators that students perform well on high-stakes assessments” (Renaissance Learning, 2003b).

Use of the AR Program was mentioned significantly more times (Chi-square=8.86, d.f.=1, $p<0.01$) by schools with the poorest students than by those with richer ones. Because the narratives for the schools with more affluent students have not yet been analyzed, it is not possible to determine what other differences exist between these two sets of schools. One possible explanation for appeal to the poorer schools may be the *NCLB* requirements that ask schools to report achievement score data by race/ethnicity and economic background (U.S. Department of Education, 2003a). Because of the interaction of ethnicity and poverty, poorer schools may feel a greater pressure to find a ‘fix’ for students struggling with reading at grade level and with scoring well on achievement tests. The packaged product and process offered by AR may provide convenience to administrators, teachers, and librarians who know they must demonstrate progress quickly. Even if other methods of emphasizing reading, such as Sustained Silent Reading (SSR) that guarantee time each day for students to read materials of their choice are equally effective, they are not as prescribed or as tied to testing and leveling of texts as is the AR program. These reasons for AR’s appeal may also explain its popularity among rural schools. In addition to poverty, rural schools may have less access to the district-level supported, mentioned by some applicants, in collection development.

The need for bilingual and multicultural materials

When asked to describe student characteristics and needs, almost all applicants responded with demographics about race and ethnicity. Requests for Spanish and bilingual books occurred in all geographical regions of the U.S. Sixty-nine mentions were made of needs of Hispanic students and the paucity of Spanish language materials. Hispanics are the largest minority group in the U.S. population, having overtaken African Americans. The real impact of this is apparent when applications from states not traditionally thought of as sites for Spanish speaking populations, such as Kentucky and Wisconsin, apply for bilingual books to meet their students’ needs.^{11,12} Schools also requested books by or about African Americans. Needs for books reflecting Asian culture and languages were notably low, but requests for cultural and language books for Native Americans exceeded their representation in the U.S. population (*Table 1*). A number of applicants noted that use of language other than English at home created a need for students to find something familiar, reflecting their own family life and heritage, at school.

In addition to requesting books in two languages or in a language other than English, a number of applicants asked for books that reflect the many cultures of their schools. More schools in the sample were multiethnic (51%) than were predominantly one race or ethnic group. A particular emphasis was put on biographies so that children of color might have role models and to help build self-esteem, but multicultural books were also requested to promote inter-group understanding. A number of applicants specified projects with these books to accomplish this goal.

Lessons Learned

Studying a random sample representative of 3,000 libraries serving poorest children in the United States gave the researchers the opportunity to weave together a 'big picture' that would be impossible to obtain without the kind of data in these applications. One feature of this overview documents the profound, complex needs of schools serving poor children in the U.S. and how books can, indeed, be used to help meet at least part of the need expressed. We have also concluded that the focus of 21st century school library media centers in the United States serving the poorest children differs in some notable ways from the vision articulated in U.S. national guidelines (American Association of School Librarians/Association for Educational Communication and Technology, 1998) and in former standards for school media programs. The change is in emphasis, rather than in fundamental principle. Because we have not analyzed comparative data, we do not know whether our conclusions apply to libraries serving more affluent children.

The children. These applications painted a picture of poverty in principally multiethnic schools in the United States. The needs of these schools and children are colossal, e.g., a school with children speaking 30 languages; a school with teen mothers and child care; schools with children in poor health or with learning disabilities. The U. S. population of poor children is very needy, and the enormity of the cumulative need is unseen by many of the affluent.

Meeting the needs of these students with a wide diversity of books is a huge challenge for librarians and other school staff. As a whole, applicants documented the needs of children and collections and focused on the types of books that might help meet these needs. Staff seem very student-centred in considering both user and collection requirements, although the only area in which student's personal needs or interests were given the same attention as curricular concerns was in relation to race and ethnicity issues.

School staff, however, seem more adept at recognizing the needs and how books might help meet them than they are at selecting or locating appropriate materials. It appears that many of the book selectors are unfamiliar with the small presses or specialized publishers from which books to meet the diversity of needs specified can be obtained. Instead, the applicants sometimes chose to purchase inappropriate resources having limited use for the population identified, e.g., large reference sets for 5-6 year-old children to meet their non-fiction and research needs. Sometimes applicants proposed purchasing books, e.g., bilingual books in specific languages that do not exist in the quantities needed. A distinct gap between recognition of need, identification of types of books desired, and ability to locate those books exists in the schools studied. This was not correlated with whether the selector had library training.

