# Project C.H.A.N.C.E.: Interim Evaluation Report Year 2 

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# PROJECT C.H.A.N.C.E.: <br> INTERIM EVALUATION REPORT YEAR 2 Executive Summary 

## Highlights of Findings

This evaluation report, prepared by the Delaware Education Research and
Development Center, includes an accounting of the second year of Project C.H.A.N.C.E. implementation. Information related to student achievement, student behavioral indices, technology literacy, and program satisfaction is discussed. The following are highlights from the report.

## Student Achievement

- There was a statistically significant improvement in the Red Clay District Reading Test scores for participants and non-participants, with the exception of participants at Warner.
- There were no meaningful differences between district reading test scores for program participants and non-participants.
- There were no statistically significant difference between program participants and non-participants in DSTP reading and writing performance level scores.
- Reading grades improved for both program participants and non-participants from $1^{\text {st }}$ quarter to $4^{\text {th }}$ quarter.
- There was a meaningful difference in the reading grades when comparing ALL regular program participants and ALL students in the Red Clay School District. Participant grades are lower.
- While not a statistically significant difference, reading grades for students in grades 1-3 show that fewer program participants' grades decreased from fall to spring and more students' grades increased from fall to spring compared to non-participants.


## Student Behavioral and Attitudinal Indices

- Between $70 \%$ and $80 \%$ of participants surveyed indicated that they always enjoy learning.
- There was a decrease from $73 \%$ to $50 \%$ of students who always like school, and in spring approximately $22 \%$ of students never like school.
- Almost all students surveyed like the program some of the time if not all of the time, and over $60 \%$ feel they are doing better in school since they began participating in the program.
- According to teacher reports, students were on time to class less often in the spring than in the fall.
- Teacher reports indicated that between $69 \%$ and $94 \%$ of students turned in homework on time, completed homework to the teacher's satisfaction, participated in class, were attentive, remained on task in class, tried their hardest, came prepared to class, and got along well with others at least a few times a week if not everyday.
- Program participants had slightly fewer suspensions than students at C.H.A.N.C.E. schools not participating in the program.


## Student Health and Wellness

- On average, program participants had slightly fewer absences compared to non-participants at both the district level and at the three program site schools.
- Survey results indicated that program staff rated all components of the health and wellness program provided by Christiana Care either "good" or "very good."


## Parent Attitudes

- Parents felt well informed about the program, believed it met their expectations, and that the instructors were adequately prepared, however, they generally did not see program participation influencing their children's academic and social behaviors.
- Over $90 \%$ of the parents surveyed either agreed or strongly agreed that they "would be willing to enroll another child in this program."
- Of the parents surveyed, $51.7 \%$ encouraged their children to go to the library once in a while, and only $24.1 \%$ encouraged their children to go to the library once a week or more.
- Almost $90 \%$ of parents said they would like to see their children complete a college degree of some kind.

The evaluation results indicate that the Project C.H.A.N.C.E. program is well thought of by students and parents, and that teachers are seeing an improvement in some classroom behaviors for students participating in the program. Based on comparisons of
participants and non-participants, impact on reading and writing performance was not seen during year two of implementation. However, district test scores and grades indicate improvement throughout the academic year. To look more closely at program impact, it would be appropriate to focus on students who have participated in the program since its inception.

## Interim Evaluation Report - Year 2

## INTRODUCTION

The students participating in Project C.H.A.N.C.E. are among those most at risk for failure in school, and the results presented in this report must be considered in this light. While discussing the impact the Project C.H.A.N.C.E. program has had on student academic performance and attitudes toward learning, as well as on parent attitudes, it is impossible to attribute any positive or negative results directly to participation in the program. The results discussed throughout this report are mostly descriptive in nature and provide information about various student academic and behavioral indices related to the program and learning in general. Program satisfaction, parent attitudes, and staff feedback are also components of this report.

Most analyses are performed on program participants as a whole, however, in some instances, data is disaggregated and analyzed for the three different sites, Warner, Lewis, and Shortlidge elementary schools.

Table 1 - Number of Students Attending Project C.H.A.N.C.E. Activities

| \# of days attending | Lewis <br> Before School* | Lewis <br> After School | Shortlidge | Warner | Total* $^{*}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $0-14$ | 5 | 4 | 4 | 16 | 29 |
| $15-29$ | 3 | 1 | 5 | 6 | 15 |
| $30-44$ | 0 | 1 | 3 | 6 | 10 |
| $45-59$ | 3 | 4 | 3 | 4 | 14 |
| $60-74$ | 1 | 3 | 7 | 1 | 11 |
| $75-89$ | 2 | 0 | 4 | 3 | 8 |
| $90-104$ | 2 | 2 | 0 | 5 | 9 |
| $105-119$ | 0 | 1 | 5 | 4 | 12 |
| $120-134$ | 4 | 1 | 6 | 1 | 8 |
| $135-149$ |  | 4 | 8 | 8 | 24 |
| $150-164$ |  | 21 | 45 | 37 | 3 |
| Number of Students | 20 |  |  |  | 143 |

[^0]Table 1 provides a summary of student attendance in the Project C.H.A.N.C.E. program during the 2000-2001 academic year. The section shaded in light gray indicates the number of "regular" students. According to the federal guidelines, a regular student is defined as a student attending at least 30 days throughout the year.

