# Texas 21<sup>st</sup> Century Community Learning Centers

# Annual Report 2006-07

# March 2008



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# **Table of Contents**

Executive Summary	1
Introduction to Report	7
Purpose of Evaluation	14
Evaluation Tasks	15
Task One	16
Task Two	58
Task Three	65
Task Four	58
Task Five	68
Conclusions	87
References	89
Appendices	94
Appendix A: Technical Reporting of Results	95
Appendix B: Technical Description of the HLM Analyses and Its Properties	103
Appendix C: Questionnaires	
Learning Point Associates Texas 21 <sup>st</sup> CCLC Evaluation Center Staff Survey Learning Point Associates Texas 21 <sup>st</sup> CCLC Evaluation Center Director/	105
Program Coordinator Survey	
Project Coordinator Survey	139

# **List of Tables**

Table 1.	Percentage of Students with Selected Demographic Characteristics by Analysis Sample Inclusion and Group.	17
Table 2	Reading Analyses Inclusion Rates by Grade and Group	
	Translation of Z-scores Into Percentage of Students Scoring Higher or Lower	24
Table 4	Unadjusted Mean Standardized TAKS Reading Scores by Grade, Group, and	<b>4</b>
Tuole 4.		27
Table 5.	Unadjusted Mean Standardized TAKS Mathematics Scores by Grade, Group, and School Year	
Table 6.	Composition of Grantees by Type	
	List of Figures	
Figure 1.	. Total Number of Reading Sessions Attended.	19
Figure 2.	Total Number of Mathematics Sessions Attended	20
Figure 3:	: Difference Between CCLS Standardized TAKS Mean Reading Scores and	
	Comparison Group Mean by Reading Activity Intensity Group and School Year:	
D: 4		25
	: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 6 : Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year:	26
		28
	: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 7	29
Figure 7:	: Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and	
	Comparison Group Mean by Reading Activity Intensity Group and School Year:	
T: 0		30
	Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 8	31
Figure 9	Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and	
	Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 9	32
Figure 10	0: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 9	
	1: Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year:	55
		34
Figure 12	2: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 10	_
	3: Differences Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year:	
		36
	<ul> <li>4: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 11</li> <li>5: Net 2005-2007 Gain in Standardized TAKS Reading Scores by 21<sup>st</sup> CCLC Students Relative to Comparison Students by Reading Activity Attendance</li> </ul>	37
	Intensity Group and Grade	38

Figure 16:	Difference Between 21st CCLC Standardized TAKS Mean Mathematics Scores an	
	Comparison Group Mean by Mathematics Activity Intensity Group and School Ye	
	2007 Grade 6	. 39
Figure 17:	Covariate-adjusted Standardized TAKS Mathematics Scores by Group:	
	2007 Grade 6	
Figure 18:	Difference Between 21st CCLC Standardized TAKS Mean Mathematics Scores an	
	Comparison Group Mean by Mathematics Activity Intensity Group and School Ye	
T: 10	2007 Grade 7	. 43
Figure 19:	Covariate-adjusted Standardized TAKS Mathematics Scores by Group:	
F: 20	2007 Grade 7	. 44
Figure 20:	Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores	
	and Comparison Group Mean by Mathematics Activity Intensity Group and School	
E: 01	Year: 2007 Grade 8	. 45
Figure 21:	Covariate-adjusted Standardized TAKS Mathematics Scores by Group:	1.0
г. 22	2007 Grade 8	. 46
Figure 22:	Difference Between 21st CCLC Standardized TAKS Mean Mathematics Scores	. 1
	and Comparison Group Mean by Mathematics Activity Intensity Group and School	
E: 22.	Year: 2007 Grade 9	. 48
Figure 23:	Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade 9	49
Eigura 24:	Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores	. 49
rigule 24.	and Comparison Group Mean by Mathematics Activity Intensity Group and School	<b>\</b> 1
	Year: 2007 Grade 10	
Figure 25.	Covariate-adjusted Standardized TAKS Mathematics Scores by Group:	. 50
riguic 23.		. 51
Figure 26.	Difference Between 21 <sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores	
1 15410 20.	and Comparison Group Mean by Mathematics Activity Intensity Group and School	1
	Year: 2007 Grade 11	
Figure 27:	Covariate-adjusted Standardized TAKS Mathematics Scores by Group:	
<b>6</b>	2007 Grade 11	. 53
Figure 28:	Net 2005-2007 Gain in Standardized TAKS Mathematics Scores Relative to	
Ü	Non-CCLC by Mathematics Activity Attendance Intensity Group and Grade,	
	Texas 21 <sup>st</sup> CCLC Students	. 54
Figure 29:	Primary Program Clusters Based on the Hours of Activity Offered in a Given	
	Category, School Year and Summer	. 72
Figure 30:	Primary Program Clusters Based on the Hours of Activity Offered in a Given	
	Category During the School Year by Grade Level Served	. 73
Figure 31:	Number of Staff of a Given Type – Summer 2006	
	Average Number of Staff of a Given Type – School Year 2006-07	
	Staff Type by Cluster (Programming Offerings) – SY 2006-07 Aggregate	
	Percentages of Students of Various Ethnic Backgrounds Served	
Figure 35:	Percentages of Students Attending Centers by Locale	. 79

# TEXAS 21<sup>ST</sup> CENTURY COMMUNITY LEARNING CENTERS ANNUAL REPORT FOR 2006-07

#### **Executive Summary**

The 21<sup>st</sup> Century Community Learning Centers (21<sup>st</sup> CCLC) program is authorized by the No Child Left Behind Act of 2001 and provides out-of-school time opportunities for academic enrichment to help students meet state and local performance standards in core academic subjects. Programs and activities are designed to reinforce and complement the regular academic program of participating students. Families of students are offered opportunities for literacy and related educational development.

The purpose of this study was to examine the impact of 21<sup>st</sup> CCLC participation on student outcomes and to investigate possible mediating, moderating, or other explanatory variables associated with successful programs. The specific evaluation tasks were:

- 1. To provide an analysis of the impact of 21<sup>st</sup> CCLC participation on student-level achievement outcomes;
- 2. To investigate the variables that mediate or moderate the relationship between program participation and student-level outcomes;
- 3. To develop and conduct statewide survey assessment to attain a better understanding of the nature of existing programs;
- 4. To determine specific programmatic features associated with the various student achievement outcomes included in the evaluation; and
- 5. To develop a profile and description of 21<sup>st</sup> CCLC programs, operations, staffing patterns and students served.

To complete these tasks, data were analyzed from several sources. Texas Assessment of Knowledge and Skills (TAKS) scores were examined for the past four school years to study program impact on student-level achievement. To develop a profile and description of  $21^{st}$  CCLC programs, data were collected directly from  $21^{st}$  CCLC grantees via a web-based data collection tool maintained by the Texas Education Agency (TEA). To determine specific programmatic features associated with the various student achievement outcomes, data collected by TEA from the  $21^{st}$  CCLC grantees were used, including student background characteristics and program emphasis.

#### Student Participants

This study included students who were in Grades 6 through 11 during the 2006-07 school year, and who attended any 21<sup>st</sup> CCLC activity during the 2004-05, 2005-06, or 2006-07 school years, and who participated in reading or mathematics activities at the center during these three years. This study also included *comparison* students who were in Grades 6 through 11 and who attended 21<sup>st</sup> CCLC feeder schools during the 2006-07 school year, but who did not attend 21<sup>st</sup> CCLC activities during the 2004-05, 2005-06, and 2006-07 school years. For both sets of students, only those with four years of TAKS English-version test scores, demographic information, and 21<sup>st</sup> CCLC records (for 21<sup>st</sup> CCLC students) were included in subsequent analyses.

#### Results

Task 1: To provide an analysis of the impact of 21<sup>st</sup> CCLC participation on student-level achievement outcomes

Key results were as follows:

#### Reading.

- Cumulative 21<sup>st</sup> CCLC reading activity attendance had a statistically significant, positive association with trends in student reading performance relative to *comparison* students.
- Students who attended 60 or more reading activities (*high intensity*) over the three-year period had higher gains in TAKS reading scores than *comparison* students.
- In terms of progress on TAKS tests relative to state norms, *high intensity* students outpaced *comparison* students across grade-level cohorts.

#### Mathematics.

- *High-intensity* students (91 or more mathematics activities over the three-year period) outpaced *moderate-* (30-90 activities), *low-* (less than 30 activities) and *comparison* groups.
- *High-intensity* students made more progress toward state norms than did *comparison* students across grade levels; *moderate-intensity* students also made more progress than *comparison* students, but to a lesser degree than *high-intensity*.

In terms of the generalizability of the findings, the primary limitation of this study is that longitudinally matched TAKS scores were generally not available for special education and LEP students, which resulted in the exclusion of many of these students from the analyses. The findings are pertinent to students who are similar to those who participated in the study.

Task 2: To investigate the variables that mediate or moderate the relationship between program participation and student-level outcomes

Task 4: To determine specific programmatic features associated with the various student achievement outcomes included in the evaluation

#### Key results were as follows:

Programmatic features associated with the various student achievement outcomes included in the evaluation

- Economically disadvantaged students scored lower than not-disadvantaged students.
- LEP status students scored lower than non-LEP students.
- There were no significant differences between Special Education status students and non-Special Education status students.
- Gifted students surpassed non-gifted students.
- The higher the 2006 TAKS score, the higher the 2007 TAKS score tended to be.

- Females scored higher than males.
- African American students scored lower than non-African American students.
- Hispanic students scored lower than non-Hispanic students.