The focus. School libraries have always existed to develop and support the curriculum of the school, to meet the needs of teachers and students, and to foster information literacy leading to life long learning and love of reading. That basic purpose has not changed. What has changed, however, is the direct involvement and responsibility the library has assumed in promoting student achievement as measured by performance on standardized tests and the challenges that are presented in meeting the needs of an enormously diverse and needy cadre of children.

Librarians long have contributed their expertise as members of instructional teams, but often an invisible line has been drawn that removed responsibility from the library staff for students' achievement. If these applications are representative, U.S. librarians are becoming more prominent in having both authority and responsibility for achievement (as opposed to more loosely conceived learning), and the role of library materials has taken on greater importance because they provide students with the information and the reading practice they need to succeed. The pressure seems enormous given ageing collections and a desperate need for up-to-date, accurate, and appealing materials.

This pressure to participate in fostering student achievement has also changed the complexion of book selection and collection development. Librarians often have turned to standard reference sources of 'best books' to help with materials selection. These catalogs for all school levels still are published and revised regularly. Many librarians have shunned use of any such references and instead read books and book reviews to make their selections. In the worse case scenario, library staff simply picked books from publisher's catalogs.

It now appears, however, that librarians or others responsible for the library in the poorest schools in the U.S. are turning to another type of pre-selected list that has a profound effect on book purchase decisions. This change is related to their new focus on student achievement. Many of the applicants in these poorest schools are using lists from

computerized reading programs, lists that accompany state standards, bibliographies that go with specific reading or other curricular programs, or lists from vendors. In addition, there seems to be no recognition in this pool of applicants that books, reading, and writing are changing drastically in the digital age. It is as if the poorer children are missing out on the literary advances (Dresang, 1999).

This new turn in collection development can be looked at in both a positive and a not-so-positive manner. Doubts arise because of the identity and purpose of the list compilers. In the past, committees of professionals put together the 'best book' collections, and there was no reason to believe that any political or economic interest might drive what appeared on those lists. The lists that many of today's selectors for libraries are using come from commercial sources that, in fact, do have a self-interest in what appears on them. Nothing is mandated, and school officials can make their own decisions, but they may not be aware of the factors that influence which books are listed. The choices seem good because they appeal to teachers (and sometimes to children) and they seem to support exactly what is prescribed to learn. The lack of knowledge of specialized sources mentioned in relation to student need reinforces the turn to prepared lists.

All of this is not necessarily bad. It is good for libraries and librarians to have a central role in student learning. It is good for books to match learning needs. This shift in emphasis has come about partly because of the library profession itself. As mentioned above, researchers have worked hard to demonstrate a link between libraries and student scores on achievement tests. Schools have embraced this research as a justification for spending in libraries. The national guidelines web site proclaims "Information Power: Because student achievement IS the bottom line (American Association of School Librarians/Association for Educational Communication and Technology, 1998). An editorial in the March 2003 edition of *School Library Journal* urges librarians to tie their book purchases to student achievement and to become the school experts on *NCLB* (St. Lifer, 2003).

It is not the advice to focus on student achievement as measured by test scores that is problematic, but rather what seems to have become an overly narrow focus for why books are in libraries and how they might be used. It is overlooking what research demonstrates is correlated with student achievement and instead focusing more on a 'direct fix'. Almost no applicants mentioned as a priority that students "pursue information related to personal interest," or "evaluate information critically and competently," or "use information creatively," or "strive for excellence in information seeking and knowledge generation," all of which are among the nine information literacy standards for student learning in the national guidelines for media centers. In the applications, there was little focus on learning how to become information literate when using the materials and intense focus on locating accurate information for a specific task. There was little focus on evaluating or interpreting information, but an intense focus on factual comprehension. The teaching and learning *are* very student-centred and definitely are designed to break barriers for children who live in poverty, but the student-centredness has a very specific academic outcome in view.

This snapshot of school libraries may be transient. But it does appear that those who are to work in 21st century school libraries face new sets of both challenges and opportunities – and have a great potential to help youth achieve.

