CAPD

EVALUATION FINDINGS

WORTHINGTON, MN 21ST CENTURY COMMUNITY LEARNING CENTER

2003-2004

December 31, 2004

S. A. Stephens, Ph.D Center for Assessment and Policy Development

EXECUTIVE SUMMARY

Program Implementation

- The Worthington 21st CCLC program design reflects what is known about improving the academic and social behavior of students.
- The program has attracted a large number of diverse students to its activities.
- The program has implemented an innovative Parent Liaison program for language minority and immigrant students and their families.

Students Who Have Benefited Most

- Students who had relatively poor school attendance records were able to substantially increase their attendance, on average by 9 school days.
- Students who had done relatively poorly on achievement tests in the previous year were able to bring up their scores significantly.

• Students with limited English proficiency, especially when also involved in the Parent Liaison program, increased their school attendance rates and demonstrated greater self-control and positive attitudes.

Implications

- Make a special effort to recruit, through pro-active outreach, at-risk students who
 appear to benefit from participation in the program students with relatively poor
 school attendance, those in the lowest quartile of standardized test scores, and LEP
 students
- Ensure that the program can and does meet the special needs and interests of these students this may require bolstering the academic assistance program and expanding culturally specific activities
- Continue the Parent Liaison program and target its services particularly to LEP students and those with poor school attendance and test scores
- Continue to address issues associated with students' counter-productive behaviors –
 this may require additional work with staff and students around acceptance and respect
 for different cultures, conflict resolution training for students and staff, and supports
 for students caught in culture conflict within their family, their school and their
 community

CHAPTER ONE: BACKGROUND¹

A number of factors have lead to the recent increase in after-school programs – increased maternal employment, concerns about the safety of unsupervised children, public safety concerns, and interest in improving students' academic performance. After-school programs are now offered by almost half of all public schools. The 21st Century Community Learning Center (21st CCLC) program of the federal government is intended to build on and expand the network of locally and privately funded after-school programs

History

The 21st Century Community Learning Centers were initiated in 1994 during the Clinton administration and reauthorized under the "No Child Left Behind Act." The program has grown to provide almost \$1 billion to 2,250 school districts and 7,000 public schools.

¹ Based on reviews of the field by Mathematica Policy Research (October 2004) and PLATO Learning (2004).

Worthington, MN, received a 21st CCLC grant from the State of Minnesota in early 2003 and began implementation that spring, building on existing programs. Its experiences during the spring of the 2002-2003 school year led ISD 518 to modify its programs. In the fall of 2003-2004, the Worthington 21st CCLC program implemented the following primary components:

- Soccer programs, particularly for high school and middle school students but including upper elementary students as well
- QUEST, a set of enrichment activities offered at various community sites, including the school buildings
- ASAP, a program that combined homework help and tutoring with enrichment activities for students identified and referred by teachers as doing poorly in school
- Parent Liaison program, which provided home visits and group activities by bilingual staff for Hispanic and Southeast Asian families, many of whom were recent immigrants to the United States

The Worthington 21st CCLC program was very successful in recruiting students for all of its programs, exceeding its targets substantially. Although there were some delays and gaps in staffing, the Parent Liaison program was able to reach a number of families, particularly in the Southeast Asian community.

Best Practices in After-School Programs

There are two sources for understanding what makes an effective after-school program. One is evaluation reports and the other is field experience. A valuable source for information on evaluation findings is the Harvard Family Research Project's Out-of-School Time Learning and Development Project and OST Evaluation Database

(www.gse.harvard.edu/hfrp/projects/afterschool). The Promising Practices in After-School Programs lists on its web site (www.afterschool.org) promising practices from the field.

Both research and experience suggest a number of factors associated with effective programs – programs that attract and retain students and are associated with positive outcomes for those students. The Worthington 21st CCLC program includes many of these factors in its design:

- Provides transportation to eliminate that barrier to participation, which is particularly important in a rural setting
- Offers a menu of enrichment program choices that rotates several times during the year
- Makes use of existing community resources and youth programs to strengthen and expand their scope and extend 21st CCLC resources

- Targets at-risk students identified through teacher referral
- Mixes at-risk with other students in enrichment activities to encourage positive relationships and reinforce positive norms
- Provides sustained academic assistance for those who need it
- Links academic assistance with regular school program by use of teachers as after school staff
- Supports program participation as well as school attendance by offering family support services to language minority and immigrant families
- Is culturally responsive and offers enrichment activities that reinforce students' cultural background (music, dance, crafts and language)
- Is available throughout the school year, but not everyday allowing students and their families the flexibility of taking part in other activities and handling other responsibilities

The only major factors for positive youth development that the Worthington 21st CCLC does currently include are community service and youth participation in program design.

Evidence of After-School Effectiveness

There have been numerous studies of after-school programs similar to the 21st CCLC concept. There is some evidence that these programs can reduce negative behaviors, increase prosocial behaviors, ensure student safety and increase academic achievement. However, other studies have found no effects on these outcomes. The question of whether after-school programs are effective in improving school performance and other positive school-related behaviors such as attendance is especially critical as it is now part of the national educational accountability system set up by NCLB.