Programmatic Features of Centers Moderating the Relationship between Program Participation and Student-level Outcomes

• The relationship between the number of reading tutoring sessions attended and the 2007 TAKS reading scores was positive and statistically significant for students attending centers that served predominately elementary and middle school students.

Center Variables Moderating the Relationships between Student Characteristics and Academic Achievement

#### Reading.

- Economically disadvantaged students who attended 21<sup>st</sup> CCLCs that (a) served elementary grades only or (b) middle grades only, or (c) offered *Mostly Enrichment* programming scored lower on the 2007 TAKS reading test than did economically disadvantaged students who attended other program types.
- More success with LEP students in reading scores was associated with centers serving lower (elementary-level) grades

#### Mathematics.

Programmatic Features Associated with Student Achievement Outcomes

• All student-level predictors were statistically significant and in the same direction described above for TAKS reading scores.

Programmatic Features Moderating the Relationship between Program Participation and Student-level Outcomes

• The lack of a statistically significant relationship between attendance and achievement was consistent across center grade levels served and across program cluster type variables (six cluster types identified in Task 5).

Variables Moderating the Relationships between Student Characteristics and Academic Achievement

• LEP students and special education students who attended the "*Recreation, Careers, and Leadership*" program type performed substantially lower on the 2007 TAKS mathematics test than similar students attending other types of programs.

Task 3: To develop and conduct statewide survey assessment to attain a better understanding of the nature of existing programs

To supplement and augment data gathered on an annual basis through the TEA's administrative data system, statewide surveys of 21st CCLC grantee directors, center directors, and center staff were developed. After piloting and refinement, the surveys will be administered during the spring of 2008. These surveys will generate rich data that will serve to both fill out the statewide profile of the 21st CCLC program and to create quality implementation scales for use in models of program impact on student achievement. In addition to simple descriptive data, psychometric validation and scaling techniques will be employed to create scale scores on the various constructs of program quality. These scale scores can be used both for comparisons and tests of difference as well as for inclusion in models of impact on student achievement.

Task 5: To develop a profile and description of  $21^{st}$  CCLC programs, operations, staffing patterns and students served

An overview was provided of the programmatic characteristics associated with 21<sup>st</sup> CCLCs operating in Texas during the summer of 2006 and the 2006-07 school year. Particular attention was given to grantee characteristics, the role and nature of center activities, operations, staffing, and student attendance.

Centers could be classified into six primary clusters based on the relative emphasis given to offering certain categories of activities:

- 1. Centers mostly providing recreational activities
- 2. Centers providing mostly enrichment and tutoring
- 3. Centers providing mostly enrichment and Supplemental Educational Services
- 4. Centers providing mostly enrichment activities
- 5. Centers providing mostly career/job training, leadership, and recreational activities
- 6. Centers providing mostly enrichment and recreation activities
- Centers that primarily serve elementary students are more apt to emphasize academic enrichment programming while centers serving secondary students tend to emphasize recreational programming.
- When program cluster is considered along with the relative maturity of the grantee (i.e. *New*, *Mature*, or *Sustaining*) and the total number of participation hours offered at a given site, there is some evidence to suggest that over time, centers increasingly move toward emphasizing academic enrichment programming irrespective of program cluster. They also seem to become less dependent on recreational and homework help activities to fill their programming slate.
- A higher average rate of attendance in almost all core academic and non-core subject areas was noted among students attending centers operated by school-based grantees as compared to non-school-based grantees.
- A preponderance of evidence showed that centers in the mostly enrichment cluster demonstrated both the highest absolute number of days attended and the highest rate of attendance in core and non-core activities.

• Student grade level, the number of months since a grantee received its award, and the percentage of total activity hours dedicated to providing academic enrichment activities were all found to be significant predictors of the rate of student attendance in 21<sup>st</sup> CCLC programming.

#### **Conclusions**

This study provides rigorous evidence that cumulative participation in subject-specific 21<sup>st</sup> CCLC activities tended to have a positive effect on TAKS achievement in reading and mathematics. From a practical perspective, the results of this study suggest that 21<sup>st</sup> CCLC students who regularly attend approximately one subject-specific tutoring session per week for three years will make modest, but measurable gains in the subject for which they receive tutoring. Not surprisingly, minimal or sporadic participation in these activities was not associated with academic gains. Thus, we recommend that 21<sup>st</sup> CCLC centers adopt practices that would enhance regular, sustained student participation in subject-specific tutoring activities. These practices might include providing incentives for student participation and improving communication with feeder schools and parents. While 21<sup>st</sup> CCLC effects in Texas were not large enough to close the achievement gap relative to the state average, they seem reasonably large to warrant strong consideration of program continuation.

For both reading and mathematics, the "Enrichment and Tutoring" program cluster type was associated with lower overall TAKS achievement after controlling for student characteristics. This finding may reflect a tendency for centers to offer this type of programming where the population served is struggling academically. Thus, the negative result is not necessarily due to poor programming but could reflect attempts to deal with more at-risk students. More investigation of program quality is suggested to answer this question.

Negative relationships between LEP, special education, and African American status with reading and mathematics achievement were markedly more negative for centers predominately offering "Recreation, Careers, and Leadership" programs. Relative to their peers attending other types of centers, African American students were significantly less successful in reading achievement, and LEP and special education students were significantly less successful in TAKS mathematics achievement. Programs with the "Recreation, Careers, and Leadership" emphasis may offer too few opportunities for direct academic support to these students, although other explanations for these findings cannot be ruled out due to the correlational nature of the design. Regarding the identification of six primary clusters based on the relative emphasis given to certain categories of activities, there is a fair degree of heterogeneity in terms of how centers in Texas are structuring their programs. Such diversity also may suggest that state-supported efforts to improve the quality of after-school programming may need to be varied and nuanced in light of the programmatic approach a given center has adopted in relation to serving its target student population.

In terms of a movement toward emphasizing academic enrichment programming irrespective of program cluster, it may be interesting to explore the extent to which this movement is driven (1) by program monitoring and support strategies employed by TEA and (2) by a realization among center staff of what constitutes effective programming both in terms of

attracting and retaining students and in terms of meeting desired center outcomes. We would recommend that TEA withhold judgment on the appropriateness of centers that have opted to adopt a program model where the provision of academic enrichment activities appears secondary in importance until further efforts may be undertaken to explore the degree to which such programs are able to cultivate certain types of desired youth outcomes.

It is also important to note that at this point in time in the project, we have not collected or analyzed any data that indicates the extent to which Texas 21st CCLCs have adopted the types of practices and processes associated with positive youth outcomes. Statewide program surveys—scheduled for administration in spring 2008—are intended to yield this information. These data may be valuable in the exploration and possible explanation the variation in the outcomes of interest for 21st CCLC, including attendance and student achievement.

### TEXAS 21<sup>ST</sup> CENTURY COMMUNITY LEARNING CENTERS ANNUAL REPORT FOR 2006-07

#### Introduction

After-school programs historically have been important in keeping otherwise unsupervised children safe from risky behaviors while their caregivers are at work. The Afterschool Alliance survey (2004) revealed that 14.3 million American children take care of themselves during after-school hours. Beyond the purpose of safety, Hollister (2003) attributes the recent growth of after-school programs and the need to improve them to more of a social movement than to public policy or new laws. The basis for the movement is the primary hypothesis that greater time spent on educational activities will yield greater gains in a child's academic achievement. A second hypothesis is that children who spend a lot of time "home alone" are more likely to engage in high-risk, negative behaviors.

For nearly a decade, centers funded by the 21<sup>st</sup> Century Community Learning Centers (21<sup>st</sup> CCLC) program have afforded youth living in high-poverty communities across the nation the opportunity to participate in after-school programs designed to provide academic enrichment and youth development activities. Beginning in 2003, the federal No Child Left Behind Act of 2001 (NCLB) legislation (Public Law 107-110) initiated funding for the 21<sup>st</sup> CCLC program. The primary purposes of the program are to:

- Provide out-of-school time opportunities for academic enrichment, including tutorial services to help students (particularly those in high-poverty areas and who attend lowperforming schools) meet state and local performance standards in core academic subjects such as reading, mathematics, and science.
- 2. Offer students a broad array of additional out-of-school time services, programs, and activities that are designed to reinforce and complement the regular academic program of participating students. These would include youth development activities; drug-and violence-prevention programs; counseling services; art, music, and recreation programs; technology education programs; and character education activities.
- 3. Offer families of students served by community learning centers opportunities for literacy and related educational development.

Comprehensive evaluation of the present 21<sup>st</sup> CCLC program requires acknowledgement of the changes in administration, eligibility requirements, primary activity emphasis, and target

population requirements for program implementation defined in the amendment of the 21<sup>st</sup> CCLC program under NCLB. Specifically, these include:

- 1. Transferal of program administration from the federal to the state level—under the reauthorization, responsibility for administering the 21<sup>st</sup> CCLC program was turned over to each State's Education Agency (SEA). Each year each SEA receives an annual formula-derived allocation of 21<sup>st</sup> CCLC program funds. SEAs are obligated to allocate 21<sup>st</sup> CCLC funds to local organizations through a competitive request for application process.
- 2. Expansion of eligibility to additional entities—provisions outlined in the reauthorizing legislation expanded sub-grant eligibility to all public and private organizations.
- 3. Focusing services on academic enrichment opportunities—as part of the reauthorization, entities receiving a state-administered 21<sup>st</sup> CCLC grant must provide academic enrichment activities to students participating in center programming. Broadly defined, academic enrichment activities expand students' learning opportunities in ways that differ from the methods used during the school day. They often are interactive and project focused, and they allow the participants to apply knowledge and skills learned in school to real-life experiences. It is expected that local grantees will implement academic enrichment activities that will help students meet both state and local standards in core content areas such as reading, mathematics, and science.
- 4. Targeting services to poor and low-performing schools—under the reauthorization, states are required to award grants only to applicants that serve students who attend schools with 40% or more students identified as economically disadvantaged. To reinforce this requirement and to encourage the development of collaborations between local education agencies and other organizations, states also are required to give priority to applications for projects in schools designated as in need of improvement under Title I and to applications that are submitted jointly by school districts receiving Title I funds and public or private community-based organizations.