## Student Achievement

Class grades, district test scores, and performance levels on the Delaware Student Testing Program (DSTP) were used to examine student achievement in reading and writing. Non-participants are defined as students in the district that did not receive services from the C.H.A.N.C.E. program. Because a large percentage of C.H.A.N.C.E. students are African American, the breakouts that follow include data for African American students to allow for comparisons of similar students.

## District Reading Test Scores

District reading test scores were examined for participants in the C.H.A.N.C.E. program and for non-participants. A series of t-tests were performed to assess significance between the pretest and posttest means for each group. Additionally, univariate analysis of variance was used to examine pretest and posttest differences between C.H.A.N.C.E. participants and non-participants. Recently many researchers have argued that significance testing is only the first step, and that it is necessary to determine how meaningful a difference is by looking at what is referred to as the size of the "effect". Effect sizes are provided to represent how meaningful any significant differences are between participant and non-participant scores. Conventional rules for evaluating effect size indicate that effect sizes between .2 and .5 represent a small effect, effect sizes between .5 and .8 represent a medium effect, and effect sizes above .8 represent a large effect.

According to rules of convention in statistical analysis, the following rules will be implemented throughout this report regarding tests of statistical significance and effect sizes: Tests for statistical significance will be performed on groups with a minimum of

10 individuals. When significance is found, effect size analysis will be performed on groups of 100 or greater.

Table 2 shows the mean pretest score, the mean posttest score, and the difference between the pretest and posttest means. The significance between pretest and posttest means is indicated in the mean difference column. All but one pre-post-test difference is statistically significant. With the exception of program participants at Warner, all groups showed an increase in reading test scores.

Table 2 - Pre and Post District Reading Test Scores for Program Participants and NonParticipants

|  | Reading <br> Pretest <br> Mean | Reading Posttest Mean | Mean <br> Difference |
| :---: | :---: | :---: | :---: |
| PARTICIPANTS: All students ( $\mathrm{n}=35$ ) | 43.57 | 57.60 | $14.03^{* * *}$ |
| NON-PARTICIPANTS: All district elementary students ( $\mathrm{n}=3,908$ ) | 55.85 | 68.63 | $12.79^{* * *}$ |
| NON-PARTICIPANTS: Students at a C.H.A.N.C.E. school ( $\mathrm{n}=702$ ) | 46.30 | 59.16 | 12.86 *** |
| PARTICIPANTS: African-American Students (n=28) | 41.96 | 54.25 | 12.29 *** |
| NON-PARTICIPANTS: District African-American elementary students $(\mathrm{n}=1,027)$ | 47.79 | 58.44 | $10.64 * *$ |
| NON-PARTICIPANTS: African-American students at a C.H.A.N.C.E. school ( $\mathrm{n}=419$ ) | 46.08 | 57.45 | $11.37{ }^{* * *}$ |
| PARTICIPANTS: Lewis students ( $\mathrm{n}=10$ ) | 38.70 | 55.30 | $16.60{ }^{*}$ |
| NON-PARTICIPANTS: Lewis students ( $\mathrm{n}=239$ ) | 38.09 | 55.20 | $17.11^{* * *}$ |
| PARTICIPANTS: Shortlidge students ( $\mathrm{n}=14$ ) | 39.86 | 55.50 | $15.64{ }^{* *}$ |
| NON-PARTICIPANTS: Shortlidge students ( $\mathrm{n}=158$ ) | 41.97 | 61.44 | $19.47^{* * *}$ |
| PARTICIPANTS: Warner students ( $\mathrm{n}=11$ ) | 52.73 | 62.36 | 9.64 |
| NON-PARTICIPANTS: Warner students ( $\mathrm{n}=305$ ) | 54.98 | 61.07 | $6.10{ }^{* * *}$ |

${ }^{* * *} \mathrm{p}<.001 \quad{ }^{* *} \mathrm{p}<.01 \quad{ }^{*} \mathrm{p}<.05$

Additional analyses were performed to examine differences between program participants and non-participants. Table 3 shows the groups for which comparisons were performed, the difference between their mean scores, and the effect size for the score difference. All comparisons resulted in a statistical significance at the .001 level. However, the effect sizes for the significant differences, in all cases, were small. Therefore, the differences between program participants and non-participants are not very meaningful.