In October 2004 the U. S. Department of Education released the second report of an evaluation of the 21st CCLC program conducted by Mathematica Policy Research. This large study of approximately 5,300 students in 79 schools in over 30 school districts looked at several important outcomes, including:

- School attendance
- Homework completion

- Grades
- Test scores
- Positive social behaviors
- Parent involvement

Overall, this study found few differences between students who participated in the 21st CCLC program at their school and those who did not. The programs did not increase homework completion, grades, test scores, or positive behaviors for either elementary or middle school students.

There were a few areas in which the program appeared to increase positive outcomes. Middle school students participating in 21st CCLC programs missed fewer days of school and parents of participating elementary school students were more likely to attend school events.

Expectations for the Worthington 21st CCLC

The results from the national evaluation suggest that expectations that the Worthington 21st CCLC would make a huge difference in participating students' behavior and performance are probably not warranted. At the same time, the Worthington 21st CCLC has certain characteristics that suggest it might be more effective than the national average. These include:

- Targeting of students at academic risk
- Special efforts to engage language minority and immigrant students including offering culturally specific programming
- Outreach to families of language minority and immigrant student participants
- Involvement of regular classroom teachers in the academic portion of the after-school program

However, the evaluation of the Worthington program does not have the benefit of a control or comparison group with which to compare results from participating students. Instead, the evaluation relies on individual student change in attendance and test scores and on teacher reports to measure whether the program made a difference. At a minimum, participation is hoped to be associated with better school attendance, school-related and other behavior, and academic performance.²

² It is possible to observe no change in these measures for participating students even for an effective program, if an overall downward trend for all students suggests that, in the absence of the

Given the requirements of NCLB, there is a special interest in determining whether students in some of the subgroups are benefiting from the 21st CCLC program. These include:

- Students whose family income makes them eligible for free or reduced price school lunches
- Students who are English Language Learners (formerly known as Limited English Proficiency)
- Students from minority and immigrant groups (predominantly Hispanic and Southeast Asian, but African and African-American as well)

Therefore, this evaluation will take a special look at these groups.

Also, the Worthington 21st CCLC program has two major components – one that combines academic assistance with enrichment for students identified as at academic risk, and another that enrolls other students in the enrichment activities only. The expectation is that the students in the combined program (ASAP), because they receive additional services and because they are considered at risk of poor school performance without additional support, would be more likely to show benefits of participation.

Organization of This Report

The remainder of this report is organized into seven chapters. Chapter Two describes the students participating in the Worthington 21st CCLC program in terms of their demographic and background characteristics and their previous school experiences. Chapter Three provides information on the patterns of participation of students. Chapter Four reports on the analysis of school attendance, and Chapter Five on the analysis of test scores. Chapter Six is focused on teacher reports of behavior changes. The final chapter draws some implications from the results and suggests some potential modifications to the program design.

program, the outcomes for participating students also would have declined. However, there is no reason to believe that students in the Worthington schools are experiencing declines in these school outcomes. .

CHAPTER TWO: PROGRAM PARTICIPANTS

In the 2003-2004 school year, the following numbers of students³ participated in the Worthington 21st CCLC program:

- Only in the soccer program 151 students
- Only in the enrichment program (QUEST) 298
- In the combined academic assistance and enrichment program (ASAP) 385

In addition, the families of 195 students were involved in the Parent Liaison component of the program.

This chapter describes some of the background characteristics and school experiences of these program participants. Information on these characteristics is presented in Table 1.

School Level

The ASAP participants predominantly (77 percent) came from the upper elementary and middle school grades. Because the Parent Liaison program focused on ASAP participants, the majority in this program (71 percent) were also in the upper elementary and middle school grades.

The QUEST program drew almost exclusively from the primary and upper elementary grades, which accounted for 86 percent of QUEST participants.

The soccer program participants were fairly evenly distributed across the school levels. This was the only program to have a substantial number of high school participants.

Family Income Level

Almost three-quarters of the Parent Liaison participants had family incomes low enough to qualify for the free school lunch program. When considering families eligible for either free or reduced price lunches, 85 percent of Parent Liaison participants fell into that group. The QUEST and soccer programs had about half of their participants eligible for free or reduced price lunches, while 73 percent of ASAP participants met the income eligibility criteria.

Racial or Ethnic Group⁴

³ These numbers represent students with sufficient data to include in the evaluation analysis.

The largest group in both the ASAP and the Parent Liaison programs were Hispanic students, while the largest group in the QUEST program were white students.

English Proficiency

Paralleling the racial/ethnic distribution across the programs, more ASAP and Parent Liaison program participants were limited in English proficiency (between 70 and 80 percent) compared to the soccer and QUEST programs (over 90 percent being English proficient).

2002-2003 School Attendance Group

One important characteristic of students considered in this report is their school attendance rate in the previous school year, 2002-2003. While overall rates of school attendance are very high, participating students were divided into four attendance groups – from lowest (percent of school days attended in 2002-2003 below 91 percent) to highest (98 percent or higher). The middle two groups had attendance rates of 91 to 94 percent (Group 2) and 95 to 97 (Group 3). The lowest group missed 18 or more days of school – more than 3 weeks – significantly reducing their educational opportunities.

More of the Parent Liaison program participants were low attenders than the other programs – soccer, QUEST and ASAP – but the differences were small.