### Academic Impact of After-school Programs

Kane (2004) argues that the education field generally judges an intervention to be successful if it shows a positive impact within a range of 0.10 to 0.30 standard deviations in test scores, the equivalent range of what is produced with six months of schooling (Neal & Johnson,

1996). The standard deviation is the most common measure of statistical dispersion, measuring how widely the values in a data set are spread. If many data points are close to the mean, the standard deviation is small; if many data points are far from the mean, then the standard deviation is large. If all the data values are equal, then the standard deviation is zero. The hours of academic instruction in an after-school program (one to two hours per day) should therefore lead one to expect a weaker impact (< .1 standard deviations). The extent of impact is assumed also to be associated with level of attendance, parental involvement, school attendance, homework completion and grades (Granger & Kane, 2004).

In light of the NCLB 21st CCLC objectives to improve student performance, a number of studies conducted in recent years have examined the impact of after-school programs on participants' state achievement test scores in addition to assessment of after-school services, program availability, and parental feedback. Vandell, Reisner, and Pierce (2007) examined 35 programs serving 2,914 students in 14 communities in 8 states. The programs, all of which had been operating for at least three years when the study began, were selected because of their records of success. Disadvantaged students who regularly attended these programs were found, after two years, to be academically far ahead of peers who spent more out-of-school time in unsupervised activities. These results offer a counterpoint to a 2004 evaluation of the 21<sup>st</sup> CCLC program conducted by Mathematica Policy Research Inc. (Dynarski et al., 2004). The Dynarski study found that the 21<sup>st</sup> CCLC program participants showed no academic gains and may have experienced a slight increase in some negative behaviors. Critics of the 2004 study indicate that many of the programs studied were operating for one year or less or were of low quality. Critics of the 2007 study contend that researchers used as a comparison a group of students who attended after-school programs sporadically, suggesting a lower level of motivation by the students at the outset of their participation in the programs than for students who regularly attended such programs.

The potential for bias was addressed by Bodilly and Beckett (2005) in a literature review of group-based, after-school programs. Most studies reviewed did not control for self-selection bias. Analysis of the most rigorous evaluations suggested that these programs had, at best, modest, positive effects on academic achievement. Even studies that controlled for motivation to sign up were not able to control for subsequent attendance rates, seriously compromising study

integrity. Researchers have struggled in attempting to distinguish between program effects and effects associated with student characteristics that drive participation levels.

Multiple, but less rigorous, studies to date support conclusions that the academic impact of after-school programs is complex (Redd, Cochran, Hair, & Moore, 2002). Afterschool Alliance (2006) completed a summary of evaluations of the academic impact of after-school programs and found numerous positive results. Increased participation in after-school activities was associated with improved school-day attendance and lower dropout rates. Standardized test scores in reading, mathematics, and language arts; and report card grades were shown to increase when looking at year-to-year participation and when compared to groups that were not involved in structured after-school programs.

A study by Huang et al. (2000) evaluated subsequent student achievement and performance for a Los Angeles initiative entitled LA'S BEST After-School Enrichment Program. Data gathered between 1990 and 2000 included achievement test scores in reading, mathematics, and language arts; English proficiency rates; school attendance; course taking patterns; and students mobility in and out of the district. The study also tracked the number of years of each student's involvement in the program. Students who participated for longer periods of time in the after-school program were found to have improved school day attendance and higher scores on achievement tests in mathematics, reading, and language arts.

A study by Durlack and Weissberg (2007) found that students who participated in after-school programs improved in behavior, as well as school performance. Twenty of the programs that demonstrated a significant increase in academic achievement had implemented components in the form of homework help or tutoring, as well as social skills training. The study concluded that programs that promoted personal and social skills acquisition also demonstrated enhanced academic achievement.

George, Cusick, Wasserman, and Gladden (2007) studied Chicago's After School Matters program, which focuses on the acquisition of work skills and increased commitment to academic achievement. Participants in the program missed fewer days of school than other students and had a lower failure rate in core academic classes. Students who were involved for at least three semesters in the after-school program had, on average, a 2.7 times higher rate of graduation and a significantly lower dropout rate than students who did not participate intensely.

To improve after-school programs and make the current debate regarding the impact of these programs on students more productive, more systematic program evaluations are recommended, especially for large, publicly-funded programs (Bodilly & Beckett, 2005). The present evaluation constitutes a step in that direction.

#### Qualities of Effective After-School Programs

It is essential that an evaluation of after-school programming be rooted in and guided by the research on effective, high-quality program provision. Best practices evidence in extended learning time programming suggests that several critical components contribute to the effectiveness and success of such programs and strategies. This summary presents research across key dimensions of programming, synthesizing findings on those attributes and characteristics associated with high-quality extended learning time programming. The dimensions of program quality outlined include program vision and design; purposeful linkages to the school day; an inclusive, collaborative approach to working with parents, partners, and the community; and strong program leadership and administration.

#### Program Vision and Design

Programs should identify goals that align with the articulated program vision. Bodilly and Beckett (2005) emphasized the importance of a clear mission, in support of high expectations and positive social norms, in their report, *Making Out-of-School Time Matter: Evidence for an Action Agenda*. A recent RAND meta-analysis of accountability and quality in after-school care employed a statistical approach to measuring the magnitude of various qualitative attributes (Beckett, Hawken, & Jacknowitz, 2001). This study identified clear program goals as a practice with moderate support of intended outcomes.

Programming and activities should link back to intended objectives. The intentionality of program design is a crucial piece of after-school program success. For example, Balfanz, Legters and Jordan (2004) emphasized the importance of well-designed curricular and instructional interventions in their study of ninth grade remediation programs for the Center for Research on the Education of Students Placed at Risk. Linkages of program activities to program intentions and goals had a positive impact on program effectiveness such that the stronger the linkage the more effective the program.

Programs that integrate a variety of activities and offerings are associated with successful outcomes. A report from the Wallace Foundation (2005) suggests that programs should offer a

"mosaic of positive experiences" for participants. The RAND study also provided strong evidence that the provision of a variety of activities and the flexibility of programming in after-school programs positively affects intended outcomes (Beckett et al., 2001). Programs that provide a variety of activities for children, both engaging and age-appropriate, see benefits in staff-child interactions, children's perceptions of the program climate, and the emotional support provided by staff.

#### Structural Program Features

Structural program features include the selection of high quality, experienced staff and the provision of continuous staff development. A number of studies have provided evidence that incorporating these features leads to greater student outcomes as well as staff retention (Vandell et al., 2004). Pechman and Fiester (2002) highlighted the importance of recruiting and retaining high-quality staff and noted that one particularly successful program focused on hiring staff from the same community as the youth they served.

Once staff is hired, extended learning programs are best served by providing continuous staff development rather than instituting training as a single event. This conclusion was drawn by Beckett et al. (2001), Jurich and Estes (2000), Owens and Vallercamp (2003), and Pechman and Fiester (2002). Training of program staff and teachers may also improve student academic outcomes and thus is an essential component of quality programming (Bodilly & Beckett, 2005). As Vandell et al. (2004) found, the most promising after-school programs "enhance staff background and skills with a diverse program of in-service training" (p. 42).

Prior education and experience of staff members also impact quality after-school programming. In their evaluation of the Chicago Public School's Lighthouse program, Smith, Roderick, and Degener (2005) identified several important staff characteristics, including their specialized knowledge and career experience, personal student/teacher relationships, and establishment of professional norms for the program. The Massachusetts After-School Research Study (MARS) found that staff members who were certified teachers or had higher educational levels were more likely to contribute to overall program quality—staff engagement, youth engagement, activities, and homework time (Intercultural Center for Research in Education [INCRE], 2005). Additionally, the MARS study also found that higher wages coupled with higher levels of training was associated with enhanced quality of staff engagement.

#### Program Processes

The processes that are associated with successful programs include curricular and staff linkages to the school day; student engagement; community and parent involvement; and ongoing evaluation of staff, students, and programs. Successful after-school programs sustain and foster good relationships with the school-day principal and teachers (INCRE, 2005; Pechman & Fiester, 2002). The after-school curriculum should closely align with the school's curriculum in order to be most effective (INCRE, 2005; Weisburd & Adorno, 2004). The RAND study found that the continuity between and complementarity of after-school and school-day programming contributed positively to program effectiveness (Beckett et al., 2001).

A number of factors contribute to student engagement in after-school programming, beginning with a supportive relationship with an adult who provides both quality emotional and academic support (Bodilly & Beckett, 2005; Eccles & Gootman, 2002). A study of the Summer Bridge program in Chicago found that student outcomes were better when the teachers knew their students (Roderick, Engel, & Nagaoka, 2003). If students clearly understand the benefits of participation in after-school programs, receive support from influential people, and have a positive program experience, then they are more likely to feel motivated to attend after school programs (Bodilly & Beckett, 2005).