But lest it be forgotten, a school library is (or used to be) a place to explore – not to get labeled books, but to try new avenues of inquiry and to read widely at varying levels of difficulty. Perhaps it is possible to assume the new mission that is apparent in the libraries examined and at the same time to keep in mind the words of a Supreme Court justice, "A school library is the place where students must always remain free to inquire, to study and to evaluate, to gain new maturity and understanding...to test or expand upon ideas present to them in or out of the classroom" (Board of Education, Island Trees Free School District No. 27, *et al. v. Pico, et al.*, 1982)

Hopefully the goals of student achievement and free inquiry are not mutually exclusive and both will prevail.

Notes

- ¹ The researchers serve as consultants to this Foundation and have full access to the applicants' data and permission to use it for this study. However, for privacy purposes neither the applicants nor the Foundation will be named in this paper.
- ² Poverty in United States schools is often measured by the percentage of students who qualify for free or reduced price lunch (FRL). Children from families with incomes at or below 130 percent of the current U.S. poverty level for a family of the size of theirs are eligible for free meals and those in families with incomes from 130-185 percent of the current poverty level are eligible for reduced price lunches.
- ³ The National Assessment of Educational Progress (NAEP), conducted for the past thirty years, and sometimes called "The Nation's Report Card," is the only measure of student achievement on which students from all states can be compared (U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 2003)
- ⁴ The Gates Foundation provides funds to schools with 10% of the students eligible for FRL. A government grant program, *Literacy Through School Libraries* (U.S. Congress, 2002), targets schools with 20% of the students eligible for FRL.
- ⁵ The application blanks were set to receive two-digit numbers so those schools with 100% of eligible students were recorded as having 99% eligible in the same category as those who did have 99%.
- ⁶ Setting here is used as it is in the NCES data to mean urban, suburban, or rural. Region refers to geographic region.
- ⁷ In the first competition, 1000 libraries applied and 100 received awards of an average \$75,000. As this paper is written, the U.S. Congress is considering raising the appropriation to \$100 million.
- ⁸ Some scholars challenge the conclusions of the NRP (Krashen, 2003b, NoChildLeft.Com, 2003).
- ⁹ Renaissance Learning serves an international community with offices in Canada, England, New Zealand, Australia, and Scotland. Schools in other countries have adopted the program.
- ¹⁰ The debate over the effectiveness of AR is heated and extensive, with proponents and opponents citing numerous research studies to support their assertions. One comprehensive critique of the research that is cited on the AR web site finds current investigations inconclusive (Krashen, 2003a).
- ¹¹ From the applicants, one might deduce that the controversy over bilingual education, e.g., in the states of California and Arizona, resulting in legislation to severely curtail it, has not permeated the nation as a whole.
- ¹² The number of Hispanic children in various states of the U.S. can be seen in census data displayed by the Annie E. Casey foundation (2003).

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Appendix 1: Application

Cover Sheet

The mission of the Foundation is to support the education of our nation's children by providing funds to update, extend, and diversify the book collections of America's school libraries. In doing so, the Foundation will provide students increased opportunity to learn to read, to become better readers, and to advance academically.

General guidelines:

- The Foundation will make grants of amounts up to \$5,000 to school libraries; funds are to be used to update, extend and diversify the book collections of those libraries.
- Any school may apply, but priority for grants will be given to those schools in which 75-100% of the school population receives free or reduced lunch.
- Applications may be submitted on-line (preferred) or in print form. The form must be received prior to the close of business at 5:00 p.m. (EST), February 28, 2003, for consideration.
- Each school may submit no more than one (1) application per grants cycle.
- On-line applications will be received through the Foundation website.

Applicants will be notified of receipt of the grant application; awards will be made on or before May 15, 2003.

Deadline for receipt of application: February 28, 2002

You are encouraged to submit your application using the online form; however, print forms will be accepted. The form must be received on or before February 28, 2003, in either electronic or print format. The goal of the Foundation is to provide books to the school libraries and students that most need them. Consequently, all Foundation grants are made to individual schools rather than to school districts, foundations, or other entities. Only one application per school is allowed.

Part One: Information about your school and this proposal

Please give us a description of your school and information on how to contact you.