Summary

The QUEST program, especially when compared to the ASAP and Parent Liaison programs, had more participants who were girls, were in elementary school and were white and English proficient. These program participants were less likely to have family incomes low enough to be eligible for free or reduced price lunches.

The Parent Liaison program, even when compared to ASAP participants, enrolled more students who came from low income families, were either Hispanic or Southeast Asian, and who had some difficult with the English language.

These patterns suggest that Worthington experiences the same association between family income and minority status and school success as in other American communities. They also suggest that having the QUEST only program brings in students from different backgrounds with whom the ASAP and Parent Liaison participants can interact. Further, the Parent Liaison program seems to be successful in reaching families who are likely to need additional support in helping students become successful in school.

⁴ Because of the very small number of Native American students in the 21st CCLC program, they are not included in the analyses reported here, or elsewhere in this report.

CHAPTER THREE: PROGRAM ATTENDANCE

In order to benefit from the Worthington 21st CCLC program, students must attend. There are several indicators of program participation – intensity (measured by frequency of attendance and/or amount of time in attendance), duration (number of weeks, months, or years a student has been attending), and breath (the range of activities in which the student participates). This report focuses on intensity measured as the total number of days in attendance and percent of days in attendance. Since this is the first full year of the program, there is not much variation in duration of attendance among participants. The breath of participation is measured by the type of program in which the student is enrolled, with the primary focus on QUEST only and ASAP programs.

In general, the assumption is that the more often students attend, the more they will benefit. The Worthington 21st CCLC management team specified thresholds of participation above which a student was considered a completer. These threshold values depended on both the number of sessions being offered and perception of the amount of involvement necessary to make a difference for a student. Therefore, there are three measures of program attendance examined in this chapter.

The chapter reports overall attendance rates and looks at differences in attendance across several subgroups, as shown in Table 2.

All Groups

Overall, 21st CCLC program participants in 2003-2004 attended 27 days or 82 percent of enrolled days. Those in the Parent Liaison program received just under 3 visits during the school year. Just less than half of all program participants met the completer criteria.

Program

Students in the ASAP component of the 21st CCLC program attended two to three times as many days as did those in the soccer or QUEST programs – 40 days compared to 18 and 13 respectively. However, this was primarily due to the differences in the number of days these activities were offered. When comparing the percent of days attended the differences in attendance across programs is much less. Even so, ASAP participants attend more regularly than students in soccer or QUEST – 79 percent compared to 75 and 68 percent respectively. And almost four out of five ASAP students met the criteria for completing the program

⁵ This is called a linear model of the relationship between participation/attendance and benefits. There are other possible models for this relationship, including a threshold model and a curvilinear model. See "Understanding and Measuring Attendance in Out-of-School Time Programs" available on the Harvard Family Research Project web site www.gse.harvard.edu/hfrp.

compared to less than one out of five for QUEST and just a little over one out of four for soccer.

Students whose families were receiving services from the parent liaisons attended 15 more days of after-school activities. However, because of differences in when they enrolled the percent of days attended was only slightly greater than students not in the Parent Liaison program. Parent Liaison participants were much more likely to meet the program completion criteria.

School Level

Elementary school participants attended program activities almost 80 percent of the time, compared with between 65 and 69 percent for middle school and high school students. Because of the attendance requirements associated with being on the varsity soccer team, which was the virtually the only program in which high school students were involved, their completion rates were very high (95 percent). The same factor affects the completion rate for middle school students, many of whom were in the soccer program.

There were no real differences in the number of parent liaison visits received by the families of students at the different grade levels.

Family Income Level

Family income level as measured by eligibility for the school lunch subsidy was not associated with any substantial differences in after-school program attendance.

Racial or Ethnic Group

The same is true of racial and ethnic groups, except that Asian families received 1.5 more visits on average than did Hispanic families. This is a result of some staffing delays and turnover.

English Proficiency

Students who were not native English speakers participated in more after-school program and therefore were more likely to meet the completion criteria than students who were not limited in their proficiency in English. This factor did not, however, affect the number of parent liaison contacts.

2002-2003 School Attendance Group

Students who were in the lowest group based on their 2002-2003 school attendance record completed the lowest percentage of possible program days and received the fewest number of

parent liaison contacts. However, these students were no less likely to reach completer status – in fact, they had the highest rate of all the groups.

Summary

The ASAP program was more successful than the soccer, QUEST or Parent Liaison programs in achieving high levels of student participation as measured by percent of program days attended and program completion status. Since it was only ASAP participants who received parent liaison services, it appears that this helped with program attendance.

As has been found in other after-school programs, middle school students were somewhat less consistent in attendance as were students who had relatively poor school attendance in the previous year. Family income, racial or ethnic group, and degree of English proficiency were not factors in program attendance.

CHAPTER FOUR: SCHOOL ATTENDANCE

Just as it is assumed that after-school program benefits depend on student attendance, so it is that school attendance is considered a prerequisite for doing well in school. This chapter looks at patterns of school attendance, which is defined as the percent of days attended of total days enrolled for each individual student. The results are shown in Table 3.

Total

School attendance rates for Worthington's 21st CCLC student participants were high, averaging 95 percent in both 2002-2003 and 2003-2004. There was virtually no change in individual school attendance patterns between the two school years.