Community involvement in after-school activities encourages a sense of community ownership of the program. For example, Sacramento's citywide after-school program, Students Today Achieving Results Tomorrow (START), partnered with the Union House Elementary School's expanded-day program in order to "expand [the] neighborhood base and incorporate community events that showcased [their] after-school enrichment programs" (Owens & Vallercamp, 2003, p. 2). The two organizations' shared goals of providing homework help and enrichment were integral to the success of this collaborative effort. Partnerships with the community and other organizations have the potential to attract long-term participants and supporters as well as a variety of resources (Pechman & Fiester, 2002; Vandell et al., 2004).

Parental involvement needs to be supported and encouraged by leaders of after-school programs, as it strongly contributes to positive program outcomes (Trammel, 2003). According to Pechman and Fiester (2002), parents are more likely to be active participants in programming if they are "coaxed" through targeted classes, special interest clubs, and social events that

encourage their participation. Across the literature, the importance of engaging and involving parents in extended learning time programming surfaces as a strong indicator of program success.

In order to determine whether after-school programming is having its intended effect, evaluation is essential. From the beginning, programs need to be designed with the goal of measuring student outcome and performance data in order to plan for continuous program improvement (Fortune, Spalding, Pande, & Emery, 2005; Pechman & Fieser, 2002). During program participation, students need to be assessed to measure the skills taught by the out-of-school-time curriculum (Fortune et al., 2005), and staff needs to be evaluated as a part of its own continuing professional development (Pechman & Fiester, 2002).

### Leadership and Program Administration

Strong district-level involvement in program implementation, support from building administration, and program leadership is important. In a study of the Extended School Services (ESS) program in Kentucky, program coordinators indicated that district support for implementation was a key strength and catalyst for effective program implementation (Cowley, Meehan, Finch, & Blake, 2002). The same study found that program staff's perceptions of their effectiveness were related to their sense of outstanding leadership and oversight from building and program administrators. It is also the responsibility of program administrators and leadership to seek support from a variety of funding sources to ensure program sustainability (Vandell et al., 2004). Program funding is often in danger of diminishing, and leaders must secure the resources for program viability.

Comprehensive program evaluation is valuable for providers of 21<sup>st</sup> CCLC programs in adding to the research base for determining the impact of programs on academic achievement and for determining program qualities that are associated with improved student performance. The following evaluation seeks to contribute toward this goal.

#### Purpose of Evaluation

The purpose of this evaluation is to examine the impact of 21<sup>st</sup> CCLC participation on student outcomes and to investigate possible mediating, moderating, or other explanatory variables associated with successful programs. The 21<sup>st</sup> CCLC program is designed to create or expand the role of community-based learning centers in providing academic enrichment opportunities, in addition to other valuable services and activities (e.g., drug and violence prevention, character education, technology, art, music, recreation) that are intended to

complement the students' regular academic program during non-school hours (e.g., after school, weekends, summer).

#### **Evaluation Tasks**

Tasks for the evaluation of Texas 21st CCLCs are as follows:

- 1. To provide an analysis of the impact of 21st CCLC participation on student-level achievement outcomes:
- 2. To investigate the variables that mediate or moderate the relationship between program participation and student-level outcomes;
- 3. To develop and conduct statewide survey assessment to attain a better understanding of the nature of existing programs;
- 4. To determine specific programmatic features associated with the various student achievement outcomes included in the evaluation; and
- 5. To develop a profile and description of 21<sup>st</sup> CCLC programs, operations, staffing patterns, and students served.

#### **Evaluation Procedures and Results**

Detailed evaluation results and descriptions of methods of analysis are described by task on the following pages.

# Task 1: To provide an analysis of the impact of $21^{st}$ CCLC participation on student-level achievement outcomes.

Research Question 1: What is the relationship between cumulative student attendance at 21<sup>st</sup> CCLC activities and growth in academic achievement in reading and mathematics, after controlling for student background characteristics?

To address this question, 21<sup>st</sup> CCLC students were first divided into one of three groups based on their level of attendance (low, moderate, high) in subject-specific activities (e.g., reading and mathematics activities) at the centers during the 2004-05, 2005-06, and 2006-07 school years. After controlling for demographic and other background variables, the TAKS performance of students within the different attendance categories was compared to the TAKS performance of students who attended the same schools as the 21<sup>st</sup> CCLC participants (also called 21<sup>st</sup> CCLC feeder schools) but who did not attend 21<sup>st</sup> CCLC (hereafter called *comparison* students). The comparisons were done in terms of change in TAKS performance over time and change was computed relative to the average TAKS performance of all students in Texas. Analyses were performed separately for TAKS reading and mathematics scores, and for each grade-level cohort that attended Grades 6 through 11 in the 2006-07 school year. For example, the cohort of Grade 6 students is the group of students who were in Grade 6 in 2006-07, Grade 5 in 2005-06, and Grade 4 in 2004-05.

#### Methodology

Participants. This study included 89,712 students who were in Grades 6 through 11 during the 2006-07 school year; who attended any 21<sup>st</sup> CCLC activity during the 2004-05, 2005-06, or 2006-07 school years; and who participated in reading or mathematics activities at the center during these three years (hereafter called "21<sup>st</sup> CCLC students"). This study also included 129,610 comparison students who were in Grades 6 through 11 and who attended 21<sup>st</sup> CCLC feeder schools during the 2006-07 school year, but who did not attend 21<sup>st</sup> CCLC activities during the 2004-05, 2005-06, and 2006-07 school years. In other words, students in 21<sup>st</sup> CCLC could be in the program in 2006-07 but not in prior years. For both sets of students, only those with four years of TAKS English-version test scores, demographic information, and 21<sup>st</sup> CCLC records (for 21<sup>st</sup> CCLC students) were included in subsequent analyses. As a result of these requirements, a total of 64,088 21<sup>st</sup> CCLC students (71.4%) and 84,381 comparison students (65.1%) were included in the TAKS reading analyses, and a total of 68,620 21<sup>st</sup> CCLC students

(76.5%) and 89,627 *comparison* students (69.2%) were included in the TAKS mathematics analyses.

As shown in Table 1, all three 21<sup>st</sup> CCLC intensity subgroups and the *comparison* student group had very similar demographic profiles. Across all 21<sup>st</sup> CCLC intensity groups, those included in the reading analyses were quite similar to comparison students with respect to the percentages of students who were economically disadvantaged (77% vs. 73%), were classified as gifted and talented (hereafter, Gifted; 12% vs. 12%), had limited English proficiency (LEP; 6% vs. 5%), were receiving special education services (2% vs. 2%), or were classified as at risk (59% vs. 54%). There was little variation in the demographic characteristics across 21<sup>st</sup> CCLC subgroups. The demographic profile of students included in the mathematics analyses was nearly identical to that of those included in the reading analyses (see Table 1).

Table 1. Percentage of Students with Selected Demographic Characteristics by Analysis Sample Inclusion and Group

Analyzaia		Egonomically		Limited	Cmaaia1	Λ +
Analysis		Economically	G:0 1	English	Special	At
Sample	Group	Disadvantaged	Gifted	Proficient	Education	Risk
Reading Included	Comparison	73%	12%	5%	2%	54%
	Low	770/	120/	00/	20/	(00/
	Intensity	77%	12%	8%	3%	60%
	Moderate Intensity	77%	10%	8%	4%	62%
	High	000/	00/	70/	407	(00/
	Intensity	80%	9%	7%	4%	60%
Mathematics Included	Comparison	73%	12%	6%	3%	55%
	Low	78%	13%	9%	3%	60%
	Intensity	7070	10,0	<i>y</i> , <b>v</b>	2,0	00,0
	Moderate	78%	10%	8%	4%	62%
	Intensity	/0/0	10/0	0/0	4/0	02/0
	High	79%	9%	7%	4%	60%
	Intensity		)/0	7 / 0	7/0	00/0

As noted previously, 21<sup>st</sup> CCLC students were divided into one of three groups based on their level of participation in reading and mathematics activities (i.e., low, moderate, high). Classification was determined by summing the total number of reading or mathematics activities that each 21<sup>st</sup> CCLC student participated in during each term (Summer, Fall, Spring) across the three school years from 2004-05 through 2006-07. Students were classified as *low-intensity* if they attended between  $0^2$  and 30 activities during the 3 years, as moderate-intensity if they attended between 31 and 90 activities during the 3 years, and as high-intensity if they attended 91 or more activities during the 3 years. As shown in Figures 1 and 2, fewer than 2,000 students attended 100 or more sessions over the three-year period. A fourth group consisted of the comparison students. Demographic variables (economically disadvantaged, gifted, LEP, special education, at risk, and grade level) were extracted from the TEA's Public Education Information Management System (PEIMS) records. The original economically disadvantaged indicator, which shows whether students received free lunch, reduced-price lunch, or were below poverty level, was recoded such that one meant economically disadvantaged (any type), and zero meant not economically disadvantaged. All other demographic variables were coded such that one meant the presence of the trait and zero meant the absence of the trait.

<sup>&</sup>lt;sup>1</sup> Cumulative student participation levels in reading and in mathematics were modeled as categorical (rather than continuous) variables to facilitate interpretation.

<sup>&</sup>lt;sup>2</sup> Note that some students who attended 21<sup>st</sup> CCLC activities, and thus were 21<sup>st</sup> CCLC students, did not participate in subject-specific tutoring (i.e., attended 0 reading or mathematics activities).

