



*Reading to Succeed
An Evaluation of the Power Lunch Program
2004-2005*

A report prepared by
Nelson Portillo
Program Evaluator
Working In The Schools (WITS)

In collaboration with

Jennifer Davis
Working In The Schools (WITS)

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WITS

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I. Executive summary

This report presents the main evaluation findings of the Power Lunch program implemented by Working In The Schools (WITS) during the 2004-2005 school year. The evaluation assessed and documented the impact that the Power Lunch program had among elementary students attending Chicago Public Schools (CPS). The main areas assessed were reading proficiency, individual and topic reading motivation, attitudes toward academic and recreational reading, reading-related skills and habits, and reading for enjoyment. Students provided self-reported information in the areas of reading attitudes, reading motivation and reading for enjoyment. Teachers reported on the students' background information, reading motivation, reading-related skills and habits. Volunteers provided further information about their participation in Power Lunch and perceived changes in the students with whom they worked. Information about reading proficiency as measured by a standardized reading test (i.e., Iowa Test of Basic Skills or ITBS) used in the state of Illinois was provided by CPS. Both quantitative and qualitative approaches were employed to assess the data collected and presented in this document.

The evaluation is partially based on a previous evaluation of the Everybody Wins! Power Lunch program in Washington D.C., conducted by the U.S. Department of Education and American Institutes for Research (Smith, Elvove, & Nesbitt, 2002). In addition, it builds on WITS' own previous evaluations of Power Lunch (see Portillo & Weiner, 2002, 2003; Portillo, Weiner, & Davis, 2004)¹. Unlike Smith et al. who used an experimental design for their Power Lunch evaluation, the WITS Power Lunch evaluation used a Pre-Test/Post-Test quasi-experimental design with non-equivalent (untreated) control groups.

This report provides information about WITS and its Power Lunch program along with a summary of the methodology, findings, limitations and conclusions. It also features a technical appendix that includes a review of existing literacy programs similar to the Power Lunch program, evidence about the effectiveness of Power Lunch and information on evaluation measures, response rates, handling of missing data, students' ethnic/racial background data and extra activities conducted in the program.

Overall, the data gathered strongly suggests that **the program succeeded in helping students improve or maintain their (1) reading proficiency, (2) reading-related skills and habits, (3) reading motivation, (4) attitudes toward reading and (5) reading for enjoyment. ITBS results demonstrated that students participating in Power Lunch obtained higher standardized reading scores than students who did not participate in the program.** Among other results, teacher accounts show that Power Lunch students experienced substantial improvement in reading comprehension, vocabulary, reading ability, listening comprehension, attention span and ability to articulate thoughts.

¹The full evaluation reports corresponding to the 2001-2002, 2002-2003 and 2003-2004 academic years are available at www.witsontheweb.org.

II. Evaluation highlights

Reading Proficiency & Related Skills

- **More Power Lunchers were immediately promoted to the next grade level than non-Power Lunchers.** Based on Iowa Test of Basic Skills (ITBS) results, 50% of all third graders participating in Power Lunch obtained a score equal to or higher than the 35th percentile necessary for immediate grade promotion. Among non-Power Lunchers, only 40% reached the same reading proficiency level.
- Among Power Lunchers, only 50% scored within or below the promotion range (24th through 34th percentile), requiring them to attend summer school. In contrast, among non-Power Lunchers (control), 60% had to attend summer school due to low ITBS reading scores. This means that **fewer Power Lunchers had to wait to be eligible for grade promotion compared to non-Power Lunchers.**
- Additional ITBS results indicate that **Power Lunchers demonstrated better reading comprehension and vocabulary abilities than non-Power Lunchers.** The average ITBS reading comprehension raw score for third graders participating in Power Lunch was 179.2, just 5.8 points below what is expected among students at the same grade level. Non-Power Lunchers were 11 points below the expected third grade ITBS average score. Power Lunchers obtained an average ITBS vocabulary raw score of 176.8, which was 9.2 points higher than what non-Power Lunch students obtained (167.6).
- According to treatment and control teachers, **Power Lunchers showed more improvement than non-Power Lunchers in 6 reading areas assessed:** reading comprehension (65% vs. 53%), vocabulary (65% vs. 55%), reading ability (66% vs. 55%), listening comprehension (62% vs. 51%), attention span (50% vs. 38%) and ability to articulate thoughts (56% vs. 50%).

Attitudes Toward Reading & Reading Motivation

- **More Power Lunchers improved or maintained their reading attitudes than non-Power Lunchers.** Among second graders, 63% of all Power Lunchers improved or maintained their academic attitude scores by the end of the school year, compared to only 47% of non-Power Lunchers. Among third graders, 44% of all Power Lunchers improved or maintained their recreational attitude scores compared to only 39% of non-Power Lunchers.
- **Power Lunchers became more motivated to read on their own than non-Power Lunchers** based on treatment and control teacher reports. Specifically, Power Lunchers in second grade and third grade outperformed non-Power Lunchers by 13% and by 11% at the same grade levels, respectively.

Reading for Enjoyment

- **By the end of the school year, more Power Lunchers stated that they enjoy reading for fun compared to non-Power Lunchers.** The percentages reported for each group were 61% and 55.2%, respectively.

III. Organization and program description

1. Working In The Schools (WITS)

Working in the Schools (WITS) is a literacy organization that increases the reading proficiency and learning capacity of low-income and minority students in Chicago Public Schools. Founded in 1991 by Joanne Alter and Marion Stone, WITS recruits and supports dedicated business, government and community volunteers who deliver measurable and consistent tutoring and mentoring services. WITS offers five different programs through which volunteers help children build the skills they need to succeed as adults, while providing teachers and principals with valuable support. During the 2004-2005 academic year, WITS implemented Power Lunch, one of the five programs, for the fourth consecutive year in 20 different public schools in Chicago.

2. Description of Power Lunch²

Power Lunch is an early literacy/mentoring program implemented in several cities in the U.S. Founded in 1991 by Everybody Wins! New York, the program was launched by the U.S. Senate in Washington D.C. in 1995; in 2001, WITS adopted the program. Its main goal is to promote literacy skills and a love of reading among elementary students. Additionally, Power Lunch aims to improve critical reading aspects such as achievement and habits, attitudes and motivation.

On the same day each week, Power Lunch volunteers ride a WITS school bus from their offices to an adopted classroom, devoting their lunch breaks to reading aloud with the same child, one-on-one. Upon arrival, volunteers check in with the school coordinator and proceed to a designated classroom or school library. Organizations work with teacher or principal selected classrooms. During the 40 minute session, volunteers and students read aloud to each other, share favorite stories and talk about books. Volunteers and students select their favorite readings from a wide variety of high quality, age-appropriate books provided by WITS.

Power Lunch offers busy professionals the opportunity to work with at-risk children. Volunteers are recruited from many private and public organizations located near participating schools; participation is completely voluntary. All potential volunteers must complete criminal background checks in addition to providing personal and professional references. After being screened, volunteers receive formal training including a handbook advising how to read aloud to children. For schedule flexibility, volunteers may choose to alternate weeks with a volunteer partner. WITS provides volunteers with round trip transportation from their workplace to the school each week.

Power Lunch also engages community members through the role of the school coordinator. School coordinators are hired parents or graduate students who offer support, answer questions and ensure a rewarding reading experience for both students and volunteers. In addition to tracking student attendance, accommodating volunteer schedules and monitoring logistical details such as greeting and dismissing, school coordinators serve as the liaisons between WITS and the volunteer groups. The school coordinator is responsible for finding substitutes for volunteers who cannot attend to ensure that no child is left without a reading volunteer.

²For further literature on read-aloud programs as well as the effectiveness of Power Lunch, see the Technical Appendix at the end of this evaluation report.

IV. Methodology

1. Purpose

The purpose of this evaluation is to assess and document, quantitatively and qualitatively, the impact that the Power Lunch program had on second and third graders in seven public schools in Chicago during the 2004-2005 school year. The evaluation focuses on student reading proficiency as well as a series of reading-related skills and behaviors. Attitudes toward academic and recreational reading as well as reading motivation are also measured. Teachers, reading volunteers and students completed the survey information reported in this evaluation.

2. Study Design

All Power Lunch evaluations utilize a quasi-experimental nonequivalent Pre-Test Post-Test control group design. As part of this design, two different groups are established to determine whether Power Lunch had an impact on groups of students across a set of reading-related outcomes. Treatment groups include all those students who participate in Power Lunch throughout the school year. Control groups include students who do not participate in Power Lunch during its implementation. By using control (or comparison) groups, it is possible to determine how students participating in Power Lunch perform on various reading-related outcomes in comparison to students not participating in it.