Table 3 - A Comparison of District Reading Test Scores for C.H.A.N.C.E. Participants and Non-participants

| Participants | Non-Participants | Reading Post- <br> Test Mean <br> Difference | Effect size |
| :--- | :--- | :---: | :---: |
| All Students (n=35) | All district elementary students <br> $(\mathrm{n}=3,908)$ | -11.03 | $\mathrm{~d}=.402^{* * *}$ |
|  | Students at C.H.A.N.C.E. schools <br> $(\mathrm{n}=702)$ | -1.56 | $\mathrm{~d}=.345^{* * *}$ |
| All African-American Students <br> $(\mathrm{n}=28)$ | District African-American elementary <br> students (n=1,027) | -4.90 | $\mathrm{~d}=.285^{* * *}$ |
|  | -3.20 | $\mathrm{~d}=.283^{* * *}$ |  |
| Lewis Students (n=10) | Lewis Students (n=239) | $.10^{* * *}$ |  |
| Shortlidge Students (n=14) | Shortlidge Students (n=158) | $-5.94^{* * *}$ |  |
| Warner Students (n=11) | Warner Students (n=305) | $1.29^{* * *}$ |  |

Note: Reading post-test mean difference was calculated by subtracting the mean score for nonparticipants from the mean score of participants. Effect size was calculated using Partial Eta-squared. Analysis of Variance between participants and non-participants was calculated with reading posttest as the dependent variable and reading pretest as a covariate. All tests were significant at the . 001 level.

## Delaware Student Testing Program Scores

The Delaware Student Testing Program provides a measure of student achievement in reading and writing. Table 4 shows the mean $(M)$ level of performance on the DSTP, as well as the standard deviation (SD) of the mean, for Project C.H.A.N.C.E. participants and non-participants in the areas of reading and writing.

Table 4 - A Comparison of DSTP Performance Levels for Program Participants and Non-Participants for Reading and Writing

|  | READING | WRITING |
| :--- | :--- | :---: |
| PARTICPANTS: All students (n=25) | $\mathrm{M}=2.36 ; \mathrm{SD}=1.22$ | $\mathrm{M}=2.00 ; \mathrm{SD}=0.50$ |
| NON-PARTICIPANTS: All district elementary <br> students (n=2,517) | $\mathrm{M}=2.60 ; \mathrm{SD}=1.11$ | $\mathrm{M}=1.99 ; \mathrm{SD}=0.78$ |
| NON-PARTICIPANTS: Students at a C.H.A.N.C.E. <br> school (n=566) | $\mathrm{M}=2.30 ; \mathrm{SD}=1.05$ | $\mathrm{M}=1.90 ; \mathrm{SD}=0.77$ |
| PARTICPANTS: All African-American Students <br> (n=18) | $\mathrm{M}=1.94 ; \mathrm{SD}=0.94$ | $\mathrm{M}=1.83 ; \mathrm{SD}=0.38$ |
| NON-PARTICIPANTS: All district African- <br> American students (n=841) | $\mathrm{M}=2.12 ; \mathrm{SD}=0.96$ | $\mathrm{M}=1.75 ; \mathrm{SD}=0.73$ |
| NON-PARTICIPANTS: African-American students <br> at a C.H.A.N.C.E. school (n=393) | $\mathrm{M}=2.17 ; \mathrm{SD}=0.94$ | $\mathrm{M}=1.80 ; \mathrm{SD}=0.75$ |
| PARTICPANTS: Lewis (n=5) $\dagger$ | $\mathrm{M}=1.80 ; \mathrm{SD}=0.84$ | $\mathrm{M}=1.80 ; \mathrm{SD}=0.45$ |
| NON-PARTICIPANTS: Lewis (n=110) | $\mathrm{M}=1.99 ; \mathrm{SD}=0.94$ | $\mathrm{M}=1.76 ; \mathrm{SD}=0.62$ |
| PARTICPANTS: Shortlidge (n=9) $\dagger$ | $\mathrm{M}=2.44 ; \mathrm{SD}=1.13$ | $\mathrm{M}=1.89 ; \mathrm{SD}=0.33$ |
| NON-PARTICIPANTS: Shortlidge (n=140) | $\mathrm{M}=2.24 ; \mathrm{SD}=0.94$ | $\mathrm{M}=1.82 ; \mathrm{SD}=0.70$ |
| PARTICPANTS: Warner (n=11) | $\mathrm{M}=2.55 ; \mathrm{SD}=1.44$ | $\mathrm{M}=2.18 ; \mathrm{SD}=0.60$ |
| NON-PARTICIPANTS: Warner (n=316) | $\mathrm{M}=2.44 ; \mathrm{SD}=1.11$ | $\mathrm{M}=1.98 ; \mathrm{SD}=0.83$ |

$\dagger$ Significance testing was not performed
Note: The average (i.e., mean) is denoted by " M " and the standard deviation is denoted by "SD."

A series of univariate analysis of variance tests were performed to determine if statistically significant differences exist between the Project C.H.A.N.C.E. student scores and the scores of those who do not participate in the program. There were no significant differences between scores of participants and non-participants for reading or writing.

## Class Grades

Class grades are also included as measures of student achievement. Student grades for the first marking period were used as a pretest score and student grades for the fourth marking period were used as a posttest score.

Class grades for the Red Clay school district are given in letter format, and were converted to a numeric scale for data analysis purposes. For students in grades 1-3, the three codes used (AG, OG, and BG) were changed to a three-point scale of 1-3, respectively. "Reads aloud with comprehension," as listed on student report cards, was used for this analysis. A 5-point scale was used for students in grades 4-5, i.e., $\mathrm{F}=0$, $\mathrm{D}=1, \mathrm{C}=2, \mathrm{~B}=3$, and $\mathrm{A}=4$. "Reading," as denoted on student report cards, was used for this analysis. Reading grades were analyzed to determine if there were any significant differences between the first and fourth marking period grades for Project C.H.A.N.C.E. participants and non-participants.