Program

Students in each of the 21st CCLC programs – soccer, QUEST, ASAP and Parent Liaison – had essentially equal rates of school attendance, and consequently there was no discernible change between the two school years.

School Level

High school students were the only grade group with substantially lower school attendance compared with elementary and middle school students. There is a difference of 7 to 8 percentage points between high school and younger students in school attendance rates in both 2002-2003 and 2003-2004. In addition, this group was the only one any discernible change in attendance rate, dropping one percentage point. This is equivalent to approximately 2 days.

Family Income Level

There were no differences in school attendance rates or change in these rates between 2002-2003 and 2003-2004 by family income level.

Racial or Ethnic Group

Of the three major ethnic groups, Hispanic students have somewhat lower school attendance rates than Southeast Asian or white students. The rates for each group is virtually identical across the two school years.

English Proficiency

While the rates for LEP and non-LEP students were in the upper 90 percent,

there was a small increase (1.2 percentage points) in school attendance rates for students with limited English proficiency. When looking students who received parent liaison services, the increase is greater (2 percentage points). This is equivalent to between 3 and 4 days, a small but significant increase and suggests that the Parent Liaison program may be effective in helping families better manage school attendance issues.

2002-2003 School Attendance Group

The largest change in school attendance rates was observed for those students who had been relatively poor attenders in the previous school year. While these students still had attendance rates in 2003-2004 that were 7 percentage points lower than highest attenders, they both narrowed the difference by half (from 14 percentage points) and significantly increased their attendance by an average of 9 school days.

Program Participation and School Attendance

Table 4 presents the correlation coefficients between program participation (number and percent of program days attended and completion status) and school attendance (rates in 2002-2003 and 2003-2004 and changes in attendance rates). Correlation coefficients are a measure of the degree to which a change in one factor takes place along with a change in the other factor.

There was no correlation of any significant size between any measures of program participation and changes in school attendance rates for any group of students, except those in QUEST. The number of days a student participates in the QUEST program, the greater the increase in school days attended. Specifically, for every day of QUEST program participation, there is a gain of 0.2 percentage points in school attendance. The average number of program days attended in the QUEST program is 13 days for which there would be a gain of about 6.5 percentage points in school attendance rate or almost 12 days.

Summary

There were few differences in school attendance rates or in changes in attendance rates by student or family demographic characteristics. Two groups appeared to benefit from participation in the 21st CCLC in increasing their rates of school attendance – students with limited English proficiency, particularly if they received parent liaison services, and students who had relatively poor attendance in the previous school year.

The number or percent of days of participation in 21st CCLC activities generally was not found to be related to changes in school attendance. The one exception was for the QUEST program, in which higher program participation was significantly associated with increases in school attendance rates.

CHAPTER FIVE: ACHIEVEMENT TEST SCORES

There are many possible ways to measure academic achievement or performance, but the one that is most often used is standardized test scores – specifically, the national percentile score.⁶ Using these scores eliminates concerns about differences across teachers in grading policies and patterns. They also make comparisons across school years possible by standardizing the test results on a common scale and computing a score on that scale that has the same meaning from one year to the next. That is, a percentile score in one year may be based on different numbers of questions and different specific content, but the score represents the individual student's position on the same scale.

At the same time, these scores are difficult to change, as they rest on knowledge and skills accumulated over the grades and are affected by student characteristics, family circumstances, and quality of schooling as well as by specific interventions such as afterschool programs. Therefore, it is unlikely that the 21st CCLC program could significantly improve achievement test scores for students who have only had one year of experience of the program as it is now configured.

This chapter looks at the national percentile scores of Worthington students on standardized achievement tests for reading and mathematics administered in the spring of 2003 and the spring of 2004. The scores were available only for a portion (about one-third or 130) of the students in the ASAP component. These results are presented in Tables 5A and 5B.

Total

Overall, for the students with available test scores, there was virtually no change from one year's percentile score to the next. On average, Worthington students participating in the 21st CCLC scored in the mid-30s for both reading and mathematics in 2003 and in 2004. This can be interpreted to mean that Worthington students scored higher than about one-third of students across the nation who have taken this test.

Program

Students receiving parent liaison services did not show any significantly different patterns of change in test scores, compared to students who were not in the Parent Liaison program.

School Level

The national percentile score on a nationally normed standardized test is the point at which, on a one hundred point scale, that percent of students across the nation would score lower than the student.

Students in the primary grades (kindergarten through 2nd grade) in 2003-2004 did not have test score data for the previous school year, so no change measures could be computed. There were no high school students in ASAP, so their test scores were not obtained. Therefore, the only two school level groups with data for analysis are students in the upper elementary grades (3rd through 5th) and in the middle school grades (6th through 8th).

Both the upper elementary and middle school students had changes in their reading and mathematics scores that were significantly greater than zero. However, the changes were in the opposite directions. Upper elementary school students experienced an increase in their percentile scores, while middle school students experienced a decrease. This may reflect a common pattern of decreased test scores in middle school, or a genuine negative effect of the program.

Family Income Level

While students from families whose income is too high to be eligible for free or reduced price lunches generally score better, there is no significant difference in how scores change for students from the income groups.