The Pre-Test measures were administered to students in a group setting by trained WITS staff during the fall of 2004. Teachers and volunteers then completed Pre-Test surveys 4 to 6 weeks after the Power Lunch program began. Post-Test measures were collected for program participants (i.e., students, volunteers, teachers) in May, 2005, at the end of the school year. In addition to employing a quantitative approach to document outcome improvements, reading volunteers and teachers also provided important qualitative information about the program (e.g., comments about Power Lunch, concerns, suggestions).

3. Sampling Procedure

Purposive non-probabilistic sampling was used to select the students participating in Power Lunch. Students participating in the evaluation came from seven different Chicago Public Schools. During the 2004-2005 school year, Power Lunch served 778 children from first to third grade in 20 different Chicago Public Schools. Eighteen schools started the program on various dates during the first semester of the academic year. Two additional schools began the program after the 2004 winter break. Because of the Pre-Test Post-Test evaluation design, only a group of those schools that had started the program at the beginning of the academic year (September-October) were selected for evaluation³.

³See the Technical Appendix for further details on evaluation measures, response rates, participants and missing data management.

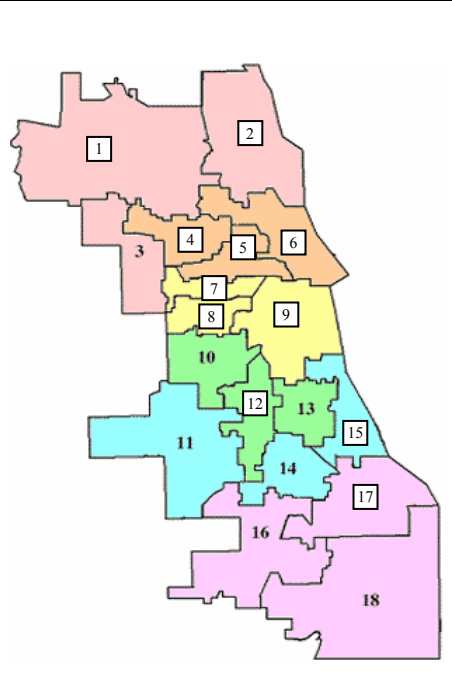
V. Power Lunch stakeholders

1. School profiles

During the 2004-2005 school year, Power Lunch served 778 children from first through third grade in 20 different Chicago Public Schools (CPS). Evaluation results came from students attending seven of those schools. Three were located south of downtown Chicago (School area 9), two were nearby downtown Chicago (School area 6), one was in the near West side of the city (School area 7) and one more was located in the far south side of downtown Chicago (School area 17). Most Power Lunchers were low-income students (93%) in schools with average mobility and attendance rates of 25% and 93%, respectively. Approximately 25 students was the median classroom size for all third grades. Table 1 provides further background information for the additional 13 schools that participated in Power Lunch.

Table 1
Background information for additional schools served by Power Lunch
based on Chicago Public Schools (CPS) data

School	Low-Income	Mobility Rate	Attend. Rate	Ave. Class*	Area
Brown	99.7	26.0	93.2	23.0	7
Copernicus	95.1	40.8	89.2	27.3	12
Grant	88.5	28.5	89.9	27.3	7
Haines	95.5	28.5	89.9	23.5	9
Haugan	91.1	22.3	96.5	25.6	1
Henson	90.2	28.7	91.8	26.0	8
Jordan	92.7	19.6	95.4	19.7	2
KIPP	N/A	N/A	N/A	N/A	9
Libby	99.0	41.4	89.7	24.0	12
Prescott	87.5	22.8	94.2	20.5	6
Schiller	100.0	28.5	89.7	N/A	6
Stowe	97.6	26.7	94.2	25.7	4
Talcott	94.5	22.5	93.7	20.3	5



Notes: The CPS areas covered by Power Lunch correspond to the numbered-boxes embedded in the map;
 *Average third grade classroom size.

2. Power Lunch student profile⁴

Approximately 67.5% of the children participating in the Power Lunch evaluation were African-American, 31.2% were Hispanic and 1.3% represented other ethnic/racial groups. Approximately half of them were female. Students' ages spanned from 7 to 12 years old, with the majority (80%) lying between the ages of

⁴See the Technical Appendix for further details on racial/ethnic background for all students who participated in the Power Lunch program during the 2004-2005 school year.

8 and 9 years old. The age median for all students was 8 years old (Mean = 8.4, SD = 0.81). About 75% of all Power Lunch students were concentrated in third grade and 25% were second graders.

Pre-Test teacher reports indicate that the vast majority of Power Lunchers (82%) were native English speakers. Of the 12% reported who have repeated at least one grade, 65% were boys and 72% were third graders. Other teacher accounts detailed that slightly more than one-third of all Power Lunchers participated in other school programs and had attention/learning difficulties, particularly among third grade male students.

3. Volunteer profile

A total of 1,256 volunteers participated in the Power Lunch program during the 2004-2005 school year. Based on Post-Test volunteer survey responses, information was gathered for approximately one third of them (N = 403). These volunteers participated in 16 of the 20 schools where Power Lunch was implemented. As shown in Table 2, about one fourth of all reading volunteers surveyed came from seven different City of Chicago departments (Graphics and Reproduction, Law, Planning and Development, Public Health, Special Events, Transportation and Treasurer’s Office) and the remaining three-fourths represented 16 other companies/institutions.

Table 2
Volunteers’ organizations and businesses
participating in the Power Lunch evaluation

Organization/Business	<i>N</i>	%
City of Chicago Departments	96	24.0%
LaSalle Bank	82	20.3%
Northern Trust	38	9.4%
Equity Office Properties/Residential	35	7.7%
Shore Bank	28	7.0%
Northwestern Law Students	17	4.2%
Goldman Sachs	17	4.2%
Metropolitan Water Reclamation District of G.C.	16	4.0%
Cook County Assessor’s Office	15	3.7%
Humana	15	3.7%
Trade Associates Group	14	3.5%
Others (Belgravia/Richard Builders, Marsh, UBS, Queen of All Saints, US Equities/Residential),	30	8.3%
<i>Totals</i>	403	100%

In terms of ethnic and racial diversity among volunteers, close to two thirds of all Power Lunch volunteers were white/non-Hispanic (64%), followed by African-American (24%) and Hispanic volunteers (7%). Asian/Pacific Islanders plus members from other groups accounted for the remaining 5%. Additional results indicate that of all Power Lunch volunteers surveyed, 63% were between the ages of 25 and 45 and 73% were female. The majority of reading volunteers worked with third graders (72%) while the rest worked with second graders (28%).

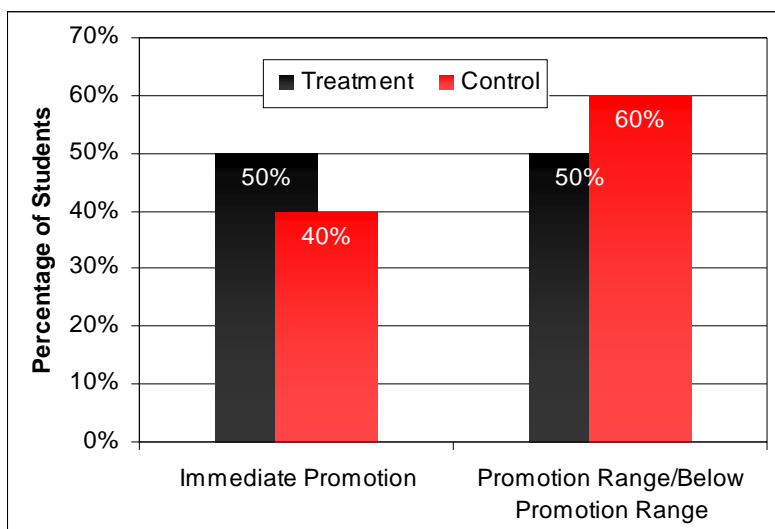
VI. Findings

1. Student reading proficiency

Learning how to read marks one of the most important abilities that children acquire during the first years of academic education. By providing volunteers' one-on-one assistance, Power Lunch fosters this ongoing process of learning to read, particularly among young students. To objectively assess the impact of Power Lunch, ITBS (Iowa Test of Basic Skills) reading comprehension results (Level 9) were obtained at the program's completion for groups of Power Lunchers and non-Power Lunch third graders⁵ who did not need special education.