Table 5 - Mean First Quarter and Fourth Quarter Reading Grades for Grades 1-3

|  | FIRST Quarter Grades | FOURTH Quarter Grades | Mean <br> DIFFERENCE |
| :---: | :---: | :---: | :---: |
| All C.H.A.N.C.E. students ( $\mathrm{n}=20$ ) | 1.43 | 1.83 | 0.40** |
| All Red Clay non-C.H.A.N.C.E. students ( $\mathrm{n}=2,690$ ) | 1.74 | 1.97 | $0.23 * * *$ |
| Non-C.H.A.N.C.E. students at a C.H.A.N.C.E. school ( $\mathrm{n}=597$ ) | 1.50 | 1.81 | 0.31 *** |
| C.H.A.N.C.E. Black Students ( $\mathrm{n}=22$ ) | 1.41 | 1.68 | 0.27 |
| District non-C.H.A.N.C.E. Black students ( $\mathrm{n}=831$ ) | 1.53 | 1.76 | 0.24*** |
| Non-C.H.A.N.C.E. Black students at a C.H.A.N.C.E. school (n=383) | 1.59 | 1.89 | 0.30*** |
| Lewis C.H.A.N.C.E. students ( $\mathrm{n}=8) \dagger$ | 1.38 | 2.13 | 0.75 |
| Lewis non-C.H.A.N.C.E. students ( $\mathrm{n}=227$ ) | 1.31 | 1.68 | $0.37 * * *$ |
| Shortlidge C.H.A.N.C.E. students ( $\mathrm{n}=14$ ) | 1.50 | 1.50 | 0.00 |
| Shortlidge non-C.H.A.N.C.E. students ( $\mathrm{n}=223$ ) | 1.54 | 1.75 | $0.21^{* * *}$ |
| Warner C.H.A.N.C.E. students ( $\mathrm{n}=8) \dagger$ | 1.38 | 2.13 | 0.75 |
| Warner non-C.H.A.N.C.E. students ( $\mathrm{n}=147$ ) | 1.73 | 2.10 | 0.37*** |

${ }^{* * *} \mathrm{p}<.001 \quad{ }^{* *} \mathrm{p}<.01 \quad{ }^{*} \mathrm{p}<.05$
$\dagger$ Significance testing was not performed
Note: Student letter grades were transformed to numbers as follows: $\mathrm{AG}=3, \mathrm{OG}=2$, and $\mathrm{BG}=1$.

A series of t -tests were performed to assess significance between the first quarter and fourth quarter grades for each group. Additionally, univariate analysis of variance was used to examine grade differences between C.H.A.N.C.E. participants and nonparticipants. Table 5 shows the mean first quarter grade, mean fourth quarter grade, and mean difference for students in grades 1-3. In all but one case there was a statistically significant improvement in student reading grades for participants and non-participants. Because the samples were so small at the individual program schools, no significance tests were performed. However, a . 75 point increase, on a 3-point scale, was seen at Lewis and Warner.

Table 6 - A comparison of Reading Grades for Participants and Non-Participants in Grades 1-3

| Participants | Non-Participants | Reading Grades Mean Difference | Effect size |
| :---: | :---: | :---: | :---: |
| All C.H.A.N.C.E. Students (n=20) | All district elementary students ( $\mathrm{n}=2,690$ ) | -.14*** | $\mathrm{d}=.530$ |
|  | Students at C.H.A.N.C.E. schools ( $\mathrm{n}=597$ ) | . 02 *** | $\mathrm{d}=.395$ |
| All African-American Students (n=22) | District African-American elementary students ( $\mathrm{n}=831$ ) | .06*** | $\mathrm{d}=.452$ |
|  | District African-American students <br> at C.H.A.N.C.E. schools ( $\mathrm{n}=383$ ) | $-.21 * * *$ | $\mathrm{d}=.395$ |
| Lewis C.H.A.N.C.E. Students ( $\mathrm{n}=8) \dagger$ | Lewis students ( $\mathrm{n}=227$ ) | . 45 |  |
| Shortlidge C.H.A.N.C.E. Students ( $\mathrm{n}=14$ ) | Shortlidge students ( $\mathrm{n}=223$ ) | $-.25 * * *$ |  |
| Warner C.H.A.N.C.E. Students ( $\mathrm{n}=8) \dagger$ | Warner students ( $\mathrm{n}=147$ ) | . 03 |  |

$\dagger$ Significance testing was not performed
Note: Student letter grades were transformed to numbers as follows $\mathrm{AG}=3, \mathrm{OG}=2$, and $\mathrm{BG}=1$. Effect size was calculated using Partial Eta-squared. Analysis of Variance between participants and nonparticipants was calculated with $4^{\text {th }}$ quarter reading grades as the dependent variable and $1^{\text {st }}$ reading grades as a covariate.