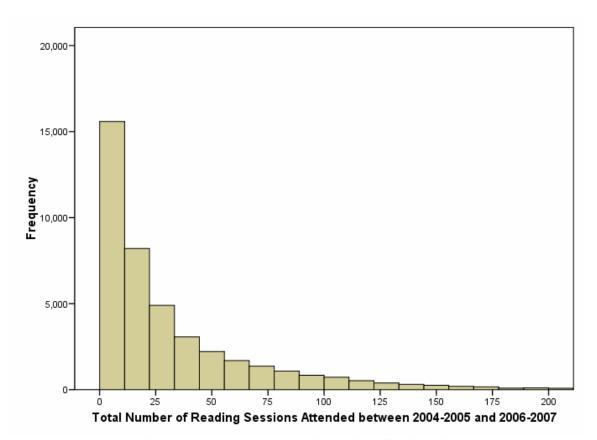


Figure 1. Total Number of Reading Sessions Attended.

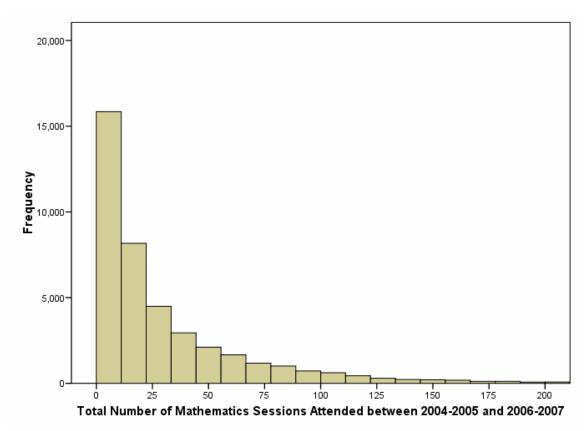


Figure 2. Total Number of Mathematics Sessions Attended

Measures. TAKS English-version reading and mathematics scale scores<sup>3</sup> were employed as measures of students' academic achievement. However, in order to compare TAKS scale scores across grades and across school years, we had to standardize the scale scores. Standardized scale scores were computed by taking each student's TAKS scale score and subtracting the statewide TAKS mean scale score, and dividing the result by the statewide standard deviation for that test. This was done separately for reading and for mathematics tests, for each school year, and for each grade level. The resulting standardized score expresses each student's TAKS performance relative to the Texas mean for that test and for that year. Thus, any increase in a student's TAKS standardized scale score represents progress relative to the average student in Texas as opposed to absolute gains in student TAKS achievement in the subject area. The reader should note that the mean absolute TAKS performance improved on average over the

<sup>3</sup> TAKS scale scores provide for a uniform comparison of student performance relative to the grade level standard in the tested subject, accounting for differences in the difficulty levels of the specific test forms. The scale scores form the basis for determining whether students met the standard.

time period in question for students in the state. With each successive year, the norm group performance was higher, which put downward pressure on relative gains.

Sample attrition. Students for whom any data were missing from either the demographic file or were missing scores from any of the four years of TAKS administrations were excluded from the analyses. To examine the potential impact of attrition from the sample, inclusion rates were computed for each student subgroup by grade. The overall inclusion rate for mathematics was 99.1%, so attrition did not have an impact on group means. For reading, the overall inclusion rate was 91.8%. To examine the potential impact of attrition on reading means, analyses of variance were performed using standardized 2004 TAKS reading scores as the outcome, and study inclusion (included, not included) and intensity group as the factors. Tests of the inclusion main effects were conducted to determine whether there were relationships between students' initial achievement levels and attrition from the study. Tests of the inclusion X group interaction effects were performed to determine whether differential attrition might have contributed to trends in group performance. As shown in Table 2, inclusion rates for reading were generally above 90%, and were very similar across all student subgroups. At all grade levels, a statistically significant main effect was observed for inclusion status, with included students scoring significantly higher than students who were excluded from the analyses, with mean standardized differences ranging from -0.83Z for 2007 Grade 6 to -0.28Z for 2007 Grade 10. A chi-square analysis revealed a statistically significant relationship between LEP status and attrition from the reading analyses ( $\chi^2 = 10,024.5$ , df = 1, p < .001), with 94.8% of non-LEP students included compared to 69.1% of LEP students. No interaction effects were observed. Thus, mathematics results were not affected by student attrition from the study. For reading, there was no differential attrition by group, but very low-performing students and LEP students were more likely to be excluded from the analyses.

Table 2. Reading Analyses Inclusion Rates by Grade and Group

Grade in 2007		Included in Rea	ding Analysis?
		No	Yes
6	Comparison	5.5%	94.5%
	Low Intensity	5.7%	94.3%
	Moderate Intensity	6.3%	93.7%
	High Intensity	5.8%	94.2%
7	Comparison	5.9%	94.1%
	Low Intensity	6.3%	93.7%
	Moderate Intensity	6.6%	93.4%
	High Intensity	6.1%	93.9%
8	Comparison	6.2%	93.8%
	Low Intensity	6.2%	93.8%
	Moderate Intensity	7.5%	92.5%
	High Intensity	6.9%	93.1%
9	Comparison	7.8%	92.2%
	Low Intensity	8.8%	91.2%
	Moderate Intensity	9.3%	90.7%
	High Intensity	7.2%	92.8%
10	Comparison	8.3%	91.7%
	Low Intensity	8.6%	91.4%
	Moderate Intensity	9.7%	90.3%
	High Intensity	6.3%	93.7%
11	Comparison	9.4%	90.6%
	Low Intensity	10.4%	89.6%
	Moderate Intensity	10.9%	89.1%
	High Intensity	11.5%	88.5%

Analyses. For each grade level from 6 through 11, a one-way repeated-measures analysis of covariance was performed, with 21st CCLC reading Activity Intensity as the independent variable, and standardized TAKS reading scores from 2004-05, 2005-06, and 2006-07 as the repeated measures. Covariates included 2003-04 standardized TAKS reading scores, and status on economic disadvantage, gifted, LEP, special education, and at risk. Similar analyses were conducted for standardized TAKS mathematics scores. Of primary interest are the tests for differences in TAKS achievement across years among groups (comparison students, low-, medium-, and high-intensity 21st CCLC students). In addition to the inferential test of this interaction effect, actual and covariate-adjusted mean scores were computed and plotted to aid in interpretation. The covariate-adjusted scores reflect the expected mean scores for each group assuming that students within each group were equal with respect to their 2003-04 TAKS scores

and that each group had equal percentages of economically disadvantaged, gifted, LEP, special education, and at risk students. Post-hoc analyses were performed in cases where a statistically significant group X school year interaction effect was observed by conducting pairwise comparisons of the differences between 2007 and 2005 scores ( $\Delta$ ) within subgroups. The Bonferroni procedure was employed to control for experimentwise alpha rates.

#### Results

In this section, we present the results of comparative longitudinal analyses of student TAKS achievement by *comparison* students, and *low-*, *moderate-*, and *high-intensity* 21<sup>st</sup> CCLC students. Descriptive results for each group are presented in the tables and figures and are based on standardized TAKS scale scores. Thus, a score of 0 indicates that the mean for that student group was equal to the mean score for all students in Texas. Negative scores indicate that the group mean was below the average score in Texas, while positive scores indicate that the group mean was above the average score in Texas. Differences are expressed in standard deviation units (e.g., +.10Z), and each can be translated into the percentage of students in that particular group who scored above or below the state's average score. For example, if the average standardized TAKS reading scale scores for students in a particular group scored was -.20Z (.20 standard deviation units below the mean), then we know from Table 3 that 58% of the students in that group scored above the state's average for that TAKS test and 42% scored below the state's average. Where statistically significant group X school year interaction effects were observed, post-hoc analyses were performed by comparing the rate of change in scores between 2005 and 2007 (Δ) within and between groups.

Table 3. Translation of Z-scores Into Percentages of Students Scoring Higher or Lower than the State Average Score

Positive Standardized Score	+.10	+.20	+.30	+.40	+.50	+.60	+.70	+.80	+.90
Percentages of Students Scoring Higher than the State Average	54%	58%	62%	66%	69%	73%	76%	79%	84%
<b>Negative Standardized Score</b>	10	20	30	40	50	60	70	80	90

*Note*. The information presented in this table serves as a general guide to interpreting the effects. The actual percentages of students scoring above or below the state average may vary slightly depending on how closely specific TAKS achievement score distributions approximate a normal distribution.

For each cohort, two figures and one table are provided. The first figure shows the differences between 21st CCLC and comparison students' standardized TAKS scores over time. So, for example, if the *moderate*-intensity 21<sup>st</sup> CCLC group had a score of +0.20 on the first figure, then using the Table 3 above we can see that a +.20 change in standardized score means that 58% of these students scored higher than the mean for the comparison students. Because comparison students serve as the reference group for these figures, the *comparison* group mean is always 0, and therefore is not plotted. These figures help us determine whether, on the whole, 21<sup>st</sup> CCLC students made progress relative to *comparison* students attending schools in 21<sup>st</sup> CCLC feeder patterns. The second figure shows covariate-adjusted mean TAKS scores over time, which represent the mean TAKS scores that likely would have been obtained by each student group (i.e., comparison, low-, moderate-, and high-intensity) if they had equal 2004 TAKS scores and had the same demographic profiles. These figures provide for a more sensitive test of program effects. Finally, the tables provide a longitudinal view of how students in all groups performed relative to the state's average, where the Texas mean is equal to 0 as described above. For example, if the mean standardized TAKS score for *comparison* students was -0.10, then 54% of students in that group scored below the average TAKS score for all students in Texas.