According to current Chicago Public Schools (CPS) policies, elementary school students are promoted or retained based on successful completion of curriculum, class attendance and ITBS performance. Third, sixth and eighth graders are immediately promoted to the next grade if they achieve a minimum ITBS score in reading comprehension equal to or above the 35th percentile. Performance at this percentile conclusively demonstrates sufficient proficiency for immediate grade promotion. ITBS scores within the 24th to the 34th percentile range are considered acceptable; promotion at the benchmark grades (third, sixth and eight) is decided in conjunction with factors such as summer school performance, assistance and homework completion, among others. Students who score below the 24th percentile could be retained and subsequently asked to repeat the grade. They are allowed to retake the ITBS and attend summer school to determine if they will be promoted to the next grade.

Figure 1
Reading ITBS results for third graders



Overall, ITBS results show that (1) *more Power Lunchers were immediately promoted to the next grade level than non-Power Lunchers* and (2) *fewer Power Lunchers needed to attend summer school*. Among third graders who participated in Power Lunch, 50% obtained a score equal to or higher than the 35th percentile necessary for immediate grade promotion (see Figure 1). In contrast, only 40% of non-Power Lunchers (control)

⁵ITBS testing at the second grade level is optional and no results were available or provided by CPS.

reached the same reading proficiency level. An additional 50% of Power Lunchers scored at or below the Promotion Range (34th through 24th percentile), requiring them to attend summer school. Among non-Power Lunchers (control), 60% had to attend summer school due to their low ITBS reading scores.

The leading advantage of Power Lunchers can be examined additionally by averaging their ITBS (Level 9) reading comprehension and vocabulary raw scores as well as their respective percentiles. The ITBS reading comprehension portion of the test includes fictional and non-fictional passages that vary in length and difficulty. Roughly two thirds of the questions that follow the passages require students to draw inferences or make generalizations. The vocabulary test evaluates students' breadth of general vocabulary and serves as an overarching indicator of verbal ability. Each question in this test presents a word in a short phrase or sentence; students are then asked to select the answer that shares the same meaning as the target word (The Riverside Publishing Company, 2004).

Additional ITBS results indicate that *Power Lunchers demonstrated better reading comprehension and vocabulary abilities than non-Power Lunchers*. The average ITBS reading comprehension raw score for third graders participating in Power Lunch was 179.2, just 5.8 points below what is expected among students at the same grade level. Non-Power Lunchers were 11 points below the expected third grade ITBS average score⁶. In other words, Power Lunchers were closer to the expected ITBS performance for third graders than non-Power Lunchers. In terms of average ITBS reading comprehension percentile results, findings show the advantage achieved by Power Lunchers. On average, Power Lunchers were positioned at the 39th percentile and non-Power Lunchers at the 33rd percentile. Based on these results, more Power Lunchers would be immediately promoted to the next grade while non-Power Lunchers would have to attend summer school due to the promotion range percentile results. The ITBS reading raw score difference between Power Lunchers and non-Power Lunchers was statistically significant⁷.

ITBS vocabulary results also point to a Power Lunch advantage. Power Lunchers obtained an average ITBS vocabulary raw score of 176.8, 9.2 points higher than the average obtained by non-Power Lunch students (167.6). Converted to percentiles, the Power Lunch students' score lands at the 38th percentile while non-Power Lunch students' score reached only the 26th percentile—very close to the lower value of the promotion range. The ITBS vocabulary raw score difference between Power Lunchers and non-Power Lunchers was statistically significant as well⁸.

2. Assessment of reading-related skills

Both treatment and control teachers were asked to complete a series of Post-Test-only questions regarding the improvement they had observed in their students since the beginning of the school year. The evaluation measured the extent to which students had improved across six different reading-related areas:

⁶Although the abovementioned ITBS score differences may seem small, the difference between any given grade and the next grade level, from first grade through eighth grade, never exceeds 18 points. Between second and third grade, the difference in expected ITBS raw scores is just 17 points or from 168 to 185.

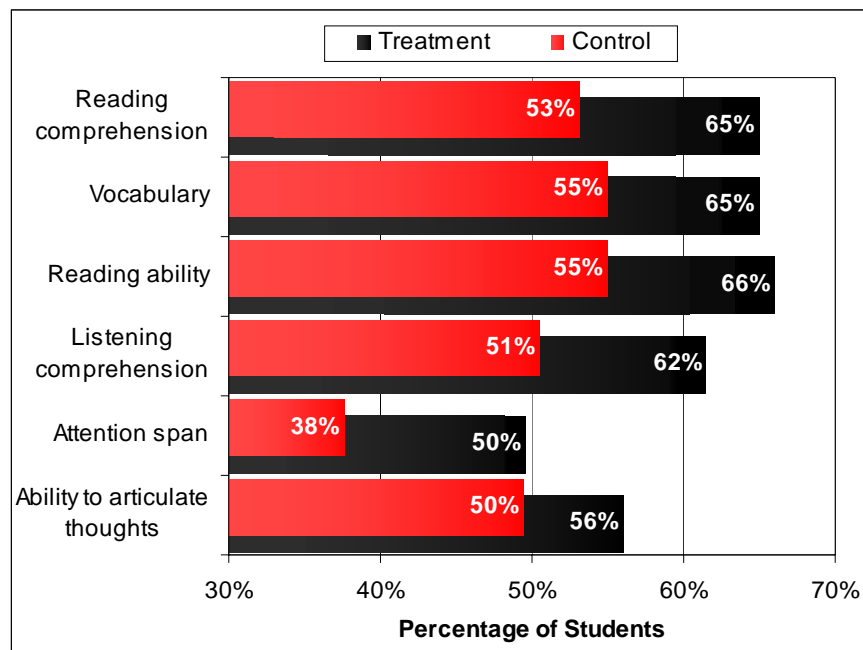
⁷ $F(1, 231) = 4.32, p < .05$

⁸ $F(1, 176) = 10.23, p < .01$

reading comprehension, vocabulary, reading ability, listening comprehension, attention span and ability to articulate thoughts. Teachers reported whether each of the areas assessed *Worsened*, experienced *No change*, *Somewhat improved*, *Improved* or *Very much improved*. Each of these categories held assigned values that ranged from 1 to 5, respectively.

In general, results show that both Power Lunchers and non-Power Lunchers improved in all six areas assessed by the end of the school year. Nevertheless, Power Lunchers outperformed non-Power Lunchers in all areas evaluated (see Figure 2). Using teacher reports and the two top evaluation categories, results show that 60% or more of all Power Lunch students *Improved* or *Very much improved* their reading comprehension, vocabulary, reading ability and listening comprehension by the end of the program or the school year. These results actually surpassed statistically by at least 10% the improvement reported by control teachers for non-Power Lunch in the same four assessed areas⁹. Power Lunchers also showed a greater improvement in the areas of ability to articulate thoughts (56% vs. 50% obtained by non-Power Lunchers) and attention span (50% vs. 38% obtained by non-Power Lunchers)¹⁰.

Figure 2
Student reading-related skills improvement
according to teacher ratings by group condition



⁹The ratings provided by teachers were averaged for both treatment and control student groups and served to compute all mean (ANOVA) difference comparisons. The results for the areas of reading comprehension, vocabulary, reading ability and listening comprehension between the treatment and control groups are the following: $F(1, 359) = 7.18, p < .01$; $F(1, 359) = 2.72, p < .05$; $F(1, 359) = 7.41, p < .05$; and $F(1, 359) = 2.92, p < .05$ (all p values were one-tail).