Additional analyses were performed to examine differences between program participants and non-participants. Table 6 shows the groups for which comparisons
were performed, the difference between their mean scores, and the effect size for the score difference. All comparisons resulted in a statistical significance at the . 001 level. The effect sizes for the significant differences were small in all cases except when comparing program participants with all students in the Red Clay School District. The effect size for this comparison was medium. Therefore, the differences between program participants and non-participants was meaningful in this instance, but not very meaningful for the other comparisons performed.

Table 7 - Mean First Quarter and Fourth Quarter Reading Grades for Grades 4-5

|  | First <br> QUARTER <br> Grades | FOURTH <br> QUARTER <br> GRADES | MEAN <br> DifFERENCE |
| :--- | :--- | :---: | :---: |
| All C.H.A.N.C.E. students (n=14) | 2.71 | 2.36 | -0.36 |
| All Red Clay non-C.H.A.N.C.E. students (n=2,175) | 2.72 | 2.79 | $0.07^{* * *}$ |
| Non-C.H.A.N.C.E. students at a C.H.A.N.C.E. school <br> $(\mathrm{n}=406)$ | 2.66 | 2.53 | $-0.13^{* *}$ |
| C.H.A.N.C.E. Black Students (n=11) | 2.64 | 2.27 | -0.36 |
| District non-C.H.A.N.C.E. Black students (n=634) | 2.34 | 2.33 | -0.01 |
| Non-C.H.A.N.C.E. Black students at a C.H.A.N.C.E. school <br> $(\mathrm{n}=263)$ | 2.48 | 2.38 | -0.10 |
| Lewis C.H.A.N.C.E. students (n=2) $\dagger$ | 4.00 | 3.50 | -0.50 |
| Lewis non-C.H.A.N.C.E. students (n=53) | 3.13 | 3.34 | 0.21 |
| Shortlidge C.H.A.N.C.E. students (n=3) $\dagger$ | 2.00 | 2.33 | 0.33 |
| Shortlidge non-C.H.A.N.C.E. students (n=50) | 2.44 | 2.62 | 0.18 |
| Warner C.H.A.N.C.E. students (n=9) $\dagger$ | 2.67 | 2.11 | -0.56 |
| Warner non-C.H.A.N.C.E. students (n=303) | 2.38 | $-0.23^{* * *}$ |  |

${ }^{* * *} \mathrm{p}<.001{ }^{* *} \mathrm{p}<.01{ }^{*} \mathrm{p}<.05$
$\dagger$ No test of significance was performed
Note: Student letter grades were transformed to numbers as follows: $\mathrm{A}=4, \mathrm{~B}=3, \mathrm{C}=2, \mathrm{D}=1$, and $\mathrm{F}=0$.

The same comparisons were performed for grades 4-5 as were performed for grades 1-3. Table 7 shows the mean reading grades for the first and fourth quarter marking periods and the mean difference for the two quarters. Within group comparisons resulted in statistically significant differences for non-participants in the district, at C.H.A.N.C.E. schools, and at Warner Elementary School, some increases and some decreases. Significance tests were not performed for the C.H.A.N.C.E. participants at individual schools because the sample sizes were too small, however, some increase in reading grades is noted for these groups.

Table 8 - A comparison of Reading Grades for Participants and Non-Participants in Grades 4-5

| Participants | Non-Participants | Reading Grades Mean Difference | Effect size |
| :---: | :---: | :---: | :---: |
| All C.H.A.N.C.E. Students (n=14) | All district elementary students $(\mathrm{n}=2,175)$ | -.43*** | $\mathrm{d}=.411$ |
|  | Students at C.H.A.N.C.E. schools ( $\mathrm{n}=406$ ) | -.17*** | $\mathrm{d}=.285$ |
| All African-American Students ( $\mathrm{n}=11$ ) | District African-American elementary students ( $\mathrm{n}=634$ ) | -.06*** | $\mathrm{d}=.326$ |
|  | District African-American students at C.H.A.N.C.E. schools ( $\mathrm{n}=263$ ) | $-.11 * * *$ | $\mathrm{d}=.239$ |
| Lewis C.H.A.N.C.E. Students ( $\mathrm{n}=2$ ) $\dagger$ | Lewis students ( $\mathrm{n}=53$ ) | . 16 |  |
| Shortlidge C.H.A.N.C.E. students $(\mathrm{n}=3) \dagger$ | Shortlidge students ( $\mathrm{n}=50$ ) | -. 29 |  |
| Warner C.H.A.N.C.E. Students $(\mathrm{n}=9) \dagger$ | Warner students ( $\mathrm{n}=303$ ) | -. 27 |  |

${ }^{* * *} \mathrm{p}<.001{ }^{* *} \mathrm{p}<.01 \quad{ }^{*} \mathrm{p}<.05$
$\dagger$ No test of significance was performed
Note: Student letter grades were transformed to the numbers as follows: $A=4, B=3, C=2, D=1$, and $\mathrm{F}=0$. Effect size was calculated using Partial Eta-squared. Analysis of Variance between participants and non-participants was calculated with $4^{4 \mathrm{~h}}$ quarter reading grades as the dependent variable and $1^{\text {st }}$ reading grades as a covariate.