Racial or Ethnic Group

There was also no significant differences in how test scores changed across the racial/ethnic groups.

English Proficiency

Test score changes did not differ between students who were English proficient and those who were not.

2002-2003 School Attendance Group

Students' test scores and changes in scores between 2003 and 2004 were not affected by their previous school attendance record.

2002-2003 Test Score Quartile

Students were placed in groups based on how well they did on the standardized tests in the spring of 2003. Students who were in the lowest scoring group experienced modest but significant improvements in their test scores by the spring of 2004. Students in the other scoring groups had little change or declines.

Program Participation and Test Scores

The percent of program days in which students participated in ASAP is significantly correlated with higher math but not reading scores.

Summary

Very few factors were found to be associated with improvements in standardized achievement test scores among 21st CCLC participants. While students who had done relatively poorly on these tests in the previous year did so again the following year, they were able to bring up their scores in both reading and math by about 5 percentile points. This is a significant change, representing a 30 to 50 percent increase.

CHAPTER SIX: TEACHER REPORTS

Teachers of ASAP participants were asked to complete a checklist at the end of the school year indicating the extent to which a specific set of student behaviors may have changed from the beginning of the year. These behaviors are indicated on Table 6, and include those that relate directly to academic performance (such as completing assignments), those that relate to student attention to school work (such as paying attention, listening, fidgeting and talking), and those that relate to the student's social relationships at school (being argumentative, disrespectful or disruptive).

Teachers were asked to choose one of the following categories for each of these behaviors – the student was doing a lot better, somewhat better, a little better, showed no change or was getting worse. In order to facilitate analysis and interpretation, these responses were given a numeric value from 5 (doing a lot better) to –2 (doing worse), with zero assigned to "no change" responses. These values were then added across the individual questions under each of the three categories of behavior – academic, attending, and social – and divided by the number of questions. The resulting score represents an average amount of change in that category of behavior, as reported by the students' primary teacher.

Overall Responses

Table 6 presents the percent of responses in each category for each question. In general, teachers seldom reported a substantial degree of improvement in students' behavior. The most commonly given category was "no change." Depending on the item, teachers reported no change for from the low 40s (for positive academic and attending behaviors) to almost 90 percent (for negative classroom and social behaviors).

The most consistent reports of improvement were in the area of academic behaviors. Less than half of the students were reported to have demonstrated no change in behavior and between 30 and 40 percent were perceived by their teachers to be behaving somewhat or a little better.

The average teacher report index scores are shown in Table 7. Overall, teachers report a little improvement in academic behaviors, and very little change in attending and social behaviors. Correlation coefficients between the academic and attending index scores and between the attending and social behavior index scores are both about 0.5 (1.0 represents a perfect one-to-one correspondence), a significant and substantial association. The correlation coefficient between the academic and social behavior index scores is 0.25, less strong but still significant.

School Level

There are no differences between primary grades and upper elementary grades in average index scores on any of the three categories of student behavior. There were no teacher report data for middle school ASAP students.

Family Income Level

The average index scores were not significantly different across family income levels.

Racial or Ethnic Group

There were no significant differences in index scores by racial or ethnic group.

English Proficiency

Students with limited English proficiency were significantly more likely to improve their social behaviors with peers and adults than were students already proficient in English. This difference was even more pronounced for students receiving parent liaison services.

2002-2003 School Attendance Group

There were no significant differences in index scores across groups of students designated by their 2002-2003 school attendance rates.

Program Participation, Changes in School Attendance and Test Scores, and Teacher Reports

Table 8 presents the correlation coefficients between measures of program participation and the three index scores representing teacher reports of changes in student behaviors, and between the index scores and changes in school attendance rates and in test scores in reading and mathematics. None of these coefficients is significant.

Summary

Teacher reports of student behaviors in three areas – academic activities, attending behaviors in the classroom, and social behaviors with peers and adults at school represent three important, related but different sets of student behaviors believed to be related to school success. Overall, students in the 21st CCLC program were reported to have shown only a little improvement over the 2003-2004 school year. Among various student groups, only whether or not the student was limited in English proficiency, particularly those also in the Parent Liaison program, made a difference. Teachers reported greater improvement in social behaviors for students with limited English proficiency than for other students.

CHAPTER SEVEN: SUMMARY AND IMPLICATIONS

The Worthington 21st CCLC program combines a set of program characteristics that represent much of what is known about improving the academic and social behavior of students. It has been able to attract and engage a large number of students to its activities and has made strides in implementing its innovative Parent Liaison program for language minority and immigrant students and their families.

Summary of Benefits

Certain groups of students appear to have especially benefited from participating in the Worthington 21st CCLC program. Students who had relatively poor school attendance records were able to substantially increase their attendance, on average by 9 school days. Students who had done relatively poorly on achievement tests in the previous year were likewise able to bring up their scores significantly. Students with limited English proficiency, especially when also involved in the Parent Liaison program, increased their school attendance rates and demonstrated greater self-control and positive attitudes as reported by their teachers.

The extent or intensity of program participation does not appear to be associated with these changes in student outcomes. However, this may be due to the generally high attendance rate among participants, particularly participants in the elementary grades for whom more data, particularly teacher reports and test scores, are available.