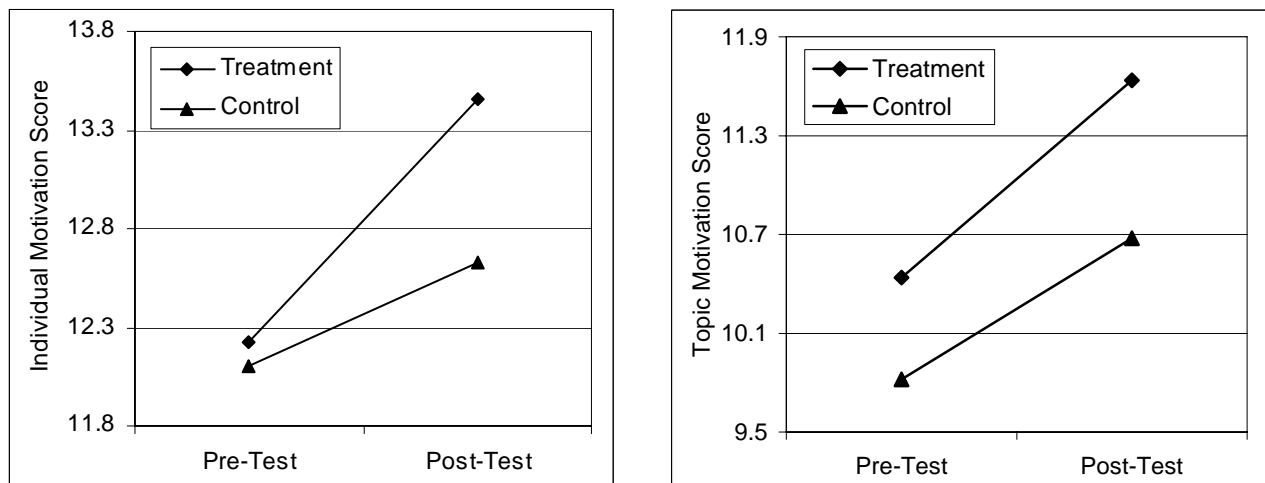
¹⁰The results for the areas of ability to attention span and articulate thoughts between the treatment and control groups are the following: $F(1, 359) = 7.11, p < .01$; and $F(1, 358) = 3.52, p < .05$.

3. Individual and topic reading motivation

In the arena of children's literacy, most researchers have shown a greater interest in studying and understanding the role played by cognitive factors. However, as reading is a task that children can freely choose to do, other factors such as motivation are also critical (Baker & Wigfield, 1999). Because of their daily interaction with students at school, teachers are one of the key available sources used to report on children's motivation. Based on teacher accounts, the evaluation assessed students' motivation to read on their own (*individual motivation*) and to develop favorite topics (*topic motivation*) both at the Pre and Post-Test.

Both Power Lunchers and non-Power Lunchers improved their individual and topic motivation for reading during the school year (see Figure 3). Power Lunchers, however, experienced a greater motivational improvement than non-Power Lunchers, particularly in their individual motivation. On average, Power Lunchers increased their individual motivation score by 1.26 points while the non-Power Lunchers increased by only .52 points¹¹. The steeper slope of the line representing all treatment groups (see left panel) graphically confirms the longitudinal gain of Power Lunchers. The gains in topic motivation were very similar for both treatment and control groups but, again, Power Lunchers outperformed non-Power Lunchers (1.2 vs. .86, respectively)¹².

Figure 3
Pre-Test and Post-Test average individual and topic ratings by group condition



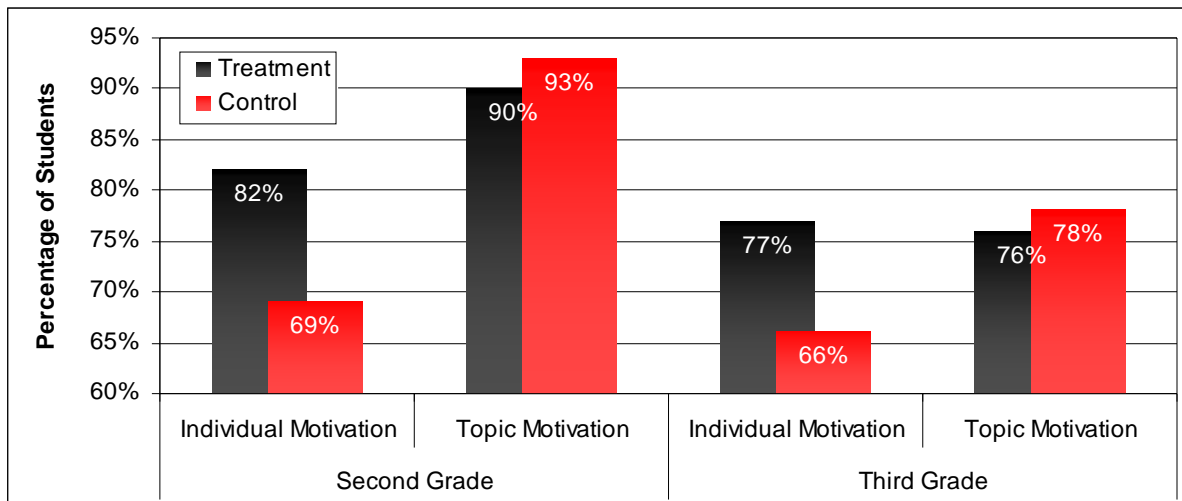
An additional approach to examining reading motivation development is to compare the percentage of Power Lunch and non-Power Lunch second and third grade students who increased or maintained their motivational ratings between the Pre and Post-Test. Figure 4 shows that a larger percentage of second and third

¹¹The values of the Individual Motivation Scale ranged between 5 and 20 so that the maximum improvement that a student could theoretically achieve at the Post-Test was 15 points. The values of the Topic Motivation Scale ranged between 4 and 16 so that the maximum improvement that a student could theoretically achieve at the Post-Test was 12 points.

¹²A 2 (Pre-Test/Post-Test) x 2 (Treatment/Control) multivariate statistically significant interaction effect confirmed the individual motivation improvement to the advantage of Power Lunchers, $F(1, 324) = 3.99, p < .05$. Mean differences (main effects) between treatment and control groups were not present at the Pre-Test, but a one-way ANOVA found a statistically significant mean difference at the Post-Test, $F(1, 324) = 3.87, p < .05$. As for topic motivation, no interaction effect or Pre-Test main effect were found, but a Post-Test main effect was found, $F(1, 340) = 7.15, p < .01$.

graders participating in Power Lunch improved or maintained their Pre-Test individual motivation scores compared to non-participating students at the same grade levels. Specifically, second grade Power Lunchers outperformed non-Power Lunchers by 13%, while third graders had a numerical lead equal to 11%. Non-Power Lunch second and third graders, however, surpassed Power Lunchers by 3% and 2%, respectively, in topic motivation. This slight advantage is, however, more than three times smaller than that of Power Lunchers over non-Power Lunchers in terms of individual motivation scores (13% and 11%).

Figure 4
Individual and topic motivation change
by grade and group condition



4. Attitudes toward recreational and academic reading

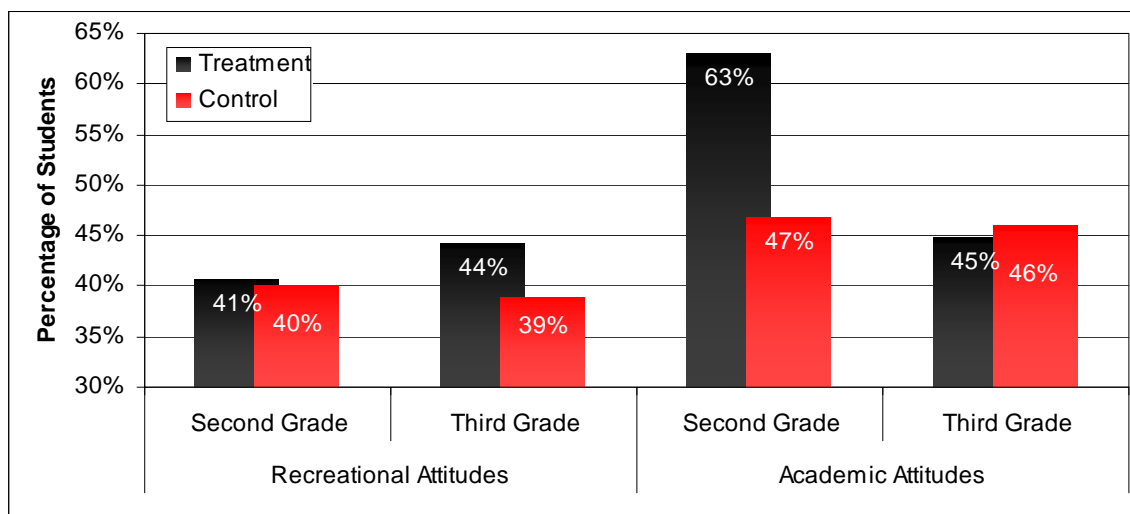
According to McKenna and Kear (1990), children’s reading attitudes represent another important non-cognitive aspect of reading studied by contemporary researchers. They are important because they are likely to guide children’s reading actions and influence reading achievement (Mathewson, 1994; McKenna, Kear, & Ellsworth, 1995; Stevenson & Newman, 1986). At both the Pre-Test and Post-Test, the evaluation assessed two reading attitude dimensions among students (recreational and academic attitudes toward reading) with the Elementary Reading Attitude Survey (ERAS; McKenna et al., 1995).