Additional analyses were performed to examine differences between program participants and non-participants. Table 8 shows the groups for which comparisons were performed, the difference between their mean scores, and the effect size for the score difference. All comparisons resulted in a statistical significance at the .001 level
and showed decreases in reading grades. The effect sizes for the significant differences were small in all cases, therefore, the differences between program participants and nonparticipants were not very meaningful. Again, because of small sample sized, tests of significance were not performed on individual school data.

One academic success story for Project C.H.A.N.C.E. that was reported in the Annual Federal Report, is the comparison of student reading performance for project participants and all Red Clay School District students in grades 1-3. Figure 1 compares student end of fall grades with their end of spring grades and shows the percentage of students whose grades decreased, remained the same, or increased. Reading grades are defined as "reads aloud with comprehension." There is a lower percentage of program participants whose scores decreased, and a higher percentage that increased compared with non-participants. Considering that students participating in Project C.H.A.N.C.E. are those who are most at-risk, makes this comparisons all the more exciting.

Figure 1 - Change in Reading Grades Over Time for Participants and Non-participants


## Student Behavioral and Attitudinal Indices

Information on student behaviors and attitudes was gathered through student surveys, a teacher survey, and school records. A number of attitude and behavior surveys were administered to students participating in the program. The following is a summary of major findings from these surveys. Comparisons over time are made at the group level because individual student responses were not tracked from one administration to another. The complete survey results are included in Appendices A -
E. Because effect sizes are calculated to guard against meaningless significant differences due to large sample sizes, they are not necessary when sample sizes are small. Therefore, when examining survey data for program participants, they were not calculated.

## Student Surveys

Student surveys were administered to gather information about participants' academic attitudes and behaviors, school beliefs, and satisfaction with the program. The following highlights are taken from these survey results, which are found in Appendices A-D.

In a survey administered in the fall and spring, students reported positive attitudes about learning and reading. Between $70 \%$ and $80 \%$ of participants surveyed indicated that they always enjoy learning. More than $60 \%$ of these same students indicated that they are always good at reading, while less than $10 \%$ reported they are never good at reading. Also, between $57 \%$ and $78 \%$ of students surveyed in fall and spring reported that they always pay attention in class, follow school rules, and turn in homework on time. There were some less positive findings when the student survey data was analyzed. There was a decrease from $73 \%$ in fall to $50 \%$ in spring of students who always like school, and in spring approximately $22 \%$ of students never liked school. No significant differences were found between fall and spring administrations.

Another survey asked about student behavior and attitudes during the most recent 30 -day period. It showed that when comparing winter data with spring data, there was a decrease from $76.0 \%$ (19) to $53.1 \%$ (17) of students who indicated that they wanted to go to school every day. In both winter and spring, approximately $12 \%$ of program participants indicated that they felt unsafe at school everyday during the previous 30-day period on which they were reporting.

Another survey administered focused on student satisfaction with the program activities. A total of 22 students completed the 5-item survey. The summary of student responses is in Table 9 below. Almost all students surveyed like the program some of the time if not all of the time, and over $60 \%$ feel they are doing better in school since they began participating in the program.

Table 9 - Summary of Student Responses to the Student Activity Survey

|  | Always | Sometimes | Never |
| :--- | :---: | :---: | :---: |
| 1. I like it. | $45.5 \%(10)^{*}$ | $36.4 \%(8)$ | $9.1 \%(2)$ |
| 2. I look forward to attending the program. | $40.9 \%(9)$ | $54.6 \%(12)$ | $4.5 \%(1)$ |
| 3. I feel comfortable talking to the Safe Pathways <br> staff. | $50.0 \%(11)$ | $31.8 \%(7)$ | $13.6 \%(3)$ |
| 4. I think there are enough after-school staff in the <br> activity so I can get help whenever I need it. | $54.5 \%(12)$ | $31.8 \%(7)$ | $13.6 \%(3)$ |
| 5. I think that I'm doing better in school since I <br> started coming here. | $63.6 \%(14)$ | $18.2 \%(4)$ | $9.1 \%(2)$ |

* Percentages do not always add to $100 \%$ because some students did not respond to all items.


## Teacher Survey

In both fall 2000 and spring 2001, teachers of students participating in Project C.H.A.N.C.E. were asked to complete surveys about student performance in class. They were to reflect on student behavior during the most recent 30-day period. The students for whom teachers completed reports were not always the same for both administrations, and reports for students with data from both administrations were not necessarily completed by the same teacher.

Of the items on the Teacher Survey, only one showed a significant difference between fall and spring. Students were on time to class less often in the spring than in the fall (see Appendix E for complete results). However, over 70\% of the students were on time to class everyday during the 30-day period on which teachers focused. In addition to change over time, the following statement can be made based on teacher reporting of student behavior for both fall and spring: Between $69 \%$ and $94 \%$ of students turned in homework on time, completed homework to the teacher's satisfaction, participated in class, were attentive, remained on task in class, tried their hardest, came prepared to class, and got along well with others at least a few times a week if not everyday.