Implications

The results of this examination of Worthington's 21st CCLC program suggests the following with regard to decisions about continuation, expansion or revision of the program's design:

- Make a special effort to recruit at-risk students who appear to benefit from
 participation in the program students with relatively poor school attendance, those in
 the lowest quartile of standardized test scores, and LEP students this may require
 more proactive outreach with many students and their families
- Ensure that the program can and does meet the special needs and interests of these students this may require bolstering the academic assistance program and expanding culturally specific activities
- Continue the Parent Liaison program and target its services particularly to LEP students and those with poor school attendance and test scores
- Continue to address issues associated with students' counter-productive behaviors this may require additional work with staff and students around acceptance and respect



TABLE 1 CHARACTERISTICS OF 2003-2004 21CCLC PROGRAM PARTICIPANTS, BY TYPE OF PROGRAM

(percent)

	SOCCER ONLY	QUEST	ASAP	Parent Liaison	TOTAL
GENDER					
• Female	29	59	46	52	47
• Male	71	41	54	48	53
SCHOOL LEVEL					
Primary (K-2)	34	40	22	27	31
• Upper Elementary (3-5)	27	46	35	41	37
• Middle (6-8)	14	12	42	30	27
• High (9-12)	25	2	1	3	5
FAMILY INCOME LEVEL					
Eligible for free lunch	39	47	58	73	51
Eligible for reduced lunch	7	11	15	12	12
Not eligible	54	42	27	15	37
ETHNIC GROUP					
• White	24	52	32	2	43
• Hispanic	33	30	52	78	41
• Asian	8	13	12	20	12
• African/African- American (n=29)	3	5	3	0	4
• Native American (n=2)	0	0	<1	0	<1
ENGLISH PROFICIENCY					

	SOCCER ONLY	QUEST	ASAP	Parent Liaison	TOTAL
• Limited	3	6	21	28	17
Sufficient	97	94	79	72	83
2002-2003 SCHOOL ATTENDANCE GROUP					
• Group 1: Lowest	14	9	15	18	13
• Group 2	20	23	20	25	21
• Group 3	31	33	33	35	33
• Group 4: Highest	35	35	32	22	34

Note: G1 = lowest attendance, G4 = highest attendance; G1 = less than 91 percent, G2 = between 91 and 94 percent, G3 = between 95 and 97 percent, and G4 = greater than 98 percent

TABLE 2: PROGRAM ATTENDANCE DURING 2003-2004 SCHOOL YEAR

STUDENT GROUP	Mean # Total Program Days Attended (Quest, ASAP, Soccer)	Mean % Total Program Days Attended (Quest, ASAP, Soccer)	Mean # Parent Liaison Contacts	Percent Program Completers
TOTAL	27	82	2.8	47
PROGRAM TYPE • QUEST	13	68	2.9	16
(Enrichment, No Academic)	13	08	2.7	10
• ASAP (Academic & Enrichment)	40	79	2.8	78
• Soccer Only	18	75	1.7	27
PARENT LIAISON				
• Yes	38	77	2.3	69
• No	23	74	0	41
SCHOOL LEVEL				
• Primary (K-2)	24	78	2.9	37
• Upper Elementary (3-5)	26	79	2.5	43
• Middle (6-8)	29	65	3.3	56
• High (9-12)	38	69	<1	95
FAMILY INCOME LEVEL				
• Eligible for free lunch	29	74	2.7	53
Eligible for reduced lunch	31	75	2.9	55
• Not eligible	22	75	3.3	37

STUDENT GROUP	Mean # Total Program Days Attended (Quest, ASAP, Soccer)	Mean % Total Program Days Attended (Quest, ASAP, Soccer)	Mean # Parent Liaison Contacts	Percent Program Completers
ETHNIC GROUP	,	,		
• White	21	75	2.3	33
• Hispanic	31	73	2.5	57
• Asian	34	79	4.0	62
• African or African-American	28	71	0	59
Native American	27	74	0	50
ENGLISH				
PROFICIENCY				
• Limited	38	78	2.6	72
• Sufficient	25	74	2.8	44
PROGRAM COMPLETER				
• In Quest, ASAP or Soccer	45	82	2.7	NA
• In Parent Liaison Program	49	84	2.7	NA
2002-2003 SCHOOL ATTENDANCE GROUP				
• Group 1: Lowest	31	71	2.2	63
Group 2	29	73	2.6	57
• Group 3	28	73	3.0	49
• Group 4: Highest	29	80	2.9	50



TABLE 3: SCHOOL ATTENDANCE

DURING 2002-2003 AND 2003-2004 SCHOOL YEARS

(only students with attendance data in both years)

STUDENT	Mean % School Days Attended 2002-2003	Mean % School Days Attended 2003-2004	Mean Change in Percent of School Days Attended, 2002- 03 to 2003-04
GROUP			
TOTAL	95	95	<.1
(n = 668)			
PROGRAM TYPE			
• QUEST (Enrichment, No Academic)	96	96	<.1
• ASAP Combined (Academic & Enrichment)	95	95	<.1
• Soccer Only	94	94	<.1
PARENT LIAISON			
• Yes	95	95	<.1
• No	96	95	<.1
SCHOOL LEVEL			
Primary (K-2)	96	96	<.1
• Upper Elementary (3-5)	96	96	<.1
• Middle (6-8)	95	95	<.1
• High (9-12)	88	87	-1.0
FAMILY INCOME LEVEL			
Eligible for free lunch	95	95	<.1
Eligible for reduced lunch	96	96	<.1
Not eligible	96	96	<.1
ETHNIC GROUP			