#### Reading

Grade 6. A statistically significant group X school year interaction effect was observed on standardized TAKS reading scores ( $F_{6,63418} = 2.79$ , p = .01). A visual inspection of Figure 3 reveals that all  $21^{st}$  CCLC groups gained modestly relative to the *comparison* group, with the strongest gains posted by the *high-intensity* reading activity group (see Figure 4). Overall, *comparison* students scored below the state's averages on the TAKS reading test, with unadjusted mean standardized (Z) scores of -.10Z, -.07Z, and -.10Z in 2004-05, 2005-06, and 2006-07, respectively, while  $21^{st}$  CCLC students' unadjusted mean scores ranged roughly between -.20 and -.30 standard deviation units below the state's averages (see Table 3). However, *comparison* students' means stayed relatively stable across the three years, while  $21^{st}$  CCLC students in all intensity groups improved relative to the state's average. Post-hoc analyses revealed that the *comparison* group did not have a statistically significant gain between 2005 and 2007 ( $\Delta$  = +.00), while all three  $21^{st}$  CCLC groups did ( $\Delta$  = +.04, +.04, and +.06 for *low-intensity*, *moderate-intensity*, and *high-intensity* groups, respectively). Further, the  $\Delta$  for the *high intensity* group was statistically significantly higher than that of the other two  $21^{st}$  CCLC subgroups.

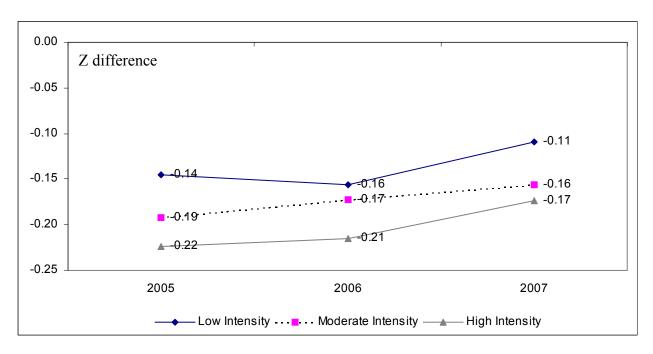


Figure 3: Difference Between CCLS Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 6

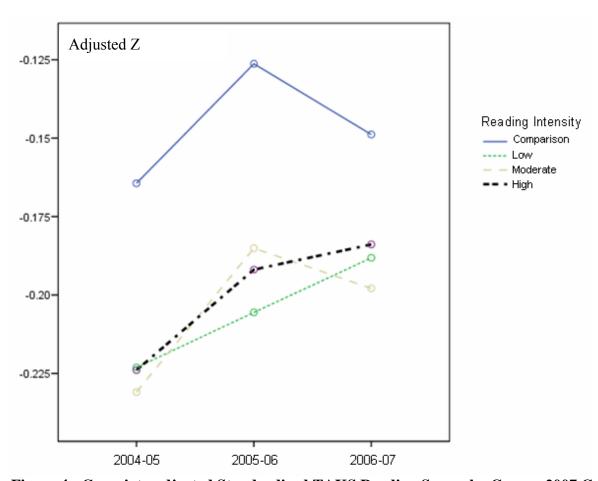


Figure 4: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 6

Table 4. Unadjusted Mean Standardized TAKS Reading Scores by Grade, Group, and School Year

Grade in 2006-07	Group	2003-04	2004-05	2005-06	2006-07	N
Grade 6	Comparison Low Intensity Moderate Intensity High Intensity	05 18 22 26	10 25 30 33	07 23 24 29	10 21 25 27	16,781 4,009 5,566 5,363
Grade 7	Comparison Low Intensity Moderate Intensity High Intensity	12 25 31 33	12 28 33 38	10 22 28 34	10 25 27 28	17,712 5,167 5,639 3,271
Grade 8	Comparison Low Intensity Moderate Intensity High Intensity	22 32 36 40	17 27 32 40	14 23 27 31	14 25 25 30	17,807 6,179 6,008 2,535
Grade 9	Comparison Low Intensity Moderate Intensity High Intensity	25 31 37 35	23 32 37 34	19 28 30 31	08 18 19 16	19,501 5,937 4,741 1,701
Grade 10	Comparison Low Intensity Moderate Intensity High Intensity	26 26 32 26	23 24 29 26	10 12 16 08	26 28 32 22	6,839 2,562 1,459 543
Grade 11	Comparison Low Intensity Moderate Intensity High Intensity	18 25 23 44	09 11 16 25	15 18 13 27	31 34 30 44	5,741 2,118 979 311

Grade 7. As with Grade 6, a statistically significant group X school year interaction effect was observed on standardized TAKS reading scores ( $F_{6,63558} = 7.10$ , p < .001).  $21^{st}$  CCLC students in the *high*- and *moderate-intensity* groups improved relative to the *comparison* group, while those in the *low-intensity* group performed about the same as the *comparison* group (see Figure 5). The *comparison* group mean was about -.15Z below the state's average each year, whereas the *high-intensity* group improved from -0.38 to -0.28Z (a change of +0.10Z) and the *medium-intensity* group improved +0.06Z (see Table 4). As shown in Figure 6, progress relative

to the state's average was consistent and positive for the *high*- and *moderate-intensity* groups, and was variable but positive for the *low-intensity* and *comparison* group. Post-hoc analyses revealed that the *comparison* group had a statistically significant gain between 2005 and 2007 ( $\Delta$  = +.02), as did all three 21<sup>st</sup> CCLC groups did ( $\Delta$  = +.04. +.04, and +.09 for *low-intensity*, *moderate-intensity*, and *high-intensity* groups, respectively). The  $\Delta$  for the *high-intensity* group was statistically significantly higher than that of all other groups, and the  $\Delta$  for the *low-* and *moderate-intensity* groups was higher than that of the *comparison* group.

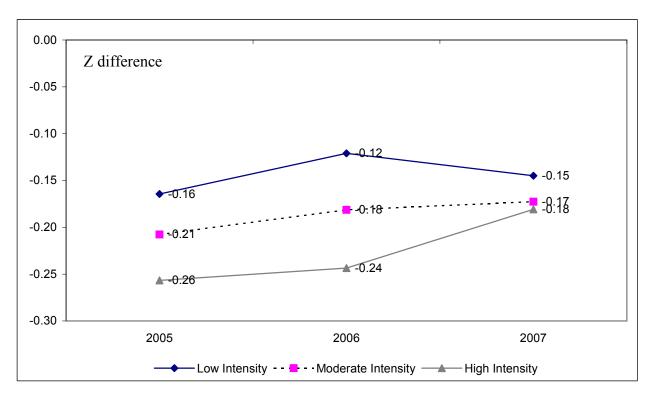


Figure 5: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 7

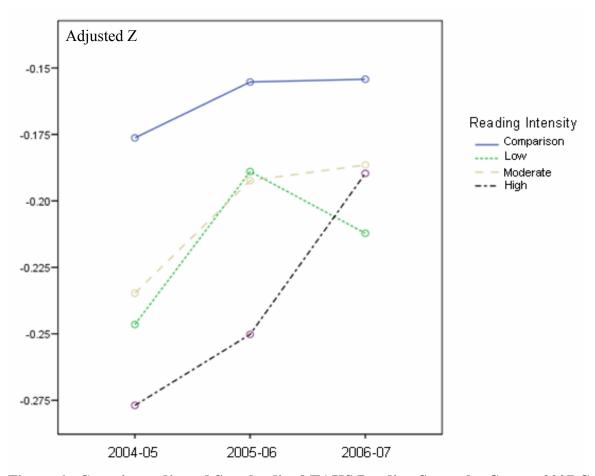


Figure 6: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 7

Grade 8. The group X school year interaction effect was also statistically significant for standardized TAKS reading scores ( $F_{6,65038} = 7.11$ , p < .001), and the pattern of results mirrored that of Grade 7, with high- and moderate-intensity students making notable, consistent gains relative to comparison students, and low-intensity students' achievement remaining relatively stable (see Figure 7). High- and moderate-intensity students made striking gains relative to comparison and low-intensity students. Over the three-year period, comparison students consistently scored at about -0.15Z relative to the state's average, low-intensity students improved from -0.27 to -0.25Z, moderate-intensity students improved from -0.32 to -0.25Z, and high-intensity students improved from -.40 to -.30Z (see Table 4). Post-hoc analyses revealed that the comparison group had a statistically significant gain between 2005 and 2007 ( $\Delta = +.03$ ), as did all three  $21^{st}$  CCLC groups did ( $\Delta = +.02$ , +.02, and +.11 for low-intensity, moderate-

intensity, and high-intensity groups, respectively). The  $\Delta$  for the high intensity group was statistically significantly higher than that of all other groups.