Previous studies (see Kush & Watkins, 1996; McKenna et al., 1995) and past Power Lunch evaluations (Portillo & Weiner, 2002, 2003; Portillo, Weiner, & Davis, 2004) show that student reading attitudes usually decline with advancement through elementary school; attitudes often even diminish within each academic year. For these reasons, it is important to (1) calculate the percentage of students who improved or maintained their recreational and academic ERAS scores from the Pre-Test to the Post-Test and (2) disaggregate students’ results not only by group condition (treatment and control), but also by academic grade.

Overall, results show that less than half of all Power Lunchers and non-Power Lunchers in second and third grade were able to improve or maintain their Pre-Test ERAS recreational and academic attitude scores.

Only two noteworthy exceptions emerged to this trend of results. The first one materialized among second graders where 63% of all Power Lunchers improved or maintained their ERAS academic attitude scores compared to only 47% of non-Power Lunchers. The second exception emerged among third graders with 44% of all Power Lunchers improving or maintaining their ERAS recreational attitude scores, compared to only 39% of non-Power Lunchers. In terms of recreational attitudes among second graders and academic attitudes among third graders, the percentage difference between Power Lunchers and non-Power Lunchers was equal to only 1% (see Figure 5).

Figure 5
Percentage of students improving or keeping unchanged their recreational and academic attitude score between the Pre-Test and Post-Test by grade and group condition



Attitudinal change can also be examined by looking at the score change between Pre-Test and Post-Test ERAS results. As predicted, Post-Test average scores showed that student attitudes indeed became more negative by the end of the school year. Power Lunchers in second grade decreased their academic attitude average score by only .02, but non-Power Lunchers' average score experienced a 1.24 point drop. Similarly, Power Lunchers in third grade decreased their recreational attitude average score by just 1.56, while non-Power Lunchers' average score experienced a 2.44 point decline. Other results illustrate that both Power Lunchers and non-Power Lunchers in second grade lost, on average, 2.48 points each on the recreational attitude scale. Among third graders who participated and who did not participate in Power Lunch, both groups experienced a 1.22 point decrease on the academic attitude scale¹³.

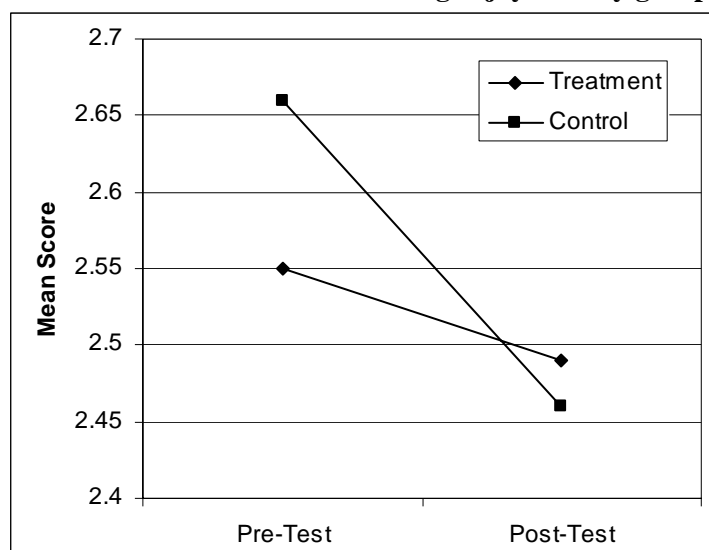
¹³None of the group differences found and described were statistically significant. However, when the raw ERAS recreational and academic attitude average scores are compared at the Pre and Post-Test, there was a statistically significant difference at the Post-Test between Power Lunchers and non-Power Lunchers on their recreational scores at the third grade level, $F(1, 268) = 4.73, p < .05$.

5. Reading for enjoyment

In addition to any academic or reading skill gains, the Power Lunch program seeks to inculcate reading for enjoyment among young children. Motivational and attitudinal changes serve as powerful indicators to determine whether students develop a more favorable disposition toward reading for enjoyment. Yet young children can also openly voice how much they enjoy recreational reading. As part of the evaluation, both Power Lunchers and non-Power Lunchers were asked how much they like reading for fun and given three possible answers from which to choose: (1) *I do not like reading for fun at all*, (2) *I like reading for fun very little* and (3) *I like reading for fun a lot*.

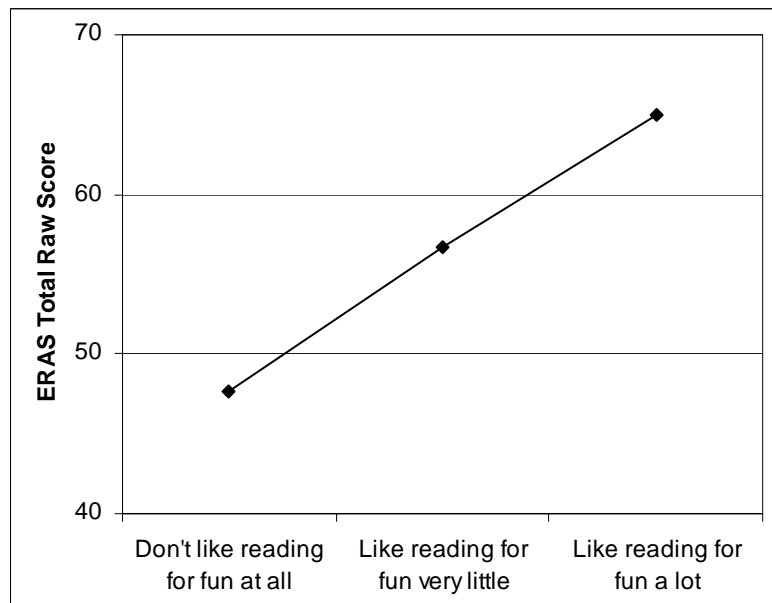
Results show that most Power Lunchers and non-Power Lunchers *like to read for fun a lot* when they were first asked, at the beginning of the school year. In fact, on that response category, non-Power Lunchers scored 6% higher than Power Lunchers (71% vs. 65%, respectively). At the Pre-Test, there were also fewer non-Power Lunch participants stating that they *did not like reading for fun at all* compared to Power Lunch participants (4.5% vs. 9.1%, respectively). At the end of the school year, the percentage of students who liked *reading for fun a lot* did decrease among Power Lunchers but even more so among non-Power Lunchers. The percentages reported for each group were 55.2% and 61%, respectively. Thus, based on these results, the number of Power Lunch students who professed to *like reading for fun a lot* decreased by only 4% between the Pre and Post-Test while four times as many (15.6%) non-Power Lunchers no longer liked reading for fun a lot. The percentage of those stating that they *did not like reading for fun at all* increased for both Power Lunchers and non-Power Lunchers (2.2% vs. 4.6%, respectively). Figure 7 summarizes the Pre-Test/Post-Test change described using the average value assigned to the three possible responses (1 through 3). Based on this metric, (1) the closer to three, the more respondents like to read for fun and (2) the steeper the line, the larger the score difference between the Pre-Test and the Post-Test (see Figure 6).

Figure 6
Pre-Test and Post-Test mean score for reading enjoyment by group condition



Further analyses indicate that the degree to which students read for fun is positively correlated with their reading attitudes. Based on Post-Test responses, results show that the correlation between these two variables was equal to .56 ($p < .05$) among Power Lunchers and .54 ($p < .05$) among non-Power Lunchers. Figure 7 indicates that the more a student likes to read for fun, the higher his or her reading ERAS attitude score is¹⁴.

Figure 7
Pre-Test and Post-Test mean score for reading enjoyment by group condition



¹⁴A one-way Analysis of Variance (ANOVA) with a Tukey HSD post-hoc test revealed that the ERAS mean reading attitude scores differed statistically from each other at each of the three levels of reading for enjoyment. ERAS mean reading attitude scores for each of the three levels, starting with those who said that they *did not like reading for fun at all*, were 45.5, 55.16, and 62.99, $F(2, 158) = 28.8, p < .001$.