STUDENT GROUP	Mean % School Days Attended 2002-2003	Mean % School Days Attended 2003-2004	Mean Change in Percent of School Days Attended, 2002- 03 to 2003-04
• White	96	96	<.1
Hispanic	94	94	<.1
• Asian	96	97	<.1
African or African-American	96	97	<.1
Native American	Too few cases	Too few cases	Too few cases
ENGLISH PROFICIENCY			
• Limited	95	96	+1.2 *
• Sufficient	95	95	<.1
SCHOOL ATTENDANCE GROUP, 2002-03			
• Group 1: Lowest	85	91	+5.0 *
• Group 2	93	95	+1.3
Group 3	97	96	9
• Group 4: Highest	99	97	-1.6
21 ST CCLC COMPLETER STATUS			
• Completer	95	95	<.1
Non-completer	96	96	<.1

Note: G1 = lowest attendance, G4 = highest attendance; G1 = less than 91 percent, G2 = between 91 and 94 percent, G3 = between 95 and 97 percent, and G4 = greater than 98 percent

^{* =} statistically significant at p <= .05

TABLE 4: CORRELATION BETWEEN PROGRAM PARTICIPATION AND SCHOOL ATTENDANCE

(correlation coefficient)

PROGRAM PARTICIPATION	PERCENT OF SCHOOL DAYS ATTENDED	PERCENT OF SCHOOL DAYS ATTENDED	CHANGE IN PERCENT OF SCHOOL DAYS
	2002-03	2003-04	ATTENDED
ALL PROGRAMS – QUEST, ASAP AND SOCCER			
Number Of Program Days Attended 2003-04	<.10	<.10	<.10
Percent Of Program Days Attended 2003-04	+.14 *	+.18 *	+.10
QUEST ONLY			
Number Of Program Days Attended 2003-04	19 *	<.10	+.20 *
Percent Of Program Days Attended 2003-04	<.10	+.20 *	+.14
ASAP			
Number Of Program Days Attended 2003-04	+.11	<.10	<.10
Percent Of Program Days Attended 2003-04	+.20 *	+.18 *	<.10
SOCCER ONLY			
Number Of Program Days Attended 2003-04	22 *	37 *	13
Percent Of Program Days Attended 2003-04	+.24 *	+.29 *	<.10
PARENT LIAISON			

PROGRAM PARTICIPATION	PERCENT OF	PERCENT OF	CHANGE IN
	SCHOOL DAYS	SCHOOL DAYS	PERCENT OF
	ATTENDED	ATTENDED	SCHOOL DAYS
	2002-03	2003-04	ATTENDED
	+.12	<.10	14
Number Of Program Days			
Attended 2003-04			
	+.20 *	+.14	<.10
Percent Of Program Days			
Attended 2003-04			
Number of Parent Liaison	+ .14	+.14	<.10
Contacts			

^{* =} statistically significant at $p \le .05$

TABLE 5:
PERCENTILE READING AND MATHEMATICS TEST SCORES,
SPRING 2002-2003 AND SPRING 2003-2004
(ASAP participants only)

	Reading Mean	Reading Mean	Reading – Change in	Math – Mean	Math – Mean	Math – Change in
STUDENT	Percentile	Percentile	Percentile	Percentile	Percentile	Percentile
GROUP	Score	Score	Score	Score -	Score -	Score
	Spring	Spring		Spring	Spring	
	2002-2003	2003-2004		2002-2003	2003-2004	
TOTAL	33	34	<1.0	33	33	<1.0
(Reading $n = 127$,						
Math $n = 128$)						
PARENT LIAISON						
• Yes	29	30	<1.0	27	30	+2.6
• No	36	37	<1.0	36	35	-1.0
SCHOOL LEVEL						
Primary (K-2)	NA	42	NA	NA	47	NA
• Upper Elementary (3- 5)	30	33	+3.4 *	30	34	+3.8 *
• Middle (6-8)	38	35	-2.7 *	35	32	-3.4 *
• High (9-12)	NA	NA	NA	NA	NA	NA
FAMILY INCOME LEVEL						
Eligible for free lunch	28	31	+2.9	27	29	+1.8
Eligible for reduced lunch	34	27	-6.8	33	33	0.0
Not eligible	42	42	<1.0	41	40	-1.8
ETHNIC GROUP						
• White	41	42	<1.0	42	40	-2.0
• Hispanic	29	30	+1.4	25	27	+2.0