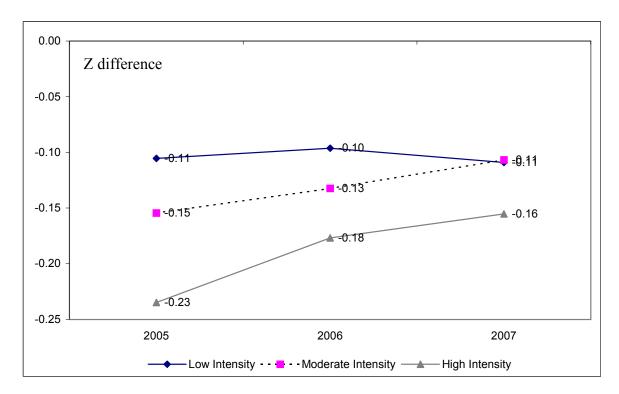


Figure 7: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 8

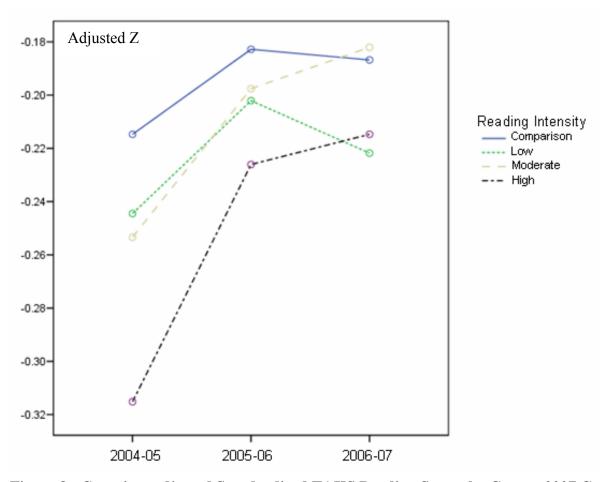


Figure 8: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 8

Grade 9. Commensurate with Grades 7 and 8 results, a statistically significant group X school year interaction effect was observed on standardized TAKS reading scores ( $F_{6,63740} = 3.29$ , p < .01). The general pattern was the same for Grade 9 students as that obtained for Grades 7 and 8, with high- and moderate-intensity  $21^{st}$  CCLC students gaining at a faster rate than comparison and low-intensity students. Low-intensity students remained at about -0.10Z relative to comparison, while high- and moderate-intensity students improved 0.04Z relative to comparison students (from -0.12 to -0.08Z and -0.15 to -0.11Z, respectively; see Figure 9). All groups made relatively dramatic improvements relative to the state's average, with comparison students improving from -0.23 to -0.08 Z, low-intensity students improving from -0.32 to -0.18Z, moderate-intensity students improving from -0.34 to -0.16Z (see Table 4). As shown in Figure 10, moderate- and high-intensity students made somewhat greater gains relative to the state's average than comparison or

low-intensity students, after controlling for the effects of 2004 achievement and demographic variables. Post-hoc analyses revealed that the *comparison* group had a large and statistically significant gain between 2005 and 2007 ( $\Delta$  = +.14), as did all three 21<sup>st</sup> CCLC groups did ( $\Delta$  = +.13, +.13, and +.18 for *low-intensity*, *moderate-intensity*, and *high-intensity* groups, respectively). The  $\Delta$  for the *high-intensity* group was statistically significantly higher than that of all other groups.

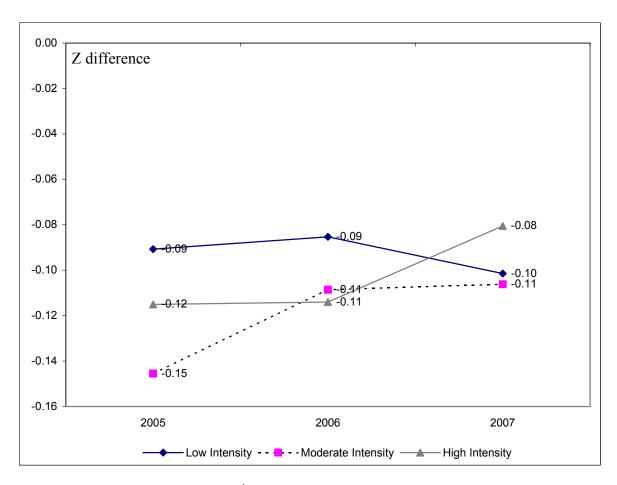


Figure 9: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 9

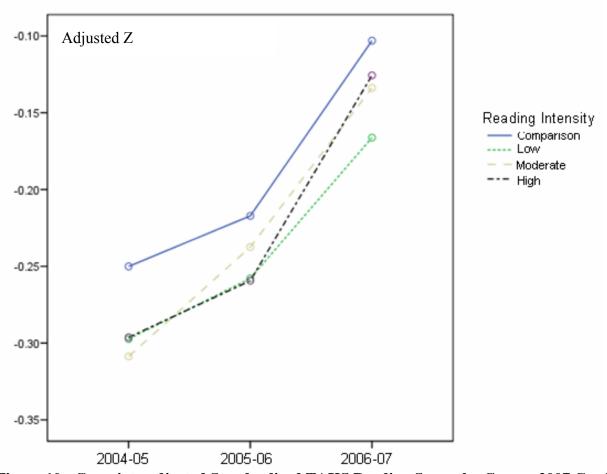


Figure 10: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 9

TAKS reading scores ( $F_{6,22786} = 2.79$ , p = .01) for Grade 10. As shown in Figure 11, high-intensity students made progress relative to the comparison group (from -0.03Z to +0.04Z) over
the three-year period, while low- and moderate-intensity students performed equally relative to comparison students (see Figure 11). A pronounced, statistically significant ( $F_{1,11393} = 34.81$ , p<.001) curvilinear time effect was evident for all groups, as the "upside-down U" shapes
displayed in Figure 12 illustrate. For all four groups, achievement relative to the state's average
peaked in 2006 (Grade 9), then declined in 2007. This strong curvilinear effect perhaps masked
the linear group X school year interaction, because, as seen in Figure 12, high-intensity students
made the greatest covariate-adjusted gains between 2005 and 2007. The high-intensity group
gained +0.07Z relative to the comparison group, and progressed from -0.26 to -0.22Z relative to

the state's average (see Table 4). Note that the number of students in the *high-intensity* group was relatively small (n=543).

Grade 11. In Grade 11, a statistically significant group X school year interaction effect was observed on standardized TAKS reading scores ( $F_{6,18278} = 2.91$ , p < .01). High-intensity and moderate-intensity students improved somewhat relative to comparison students, while low-intensity students performed nearly equally to comparison students at all time periods (see Figure 13 and Table 4). Unfortunately, as seen in Figure 14, the covariate-adjusted performance of all groups declined precipitously relative to the state's average—the rate of decline was statistically significantly less for moderate- and high-intensity students, but still troubling, as all groups slipped -0.14 to -0.23Z compared to the typical performance of Texas Grade 11 students (see Table 4). Post-hoc analyses revealed that the comparison group had a statistically significant loss between 2005 and 2007 ( $\Delta = -.22$ ), as did all three 21st CCLC groups ( $\Delta = -.22$ , -.22, and -.18 for low-intensity, moderate-intensity, and high-intensity groups, respectively). The  $\Delta$  for the high intensity group was statistically significantly less negative than that of all other groups.

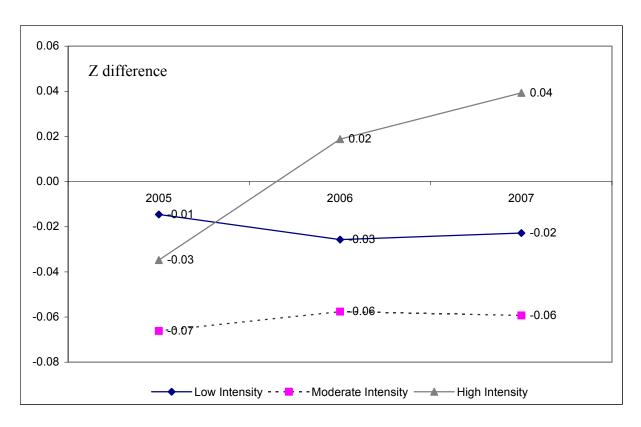


Figure 11: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 10

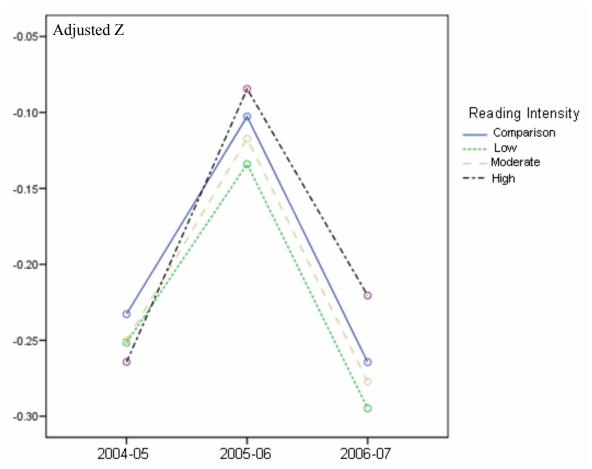


Figure 12: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 10

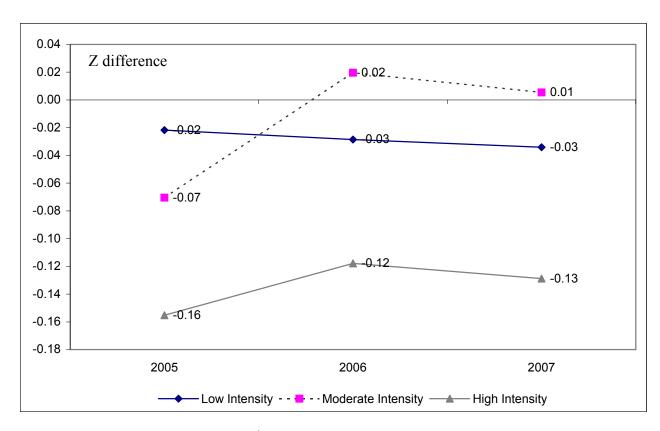


Figure 13: Differences Between 21<sup>st</sup> CCLC Standardized TAKS Mean Reading Scores and Comparison Group Mean by Reading Activity Intensity Group and School Year: 2007 Grade 11