VII. Teacher assessments and observations of Power Lunch

Past experience shows that the success of Power Lunch depends heavily on the collaboration and partnership among teachers, volunteers and program staff. As part of the evaluation, teachers had the opportunity to express their level of satisfaction with the program and whether the program burdened them with extra work. Using a scale that went from 1 (*Not at all satisfied*) to 4 (*Very satisfied*), results show that two thirds of all Power Lunch teachers surveyed felt *Very satisfied* with the program and the remaining one fourth felt *Satisfied* or *Somewhat satisfied*. Furthermore, using a 5-point Likert-type scale (1 = *Never*; 5 = *Always*), 42% asserted that Power Lunch *never* burdened them with extra work, 50% mentioned that it happened only *seldom* and just 8% said that Power Lunch *sometimes* requires some extra work¹⁵.

In addition, teachers also had the chance to rate their students' interest and enthusiasm about participating in Power Lunch and describe—in their own words—some of the program benefits as they perceived them. Teacher ratings show that most Power Lunchers displayed a great deal of interest and enthusiasm about participating in the program. More specifically, 75% of all teachers surveyed reported that their students were *Very interested* in the program as well as *Very enthusiastic* about it. The remaining 25% stated that their students were *Interested* or *Somewhat interested* and *Enthusiastic* or *Somewhat enthusiastic* when it comes to Power Lunch.

In describing the benefits of Power Lunch, teachers stated that the program: (1) *allows students to read and be read to for a significant amount of time*; (2) *exposes students to caring, educated adults from diverse backgrounds who are supportive and interested in their reading success*; (3) *provides students with an additional opportunity to read for enjoyment in a nonjudgmental setting*; (4) *provides positive role models who help students appreciate the value of reading*; (5) *allows children to hear text read fluently with lots of expression*; and (6) *helps students with fluency, vocabulary and confidence as well as the ability to bond and get close with an adult*.

Power Lunch teachers mentioned a number of additional benefits ascribed to the program. According to one third grade teacher, “students, who often are reluctant readers, feel motivated because of the one-on-one relationship with their tutors.” Another third grade teacher attested that, with Power Lunch, “students receive individual attention that they might not otherwise get at home or at school.” A different teacher commented that her “students are able to discuss stories and make connections with them. Furthermore, they can revisit favorite books over and over or read something new each time to challenge themselves.”

¹⁵When teachers (from both treatment and control groups) are required to complete extra activities such as evaluation questionnaires, they are compensated with redeemable gift certificates. Generally, when a Power Lunch session takes place, teachers may choose to remain in or leave the classroom.

VIII. Limitations of the evaluation

Power Lunch evaluations are characteristically comprehensive and complex. However, as with most applied studies, they have certain limitations that may threaten the validity of the findings presented and discussed. Among the limitations and threats to validity present in this evaluation are: possible response bias, missing data, increased family-wise error rate, students' different maturation rates and lack of control or comparison groups at specific schools.

As discussed in previous Power Lunch evaluations (see Portillo & Weiner, 2002, 2003; Portillo et al., 2004), Post-Test accounts reported by teachers could have estimated larger student improvements than those that actually occurred. Although it is not possible to determine the extent to which this was the case, findings suggest that teachers did not resort to it when assessing students' performance. Information provided by treatment and control teachers, first of all, was congruent with the trends shown by ITBS reading scores and students' reading attitudes, as well as reading for enjoyment reports. If teachers had displayed any type of response bias, it could arguably be pinpointed among treatment and/or control teachers by contrasting their reports' trends. In addition, a number of accounts provided by teachers from both treatment and control groups remained invariable between both groups as well as between Pre-Test and Post, thus indicating consistency in terms of group condition and time.

Missing data occurred across all groups of survey respondents. The proportion of missing data varied across each type of respondent and instrument. Many teachers and volunteers failed to respond either at the Pre-Test or Post-Test or were unable to respond to certain questions because they could not provide accurate information. In some cases, students did not respond to some questions because they did not fully understand them. Because listwise deletion was used to handle missing data, it is likely that some statistical bias was introduced in various analyses. In addition, the inclusion of multiple statistical tests (e.g., ANOVAS) increased the family-wise error rate so that more stringent p values (closer to .01) are needed to establish statistically significant differences with more confidence.

A more troubling issue is the possibility of students' different maturation rates in the outcome areas assessed. Maturation "refers to natural changes in people due solely to the passage of time" (Posavac & Carey, 1997, p. 148). Even though statistically significant interactions were achieved, there were Pre-Test differences that may have accounted in some areas for results in favor of Power Lunch students. It is important to mention, nevertheless, that the numerous outcome indicators evaluated and the congruency of findings as a whole help to dissipate the risk of an overarching maturation effect in most analyses.

The lack of control groups was unavoidable at some schools where all classrooms at a given grade level were participating in Power Lunch. To establish comparison groups, non-participating students from nearby participating WITS schools were surveyed and their responses were used. In many cases, schools were matched based on geographical region and ethnic/racial background, but the chances of biases due to maturation, selection and even history cannot be completely ruled out.

IX. Conclusions

In the last five years, Working In The Schools (WITS) has shown a solid commitment to conducting programmatic evaluations beyond what is usually expected from a small not-for-profit organization. The 2004-2005 school year marked the fourth consecutive outcome evaluation of Power Lunch, a relatively simple and flexible program that helps young students enjoy reading and succeed academically. This evaluation assessed a number of significant aspects that make reading accountable and achievable among elementary students. Some of these aspects were reading proficiency, reading-related skills, reading motivation, reading attitudes and what we identify as reading for enjoyment.

Working with children brings many challenges to the evaluation table, from outcomes improvement to methodological issues. These difficulties are somewhat exacerbated by the condition of the program's primary beneficiaries: academically at-risk children who come from economically disadvantaged families. Compared to past evaluations (see Portillo & Weiner, 2002, 2003; Portillo et al., 2004), a larger sample size was achieved, although the balance between treatment and control groups suffered because some teachers failed to participate or submit their reports. This later shortcoming increased, as a direct result, the proportion of missing teacher information, especially among control groups. The higher sample size, however, insured an adequate context to run a series of rigorous statistical group analyses and a stronger statistical power, permitting the establishment of existing statistically significant differences.

The results offered in this report resemble the findings provided by Smith et al. (2000), Portillo and Weiner (2002, 2003) and Portillo et al. (2004), who have conducted the only available evaluations of Power Lunch in Washington D.C. and Chicago, respectively. Smith and her colleagues implemented an experimental design whereas this and all previous WITS evaluations (Portillo & Weiner, 2002, 2003; Portillo et al., 2004) used a quasi-experimental approach due to the impossibility of randomly assigning students to treatment and control groups. It should be noted that the magnitude of treatment and control differences in this evaluation is, to some degree, smaller than what has been documented in previous ones such as the 2003-2004 evaluation (see Portillo et al., 2004). In spite of result fluctuations, which may be unavoidable across time, Power Lunch groups tend to outperform non-Power Lunch groups more often than not. In addition, many of these differences are statistically significant and are direction-congruent across several outcomes, particularly when it comes to standardized reading scores (ITBS scores). These results are also remarkable if it is taken into account that many of the students come from schools that have been on probation for several years. It is possible that a more intensive reading program could yield stronger results, especially with the lower achieving students.

In summary, the multiple positive results achieved by Power Lunchers and the congruency of this evaluation with earlier ones suggests that Power Lunch is a program that can help students improve their chances of reading success. WITS will use the information gathered to further improve its services to the at-risk student community attending Chicago Public Schools.

Technical Appendix

1. Read-aloud programs literature review

According to the report of the National Commission on Reading, *Becoming a Nation of Readers* (Anderson, Hiebert, Scott, & Wilkinson, 1984) “the single most important activity for building the knowledge required for eventual success in reading is reading aloud to children” (p. 23). Although many school age children are expected to have already acquired vast previous read-aloud experiences and be familiarized with books and authors, children raised in poverty often enter school with limited exposure to books and, as a result, their literacy and language skills are underdeveloped (Adams, 1990). In fact, many low-income children experience their first shared reading outside their home.

One strategy used to help economically disadvantaged children improve their literacy skills is implementing site-base reading and mentoring programs. Early literacy/reading programs intend to promote the development of reading skills among children; this can occur directly (e.g., reading aloud to children, classroom instruction) or indirectly (e.g., visiting the local library) through instructional and motivational activities (Moss, Hiller, Moore, & Gamse, 1999). A typical read-aloud session in many reading programs brings to mind one adult and one child sitting side by side, huddled over a book, completely immersed in the story. When adults and children share read-aloud sessions, students learn the correct way to hold, read and discuss the content of a book.