## School Records

Table 10 summarizes student suspension data. The percentage of students receiving one, two, three, or no suspensions is included for Project C.H.A.N.C.E. participants and students not participating in the program. The group of students comprising the non-participant samples includes African American students to allow for comparison of similar students. School discipline records indicate that C.H.A.N.C.E. students had slightly fewer suspensions than other students at C.H.A.N.C.E. schools who do not participate in the program. Less than $10 \%$ of C.H.A.N.C.E. students had one or more suspensions, while $12 \%$ of non-participating students at C.H.A.N.C.E. schools had one or more suspensions. The suspension rate of C.H.A.N.C.E. students was similar to that of all district elementary students.

Table 10 - Summary of Student Suspension Data

|  | Number of <br> Students <br> with <br> Suspensions | Percent of <br> Students <br> with No <br> Suspensions | Percent of <br> Students <br> with One <br> Suspension | Percent of <br> Students <br> with Two <br> Suspensions | Percent of <br> Students <br> with Three <br> Suspensions |
| :--- | :---: | :---: | :---: | :---: | :---: |
| PARTIPCANTS: All <br> students (n=76) | 7 | 90.8 | 9.2 | 3.9 | 1.3 |
| NON-PARTICIPANTS: <br> All students at <br> C.H.A.N.C.E. schools <br> (n=1,512) | 182 | 88.0 | 12.0 | 5.4 | 2.8 |
| NON-PARTICIPANTS: <br> All district elementary <br> students (n=6,656) | 583 | 91.2 | 8.8 | 3.6 | 1.9 |
| PARTIPCANTS: All <br> African-American students <br> (n=61) | 7 | 88.5 | 11.5 | 4.9 | 1.6 |
| NON-PARTICIPANTS: <br> All African-American <br> students at C.H.A.N.C.E. <br> schools (n=961) | 144 | 85.0 | 15.0 | 7.4 | 3.7 |
| NON-PARTICIPANTS: <br> All district elementary <br> African-American students <br> (n=2,115) | 373 | 82.4 | 17.6 | 8.3 | 4.5 |


| PARTIPCANTS: Lewis <br> $(\mathrm{n}=18)$ | 1 | 94.4 | 5.6 | 0.0 | 0.0 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| NON-PARTICIPANTS: <br> Lewis (n=460) | 55 | 88.0 | 12.0 | 3.5 | 1.5 |
| PARTIPCANTS: <br> Shortlidge (n=33) | 2 | 93.9 | 6.1 | 0.0 | 0.0 |
| NON-PARTICIPANTS: <br> Shortlidge (n=454) | 30 | 93.4 | 6.6 | 2.2 | 0.4 |
| PARTIPCANTS: Warner <br> $(n=25)$ | 4 | 84.0 | 16.0 | 12.0 | 4.0 |
| NON-PARTICIPANTS: <br> Warner (n=598) | 97 | 83.8 | 16.2 | 9.4 | 5.5 |

## Student Health and Wellness

School attendance records reveal that C.H.A.N.C.E. students generally have fewer absences than students who do not participate in the program. C.H.A.N.C.E. students had on average 5.41 absences throughout the school year, while other students at C.H.A.N.C.E. schools had on average 8.39 absences. The district average for elementary

Table 11 - Average Number of Days Absent from School for Project C.H.A.N.C.E. Participants and Non-Participants

|  | Non-Participants | Participants |
| :--- | :---: | :---: |
| Red Clay School District | 6,656 students | 76 students |
|  | 8.62 | 5.41 |
| Combined C.H.A.N.C.E. <br> schools | 1,512 students | 76 students |
|  | 8.39 | 5.41 |
|  | 460 students | 18 students |
| Shortlidge | 7.70 | 7.33 |
|  | 454 students | 33 students |
|  | 8.65 | 4.55 |
|  | 598 students | 25 students |

students was 8.6 absences. Table 11 presents attendance data for the entire Red Clay School District and for the three schools participating in Project C.H.A.N.C.E.

Nine Project C.H.A.N.C.E. staff completed a survey about the Health and Wellness programming provided by Christiana Care. Project staff at the three sites were asked to rate their satisfaction with several different components of the Christiana Care program on a scale of 1-5, "very poor" to "very good" respectively. All program staff rated all components either "good" or "very good," with all mean ratings between 4.5 and 5.0. Appendix F delineates the complete survey results. C.H.A.N.C.E. staff were clearly very satisfied with the programming provided by Christiana Care. Two comments they included on their surveys follow.

Christiana Care bas been a bighlight for Explore this year! The children learned and bad fun at the same time. Many changes have come for some through the prevention teachings.

The program that is offered is very informative and child friendly. Ms. Emmett bring $[s]$ all the exercises alive for the child[ren] so that they understand the importance of being bealthy and how to stay that way.

One very successful component the health and wellness programming provided by Christiana Care was a play put on at each school called "Once Upon a Dream." The focus of the play was on the dangers of tobacco use. All students were actively involved in creating the scripts, costumes, and scenery, and in the performance itself. It also allowed students to take on the role of teacher and to educate the audience. Parents were invited to attend and were asked to participate in part of the performance. Both parents and students gave very positive verbal feedback to the Christiana Care program coordinator.