This grant application was written by:

1. Your Name:
2. Your Title:
3. Your Telephone Number:
4. Your E-Mail address:
5. Are you responsible for carrying out the activities in the grant proposed? Yes No (dropdown)
6. If not, who is responsible? List the name, title, and experience of each person with responsibility for providing library services.

Name	Title	Experience
_____	_____	_____
_____	_____	_____
_____	_____	_____

School Information:

7. Your School Name:
8. Your School District:
9. Your School Mailing Address:
10. Your School Fax Number:
11. Your Principal's Name:
12. What grade(s) does your school include? _____
13. How many students are there in your school? _____
14. How many books are there in your school library? _____
15. Please calculate the approximate number of books per student using the information above. _____
16. What is this year's book budget? \$_____ What is next year's estimated book budget? \$_____
17. Please calculate the book budget per student this year using the information above. _____
18. What percentage of your student body is eligible for free or reduced lunch? You can use feeder school data if this is a secondary school. Priority will be given to schools that have a student body with 75%-100% eligibility for free or reduced lunch. _____
19. Please give a very brief description summarizing how you will use the Foundation award money.
(limited to about 100 words)

Part Two - Your Plan for Foundation funds

The Foundation wants to help you get the books you most need to support student achievement, the curriculum and to develop a love of reading among the students at your school. Please answer each of the following questions to help us understand how you would put Foundation funds to use in accomplishing that goal.

In each case, limit your answer to the space provided. Bulleted lists or outline forms as part of your narrative are acceptable. You must use a 12 point font size with any of the following fonts: Arial, Century Schoolbook, Courier, Georgia, MS Sans Serif, Tahoma, Times New Roman.

1. Why does your school library need this money? (30 points)
 - A. Describe the students your school library serves, e.g. socio-economic status, gender, and age, and their need for the books requested. *(limited to about 250 words)*
 - B. Describe the need or gaps you have identified in your collection and state how this award will be used to meet the need or fill those gaps identified.
Please be specific including both quantitative and qualitative evidence where possible. You might answer by describing a section of your collection that is too small or is out of date, books that are needed for a unique student purpose, books to support a special project, etc. Please remember that these are examples only, not requirements. We want to know what you see as the greatest need in your individual school and why it has such priority status. *(limited to about 250 words)*
2. How will this money be spent to address this need? (40 points)
 - A. Please be specific. The goal of the Foundation is to provide the books you most need to support student achievement, the curriculum, and to develop a love of reading among the students at your school. You might answer by describing your overall collection plan, a special project in your school, a collaborative enterprise with one or more teachers, a joint project with another group, etc. Be sure to tell how you will promote the new materials. Please remember that these are examples only, not requirements.
(limited to about 500 words)
 - B. How much money (up to \$5,000) are you requesting from the Foundation to implement what you describe above? Provide a brief budget outline showing how the Foundation funds will be spent.
(limited to about 150 words)
3. If you receive funds from the Foundation, you will be asked to submit a report describing their use. What do you anticipate will be the effects of using the Foundation grant money? e.g. How does this grant money contribute to instilling a life-long love of reading for your students or help promote student achievement, etc.? How will you determine and report the effects from your use of the grant money? (20 points)
(limited to about 250 words)
4. How much and what kinds of library support do your principal and teachers provide? e.g. librarian/teacher collaboration? type of scheduling? (10 points)
(limited to about 250 words)
5. Is there anything else that you would like for us to know about your school that is NOT included in your responses to the questions above?
(limited to about 100 words)

Statement of Assurance Required

I _____(name of principal), principal of the _____(name of school), hereby certify the accuracy of the information provided in the application. Further, I fully support the submission of this application to the Foundation to support the school library and the project described therein. Further, I certify that funds granted by the Foundation will not be used to supplant (replace) money normally budgeted for the _____(name of school) library program. I understand that these funds are to be used for supplemental funding only.

Date: _____

(Name of school principal)

(Name/title of person responsible for running the school library)

Thank you for your responses.

Because, unfortunately, there is not enough money to fund every worthwhile project, the grant awards committee will have to make some very difficult choices. Decisions will be made by applying the following point values to particular elements of the application. The total number of possible points is 100.

30 points - Description of need

40 points - Proposed use of the Funds

20 points - Evaluation plan

10 points - Principal support

If you receive an award you will be asked to provide a final report within one year from receipt of the grant money.