The effectiveness of reading/mentoring programs is still open to debate among practitioners and researchers, but a growing body of evidence indicates that they could be very valuable for children’s literacy. One-on-one read-aloud programs, for instance, may be extremely beneficial for at-risk students, helping them to expand their vocabulary and verbal participation in class. Morrow, O’Connor and Smith (1990) assessed different reading strategies and found a difference between children who heard stories in one-on-one settings and those in whole-class settings. Specifically, Morrow et al.’s study indicated that children in one-on-one settings asked more questions and made more comments, suggesting the superiority of one-on-one reading.

Wood and Salvetti (2001) showed that *Project Story Boost* was a successful program aimed at tackling literacy and language development deficits among at-risk children who did not receive adult read-aloud attention prior to attending school. Children were chosen to participate in the program if they scored low on the Clay assessment (Clay, 1993). Results from *Project Story Boost* showed that adult one-on-one read-aloud attention improved students’ ability to retell a story more accurately, and increased their fluency and comprehension compared to students in control groups.

Wells (1986) reported that when children and adults read aloud in a one-on-one setting, they were more likely to focus on the same objects and events, understanding the story similarly. Without noisy distractions, students better focus with their adult partner solely on the reading material set in front of them while simultaneously increasing their attention span. Students also recognize the importance of reading when repeatedly exposed to a caring adult who enjoys reading; this sends the positive message that he or she is worth their time. In turn, students are more likely to respond with a greater capability, to listen attentively and to relate

the characters in a book to real world experiences (Coiro, 2000). Coiro also suggests that as students begin to compare books to their own lives, they develop a greater sense of self-awareness and confidence.

Other studies indicate that read-aloud programs have a positive influence on children's attitudes toward reading. According to McKenna, Kear and Ellsworth (1995), attitudes toward reading are important because they are associated with, and can direct, children's reading behaviors and ability. McKenna and his colleagues consider that a negative affective response to reading can promote reading disengagement, which increases the chances of accumulating negative reading experiences over time.

One study showing that reading aloud has an impact on children's reading attitudes was conducted by Rains (1993), who investigated the effect of a yearlong program in rural western Kansas. Using the Elementary Reading Attitudes Survey (ERAS; McKenna et al., 1995), she found that students participating in the reading program displayed more positive attitudes toward reading after it was over. Similar results were found by Porter (1995), who studied 58 third and sixth graders participating and not participating in a reading aloud program in a western Kansas school.

Congruent with these findings, Duran (1995, cited in Smith et al., 2000) found that a read-aloud program for elementary students led to an increase in ERAS scores as well as in the number of books read. These positive findings are very important for the development of healthy attitudes toward reading because, as McKenna et al. (1995) have shown, attitudes toward recreational and academic reading tend to become less favorable during elementary school.

Power Lunch incorporates important aspects of developmental learning models and theories. For instance, the approach taken in Power Lunch resembles Holdaway's (1979, cited in Morrow, 1992, p. 254) developmental learning theory which specifies four essential processes that enable children to acquire literacy abilities: "*observation* of literacy behaviors, that is being read to or seeing adults read and write; *collaboration*, the interaction of the child with another individual who provides encouragement, motivation, and help; *practice*, in which the learner tries out what has been learned by reading and writing alone or with others; and *performance*, in which the child shares what has been learned and seeks approval from supportive interested adults." The program also resembles Cambourne's (1988, cited in Morrow, 1992, p. 254) model of learning which specifies that learners need to be "*immersed* in varied types of texts; need many *demonstrations* of how texts are used and constructed; must interact with individuals with high *expectations* for their success; must be given the opportunity to take responsibility for some of their literacy learning by having choices and making decisions about when, how, and what to learn; need the opportunity to make mistakes or *approximate* when engaged in literacy activities as part of the learning process; and need responses or feedback from more knowledgeable others that is constructive, timely, and non-threatening."

2. Power Lunch effectiveness

In the year 2000, the U.S. Department of Education and the American Institutes for Research conducted an evaluation of Everybody Wins' Power Lunch (see Smith et al., 2000) which showed that the program had a

substantial positive impact on elementary students in Washington D.C. Based on an experimental design with a large student sample, this evaluation showed that by the end of the school year:

- 25% of poor readers in the Power Lunch program improved their academic performance, more than double the 12% of low readers in the control group who did so.
- 55% of poor readers in the program *often* or *always* enjoyed reading, well above the 31% of control group students who felt that way.
- 35% of Power Lunch students had *improved* or *very much improved* their attention span, outpacing the 24% result for the control group.
- 81% frequently took a book home to read for fun, compared with 72% of control group students.
- 84% said that they had visited a library outside of school, topping the 76% result for the control group.

Working In The Schools (WITS) has evaluated Power Lunch for the three consecutive school years before this one (for the 2001-2002 school year, see Portillo & Weiner, 2002; for the 2002-2003 school year, see Portillo & Weiner, 2003; for the 2003-2004 school year, see Portillo et al., 2004)¹⁶. The evaluation design, a Pre-Test/Post-Test quasi-experimental design with non-equivalent (untreated) control groups, is similar to the one applied by the U.S. Department of Education in the evaluation of the Washington D.C. site. The 2001-2002 WITS evaluation included 150 students distributed among three Chicago public schools; the 2002-2003 evaluation included 318 students distributed among seven schools; and the 2003-2004 evaluation included 321 distributed among seven schools. This last evaluation revealed, among other findings, that:

- *More Power Lunchers were immediately promoted to the next grade level than non-Power Lunchers.* 64% of all first, second and third grade Power Lunch students obtained a score equal to or higher than the 35th percentile necessary for immediate grade promotion. Among non-Power Lunchers, only 38% reached the same reading proficiency level. At the Pre-Test, 12% of the students participating in the program did not read comfortably, but at the Post-Test that number decreased to only 5%.
- *Power Lunchers showed more improvement than non-Power Lunchers in 5 out of the 6 reading areas assessed:* reading comprehension (90% vs. 84%), vocabulary (94% vs. 84%), reading ability (92% vs. 84%), attention span (81% vs. 65%) and ability to articulate thoughts (86% vs. 81%).
- *More Power Lunchers improved their reading attitudes than non-Power Lunchers.* By the end of the program, 47% of all Power Lunchers improved their attitudes toward academic reading and 51% improved their attitudes toward recreational reading; control group students improved only 36% and 42%, respectively.
- Treatment and control teacher reports show that *Power Lunchers became more motivated than non-Power Lunchers to read on their own and to develop favorite topics* (74% vs. 63% and 89% vs. 75%, respectively).

¹⁶All previous Power Lunch evaluation reports are available at www.witsontheweb.org.

- *Power Lunch students outperformed non-Power Lunch students in reading confidence* as reported by teachers. Results show that the number of Power Lunch students exhibiting confidence when reading increased by 19%. Confidence levels among control group students, however, went up by only 9%.

3. Evaluation measures

The measures utilized in this evaluation were adopted from different sources. Smith et al. (2000), who conducted a previous evaluation of Power Lunch in Washington, D.C., developed a series of instruments that were adopted and/or modified in this evaluation. The measures included sets of teacher, volunteer and student surveys that were applied at the Pre-Test and Post-Test. In addition to including the instruments created and pilot tested by Smith et al., this evaluation utilized existing tools employed in evaluations of similar community reading programs.

3.1. Teacher evaluation measures

Teachers completed two different types of surveys in the Pre-Test and Post-Test stages of the evaluation. The first survey asked for background information (e.g., number of days they read aloud to their students), ratings of students' reactions to Power Lunch, personal satisfaction with the program, feedback on the benefits of the program and suggestions to improve it.

The second survey asked teachers to provide reading and academic information about each Power Lunch student (e.g., report grade card for reading, reading grade level, reading fluency). Teachers also rated their students' reading motivation based on two types of intrinsic motivation: topic and individual, as measured by Sweet, Guthrie, and Ng's (1998) Teacher Questionnaire on Student Motivation to Read (3rd Edition). Students' *topic motivation* refers "to teachers' perceptions that some students avidly read favorite topics, whereas others do not have topic preferences" and students' *individual motivation* refers to "teacher perceptions that students... read widely and frequently for [their] own sake, for extended periods of time" (Sweet et al., 1998, p. 212). Four items measured topic motivation and five items measured individual motivation. Sweet et al. (1998) reported reliabilities of .84 and .89 for the topic and individual motivation subscales respectively. In the current evaluation, the subscales have reliabilities of .91 and .80 for the Pre-Test and .93 and .79 for the Post-Test, respectively.