STUDENT GROUP	Reading Mean Percentile Score Spring 2002-2003	Reading Mean Percentile Score Spring 2003-2004	Reading – Change in Percentile Score	Math – Mean Percentile Score – Spring 2002-2003	Math – Mean Percentile Score – Spring 2003-2004	Math – Change in Percentile Score
• Asian	31	27	-4.2	35	38	+3.2
• African or African- American	Too few cases	Too few cases	Too few cases	Too few cases	Too few cases	Too few cases
• Native	Too few	Too few	Too few	Too few	Too few	Too few
American ENGLISH PROFICIENCY	cases	cases	cases	cases	cases	cases
• Limited	13	13	<1.0	12	16	+3.5
• Sufficient	3534	36	<1.0	34	34	<1.0
QUARTILE IN SPRING 2002-2003						
• Quartile 1: Lowest	14	19	+5.4 *	14	19	+5.3 *
• Quartile 2	35	35	<1.0	35	34	3
• Quartile 3	62	57	-4.9	60	52	-8.1
• Quartile 4: Highest	86	73	-13.4	80	79	-1.0
2002-2003 ATTENDANCE GROUP						
• Group 1: Lowest	2523	29	+3.4	29	26	-3.0
• Group 2	38	39	<1.0	37	39	+2.0
• Group 3	32	32	<1.0	29	30	+1.2
• Group 4: Highest	36	36	<1.0	36	36	<1.0

Note: 2002-2003 quartile group was for either reading or math, depending on the subject being analyzed

Note: G1 = lowest attendance, G4 = highest attendance; G1 = less than 91 percent, G2 = between 91 and 94 percent, G3 = between 95 and 97 percent, and G4 = greater than 98 percent

* = statistically significant at p <= .05

TABLE 6: TEACHER-REPORTED CHANGE IN STUDENT BEHAVIOR FROM BEGINNING OF MARKING PERIOD (ASAP Program Participants Only)

	A Lot Better	Somewhat Better	A Little Better	Worse	No Change
TYPE OF	(5)	(3)	(1)	(-2)	(0)
BEHAVIOR	(3)	(3)	(1)		
BEHAVIOR					
ACADEMIC					
BEHAVIORS					
	6	24	15	7	48
Participates in class					
discussions					
	7	21	17	8	47
Completes classwork					
_	10	20	13	9	49
Completes homework					
ATTENDING					
BEHAVIORS					
	6	<1	6	7	80
Arrives to class on					
time					
	9	19	23	6	43
Pays attention in class					
	12	9	2	1	75
Talks in class at					
inappropriate times					
	8	8	2	0	82
Fidgets or gets out of					
seat at inappropriate					
time					
	8	20	19	4	49
Listens and follows					
directions					
SOCIAL					
BEHAVIORS					

TYPE OF BEHAVIOR	A Lot Better (5)	Somewhat Better (3)	A Little Better (1)	Worse (-2)	No Change (0)
Gets in arguments with other students	9	7	3	<1	80
Is disrespectful to adults	6	3	4	0	88
Is disruptive to class routine	7	4	4	0	85
Has negative attitude toward school	6	6	4	1	83

TABLE 7: TEACHER REPORT INDEX SCORES BY GROUP (ASAP participants only)

STUDENT GROUP	Mean Score on Academic Behaviors	Mean Score on Attending Behaviors	Mean Score on Social Behaviors
TOTAL	1.0	.8	.5
PARENT LIAISON			
• Yes	1.0	.7	.4
• No	1.0	.9	.6
SCHOOL LEVEL			
• Primary (K-2)	.6	.8	.7
• Upper Elementary (3-5)	1.2	.8	.4
• Middle (6-8)	NA	NA	NA
• High (9-12)	NA	NA	NA
FAMILY INCOME LEVEL			
Eligible for free lunch	1.2	.9	.5
Eligible for reduced lunch	.8	.5	.3
Not eligible	.7	.7	.5
ETHNIC GROUP			
• White	.8	.9	.5
• Hispanic	1.1	.8	.5
• Asian	1.0	.6	.3
• African or African-American	Too few cases	Too few cases	Too few cases
Native American	Too few cases	Too few cases	Too few cases

	Mean Score on Academic	Mean Score on Attending Behaviors	Mean Score on Social Behaviors
STUDENT	Behaviors		
GROUP			
ENGLISH PROFICIENCY			
• Limited	1.1	.9	1.1 *
• Sufficient	1.0	.8	.4
21st CCLC			
COMPLETER STATUS			
• Completer	1.0	.8	.5
Non-Completer	1.1	.8	1.0
2002-2003 SCHOOL ATTENDANCE GROUP			
Group 1: Lowest	1.4	1.1	.9
• Group 2	1.0	1.0	.5
Group 3	.9	.7	.3
Group 4: Highest	1.0	.6	.4

Note: G1 = lowest attendance, G4 = highest attendance; G1 = less than 91 percent, G2 = between 91 and 94 percent, G3 = between 95 and 97 percent, and G4 = greater than 98 percent

TABLE 8: CORRELATION AMONG TEACHER REPORT INDEX SCORES, PROGRAM ATTENDANCE AND SCHOOL OUTCOMES

(correlation coefficient) (ASAP participants only)

	Index Score on Academic Behaviors	Index Score on Attending Behaviors	Index Score on Social Behaviors
PROGRAM ATTENDANCE			
	<.1	<.1	14
Percent Of Program Days			
Attended 2003-04			
SCHOOL ATTENDANCE			
Change in Percent of School Days Attended	<.1	<.1	<.1
MATH TEST SCORES			
Change in Math Percentile Score	17	<.1	14
READING TEST SCORES			
Change in Reading Percentile Score	22	<.1	+.11