## Parent Attitudes

## Program Satisfaction

Parent survey responses in spring 2001 indicate that they were extremely satisfied with the Project C.H.A.N.C.E. program. Parents felt well informed about the program, felt it met their expectations, and that the instructors were adequately prepared. However, parents generally do not see program participation influencing their children's
academic and social behaviors. Over $90 \%$ of the parents surveyed either agreed or strongly agreed that they "would be willing to enroll another child in this program." A complete account of parent responses to the survey can be found in the first two sections of the survey in Appendix G.

## Academic Attitudes

In fall 2000, parents a group of 29 parents completed a general attitudes survey that included items related to academic issues (see Appendix H). Of the parents surveyed, $51.7 \%$ encourage their children to go to the library once in a while, and only $24.1 \%$ encourage their children to go to the library once a week or more. Approximately $35 \%$ of the parents discuss their children's future educational and employment plans with them at least once a week. When asked how far they would like to see their children go in their education, almost $90 \%$ of parents would like to see their children complete a college degree of some kind.

Parents were also asked to describe their children's attitudes toward school and learning as well as their performance in math and reading. A large percentage of parents believe their children have moderate or strong attitudes toward learning (79\%) and school ( $86 \%$ ), and somewhat fewer parents believe their children have moderate or strong self-confidence in learning. While parents' beliefs about their children's academic attitudes are generally positive, fewer parents feel their children's performance in reading and math is moderate or strong, $59 \%$ and $62 \%$, respectively.

Additional information regarding parent-school relations, parent involvement in their children's education, and decision-making about drug use will be detailed in an addendum that will be available at the end of January. Parent interviews are currently underway.

## Staff Attitudes

This portion of the report will be available at the end of January as an addendum and will be based on a focus group conducted with program staff this fall.

## SUMMARY

The year 2 evaluation of Project C.H.A.N.C.E. included several components: student achievement in reading and writing, student attitudes and behaviors, program satisfaction, and parent and staff attitudes. As with all new and complex educational innovations, it is difficult to attribute either positive or negative changes in academic attitude, behavior, or performance directly to program participation. There are numerous factors impinging on students participating in the Project C.H.A.N.C.E. program, and all results must be considered in light of typical changes that occur throughout a school year.

Highlights from the Year 2 evaluation follow:

## Student Achievement

- There was a statistically significant improvement in the Red Clay District Reading Test scores for participants and non-participants, with the exception of participants at Warner.
- There were no meaningful differences between district reading test scores for program participants and non-participants.
- There were no statistically significant difference between program participants and non-participants in DSTP reading and writing performance level scores.
- Reading grades improved for both program participants and non-participants from $1^{\text {st }}$ quarter to $4^{\text {th }}$ quarter.
- There was a meaningful difference in the reading grades when comparing ALL regular program participants and ALL students in the Red Clay School District. Participant grades are lower.
- While not a statistically significant difference, reading grades for students in grades 1-3 show that fewer program participants' grades decreased from fall to spring and more students' grades increased from fall to spring compared to non-participants.


## Student Behavioral and Attitudinal Indices

- Between $70 \%$ and $80 \%$ of participants surveyed indicated that they always enjoy learning.
- There was a decrease from $73 \%$ to $50 \%$ of students who always like school, and in spring approximately $22 \%$ of students never like school.
- Almost all students surveyed like the program some of the time if not all of the time, and over $60 \%$ feel they are doing better in school since they began participating in the program.
- According to teacher reports, students were on time to class less often in the spring than in the fall.
- Teacher reports indicated that between $69 \%$ and $94 \%$ of students turned in homework on time, completed homework to the teacher's satisfaction, participated in class, were attentive, remained on task in class, tried their hardest, came prepared to class, and got along well with others at least a few times a week if not everyday.
- Program participants had slightly fewer suspensions than students at C.H.A.N.C.E. schools not participating in the program.


## Student Health and Wellness

- On average, program participants have slightly fewer absences compared to non-participants at both the district level and at the three program site schools.
- Survey results indicated that program staff rated all components of the health and wellness program provided by Christiana Care either "good" or "very good."


## Parent Attitudes

- Parents felt well informed about the program, felt it met their expectations, and that the instructors were adequately prepared, however, they generally did not see program participation influencing their children's academic and social behaviors.
- Over $90 \%$ of the parents surveyed either agreed or strongly agreed that they "would be willing to enroll another child in this program."
- Of the parents surveyed, $51.7 \%$ encourage their children to go to the library once in a while, and only $24.1 \%$ encourage their children to go to the library once a week or more.
- Almost $90 \%$ of parents would like to see their children complete a college degree of some kind.

The evaluation results indicate that the Project C.H.A.N.C.E. program is well thought of by students and parents, and that teachers are seeing an improvement in some classroom behaviors for students participating in the program. Based on comparisons of participants and non-participants, impact on reading and writing performance was not
seen during year two of implementation. However, district test scores and grades indicate improvement throughout the academic year. To look more closely at program impact, it would be appropriate to focus on students who have participated in the program since its inception.


[^0]:    * There is an overlap of 19 students who attend both the before and after school programs at Lewis, therefore the total column will sometimes sum to a greater number than would be expected.