Although Sweet and others (1998) do not report any long term stability information for the Teacher Questionnaire on Student Motivation to Read, the topic and individual motivation subscales had one-year stabilities (Pre-Test/Post-Test Pearson correlation) of .65 and .69 ($ps < .001$), respectively.

3.2. Volunteer evaluation measures

Reading volunteers completed a survey with open and close-ended items during the Pre-Test and Post-Test of the evaluation. The survey was presented in two formats, as a paper questionnaire and as an online survey. Reading volunteers provided background information about themselves such as workplace, ethnicity/race, gender and age, as well as their student's name (used only for case matching purposes). Reading

volunteers were then asked a series of questions about Power Lunch regarding types of books read, selection of reading material, students' reading ability, comprehension and interest. In the last section of the survey, reading volunteers were encouraged to share personal stories about their volunteering experience and any suggestions that could help WITS staff improve the quality of the Power Lunch for both students and teachers.

3.3. Student evaluation measures

Treatment and control students completed two instruments during the Pre-Test and Post-Test. The first survey collected background information and included specific reading-related information such as reading habits at school and home. The second instrument completed was the Elementary Reading Attitudes Survey (ERAS; McKenna & Kear, 1990, 1999; McKenna, Kear, Ellsworth, 1995). The ERAS is a 20-item, 4-node, pictorial rating scale based on the cartoon character "Garfield." This instrument is nationally normed and is widely used in studies and evaluations of literacy programs similar to Power Lunch (see Allen, Cipielewski, & Stanovich, 1992; Blainsdell, De Young, Hutchinson, & Pedersen, 1999; Cloer & Pearman, 1992; Dale & Radell, 1995; Diamond & Onwuegbuzie, 2000; Fitzgibbons, 1997; Friend, 1995; Gettys & Fowler, 1996; Lazarus & Callahan, 2000; McKenna, Stratton, Grindler, & Jenkins, 1995; Mostow, Aist, Burkhead et al., 2002; Overett & Donald, 1998; Porter, 1995; Roth, Worrell, & Gabelko, 2002; Vollands, Topping, & Evans, 1996). It includes two subscales that measure *attitudes toward recreational reading* (10 items) and *attitudes toward academic reading* (10 items). Responses range from 1 to 4, that is, from the most negative to the most positive attitude toward reading.

According to McKenna et al. (1995), reliability for the ERAS total scale and the subscales range between .74 and .89. For the current evaluation, Pre-Test reliability for the complete ERAS scale (20 items) was .84, and .71 and .76 for the recreational and academic subscales. Post-Test reliability for the complete ERAS scale was .86, and .77 and .78 for the recreational and academic subscales. ERAS' one-year stability (Pre-Test/Post-Test Pearson correlation) for the current evaluation was very similar to the one reported by Kush, Watkins, McAleer and Edwards (1995) ($r_s = .47$ and $.38$, $p_s < .001$, for the recreational and academic subscales respectively).

Finally, reading and vocabulary Iowa Test of Basic Skills (ITBS) raw scores and percentiles were obtained from Chicago Public Schools (CPS) for both treatment and control students. Scores were used to determine the impact that Power Lunch has on participating students and to establish their reading proficiency in an objective and unobtrusive fashion.

4. Response rates

Four hundred eighty two students completed the ERAS during the Pre-Test and 396 students completed the same instrument at the Post-Test. After adjusting for students who transferred in or out and who were absent or left the instrument incomplete, the student response rate for the ERAS was equal to 91%. For the second student survey completed during the Pre-Test, 483 Power Lunch participants filled out the instrument and 384

completed it during the Post-Test. After adjusting for students who transferred in or out and who were absent or left the instrument incomplete, the student response rate for the ERAS was equal to 87%.

As part of the evaluation, 497 reading volunteers completed a Pre-Test survey and 238 of them completed a second survey during the Post-Test. In addition, 194 reading volunteers who failed to respond to the Pre-Test survey completed the Post-Test survey. The final response rate for participating volunteers who completed both Pre-Test and Post-Test measures was 48%.

Teachers were also asked to provide information about each individual student participating in Power Lunch. They provided information for 450 students during the Pre-Test and for 381 students during the Post-Test, which accounted for an 85% response rate. From the 24 classrooms where information was gathered, 19 teachers completed both Pre and Post-Test questionnaires, two treatment teachers failed to return their Post-Test surveys and three control teachers declined to participate in the evaluation of Power Lunch.

5. Missing data

Missing data was handled by using listwise deletion. When a student was absent or failed to respond to an item in the Pre-Test or Post-Test, listwise deletion was used. Similarly, when a teacher or a volunteer failed to return or complete their respective surveys, listwise deletion was used.

6. Students' ethnic/racial background

Table 2
Students' ethnic/racial background in schools served by Power Lunch

School	Ethnicity/Race			
	White	African-American	Hispanic	Asian
Brown	0.0	97.3	2.3	0.3
Copernicus	0.5	98.4	0.9	0.2
Gladstone	1.6	43.3	54.4	0.5
Grant	0.0	100.0	0.0	0.0
Haines	0.1	14.8	1.5	83.5
Haugan	9.1	2.5	79.5	8.6
Henson	0.0	99.7	0.0	0.0
Jenner	0.0	100.0	0.0	0.0
Jordan	1.1	38.8	59.5	0.6
KIPP	0.0	100.0	0.0	0.0
Libby	0.2	94.5	5.2	0.1
Mann	0.2	99.8	0.0	0.0
Medill	0.0	100.0	0.0	0.0
Peabody	2.8	25.0	72.0	0.2
Prescott	3.8	18.8	75.3	1.0
Schiller	0.0	100.0	0.0	0.0
Stowe	1.3	6.2	92.4	0.1
Talcott	5.2	6.6	88.1	0.2
Tilton	1.3	98.7	0.0	0.0
Walsh	2.4	5.5	92.1	0.0
<i>Totals (in percentages)</i>	<i>1.5</i>	<i>62.5</i>	<i>31</i>	<i>5</i>

7. Extra activities conducted in Power Lunch

Aside from the weekly reading sessions, volunteers coordinated several outside events and activities for the Power Lunch students. The following are some of the activities carried out during the 2004-2005 Power Lunch school year:

- *Shore Bank (Horace Mann Elementary School)*: In February 2005, the volunteers and students enjoyed a celebration in honor of Black History Month. Every Power Lunch student received a copy of *The Story of Ruby Bridges*, a book about the first black child to attend an all-white elementary school. After reading the book, the volunteers and students discussed how that might feel. At the end of the school year, the volunteers invited the students to the bank for a special tour and pizza lunch. The students and volunteers played games, did arts and crafts and exchanged Thank You cards. Again, every student received a book to read at home over the summer.
- *UBS, City of Chicago Department of Public Health (Medill School)*: Both groups conducted joint holiday and end-of-the-year parties for their students. Each UBS volunteer gave their student a journal in which they had inscribed a personal message to the child. They also presented their students with stickers, crayons and a photo to decorate the journal. Dept. of Public Health volunteers gave their students books to read at home as well as information and fun activities about staying healthy. Both groups provided pizza, cookies and soda for everyone.
- *Metropolitan Water Reclamation District of Greater Chicago, Richard Builders/Belgravia Group (Jenner School)*: Together, both groups hosted holiday season and end-of-the-year parties, bringing pizza and soda for a celebration at the school. The students received books to read over Winter Break and journals to enjoy over the summer.
- *Equity Office, Equity Residential, State of Illinois Science Forensic Center (Gladstone School)*: All groups jointly organized holiday season and year-end parties with pizza and soda. The students were given gift books at both celebrations.
- *Chicago Public Schools (Schiller School)*: Volunteers celebrated with parties during the holiday season and at the end of the year. Besides pizza and soda, the volunteers bought books, hats and mittens.
- *City of Chicago Dept. of Planning and Development, Graphics, BIS, Treasurer (Jenner School)*: To celebrate the winter holidays, the City Hall volunteers invited their Power Lunch students to a celebration at the Chicago Cultural Center. Students sang carols, made arts and crafts, exchanged cards and enjoyed pizza and dessert. Each student also received a gift book. Similarly, at the end of the year, volunteers brought pizza, soda and books for their students.

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