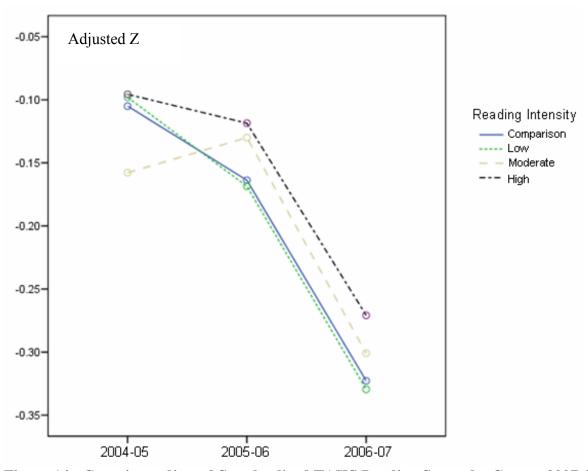
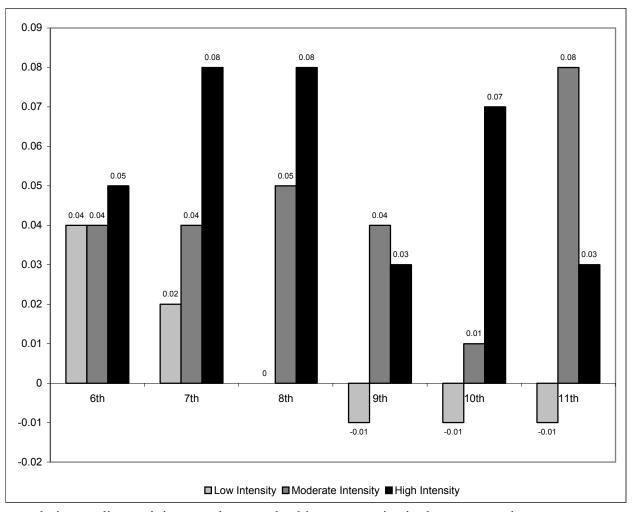


Figure 14: Covariate-adjusted Standardized TAKS Reading Scores by Group: 2007 Grade 11

Summary reading results. Figure 15 displays the standardized mean gains for 21st CCLC students in the moderate- and high-intensity groups relative to comparison students between 2005 and 2007. High-intensity students in the 2007 Grade 7 and Grade 8 cohorts and moderate-intensity students in the Grade 11 cohort made the most substantial gains, followed by high-intensity students in Grade 10. Low-intensity students made little or no gains. The consistent pattern of results for these grade levels, coupled with statistically significant group X school year interaction effects, suggest a positive, cumulative effect of participation in 21st CCLC reading activities on student TAKS reading achievement. Results also favored moderate- and high-intensity students enrolled in Grades 9-11 in 2007, who consistently improved relative to comparison students while low-intensity student performance remained stable relative to comparison students. In Grades 9 and 11, gains by moderate-intensity students were higher than

gains by high-intensity students, finding that militates against a straightforward linkage between



cumulative reading activity attendance and achievement gains in the upper grades.

Figure 15: Net 2005-2007 Gain in Standardized TAKS Reading Scores by 21<sup>st</sup> CCLC Students Relative to Comparison Students by Reading Activity Attendance Intensity Group and Grade

#### **Mathematics**

Grade 6. A statistically significant group X school year interaction effect was observed on standardized TAKS mathematics scores ( $F_{6,66730} = 2.95$ , p < .001). As shown in Figure 16, low-intensity student performance remained constant relative to the comparison group, while both moderate- and high-intensity student performance increased from -0.22 to -0.16Z relative to the comparison group. Compared to the state's average, comparison students declined from -0.14Z to -0.16Z between 2005 and 2007, low-intensity student performance remained unchanged (-0.31 to -0.31Z), while moderate-intensity and high-intensity student performance increased (-0.36 to -0.32Z and -0.35 to -0.32Z, respectively; see Table 5). As shown in Figure 17, covariate-adjusted performance of moderate- and high-intensity students exhibited a mostly linear increase, while low-intensity and comparison student performance exhibited a negative, statistically significant quadratic trend ( $F_{3,33365} = 9.94$ , p < .001). Post-hoc analyses revealed that the comparison group had a statistically significant decline between 2005 and 2007 ( $\Delta = -.02$ ), the low-intensity group had constant performance ( $\Delta = .00$ ), and the moderate-intensity, and high-intensity groups had statistically significant gains ( $\Delta = +.04$ ), respectively.

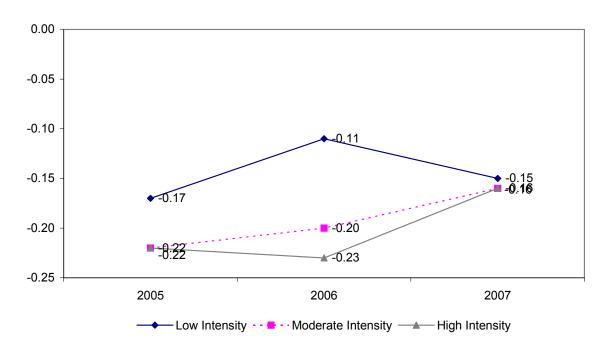


Figure 16: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores and Comparison Group Mean by Mathematics Activity Intensity Group and School Year: 2007 Grade 6

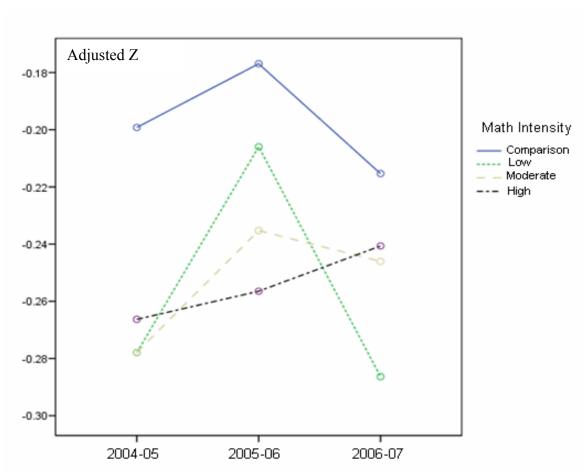


Figure 17: Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade  $\boldsymbol{6}$ 

Table 5. Unadjusted Mean Standardized TAKS Mathematics Scores by Grade, Group, and School Year

Grade in 2006-07	Group	2003-04	2004-05	2005-06	2006-07	N
	0.0 thp					
Grade 6	Comparison	11	14	12	16	17,597
	Low Intensity	24	31	23	31	5,083
	Moderate Intensity	30	36	32	32	5,739
	High Intensity	34	35	34	32	4,956
C 1. 7	G	1.7	1.5	1.4	1.6	10.700
Grade 7	Comparison Low Intensity	17 34	15 31	14 29	16 31	18,780 5,739
	Moderate Intensity	40	31 34	29 34	31 35	6,132
	High Intensity	40 41	43	3 <del>4</del> 42	37	3,136
	Tilgii intensity	.11	<b>-</b> .	72	57	3,130
Grade 8	Comparison	30	21	24	26	18,980
	Low Intensity	40	26	30	32	6,766
	Moderate Intensity	54	38	41	40	6,479
	High Intensity	54	45	46	41	2,559
			• 0	• •	• •	• • • • •
Grade 9	Comparison	35	28	30	29	20,829
	Low Intensity	48	35	36	36	6,616
	Moderate Intensity	56	44	44	40	5,115
	High Intensity	53	43	40	34	1,650
Grade 10	Comparison	49	33	29	40	7,254
	Low Intensity	49	36	32	39	2,586
	Moderate Intensity	56	44	34	43	1,705
	High Intensity	45	43	26	42	609
Grade 11	Comparison	40	29	32	50	6,187
	Low Intensity	49	31	29	45	2,318
	Moderate Intensity	50	31	32	42	1,071
	High Intensity	69	46	40	63	361

Grade 7. The group X school year interaction effect also was statistically significant for Grade 7 students ( $F_{6,67554} = 4.41$ , p < .001). The absolute performance of high-intensity students relative to comparison students increased substantially, from -0.28 to -0.20Z, while remaining unchanged for low- and moderate-intensity students (see Figure 18). Likewise, only high-intensity students improved relative to the state's average (-0.43 to -0.37Z), while the performance of comparison students (-0.15 to -0.16Z), low-intensity (-0.31 to -0.31Z) and moderate-intensity students (-0.34 to -0.35Z) remained relatively constant across the three years.

A plot of the covariate-adjusted means by group reveals a striking upward trend in the performance of *high-intensity* students (see Figure 19), with slightly negative quadratic trends for the other three groups of students. Post-hoc analyses revealed that the *comparison*, *low-intensity*, and *moderate-intensity* groups had constant performance ( $\Delta = .00$ ), while the *high-intensity* group had a statistically significant gain ( $\Delta = +.05$ ).

Grade 8. As with Grades 6 and 7, a group X school year interaction effect was statistically significant ( $F_{6,69548} = 5.24$ , p < .001), with high-intensity students posting gains relative to the state's average (-0.45 to -0.41Z) while the performance of other students declined (-0.21 to -0.26Z, -0.26 to -0.32Z, and -0.38 to -0.40Z for comparison students, low-intensity, and moderate-intensity students, respectively; see Table 5). As shown in Figure 20, the gap in performance between high-intensity and comparison students narrowed considerably from -0.24 to -0.15Z, narrowed somewhat for moderate-intensity students (-0.17 to -0.14Z), and remained constant for low-intensity students (-0.05 to -0.06Z). In terms of covariate-adjusted performance, high-intensity students made striking gains relative to the other three groups (see Figure 21). Post-hoc analyses showed that moderate- and high-intensity students had statistically significantly higher gains than either comparison or low-intensity students.

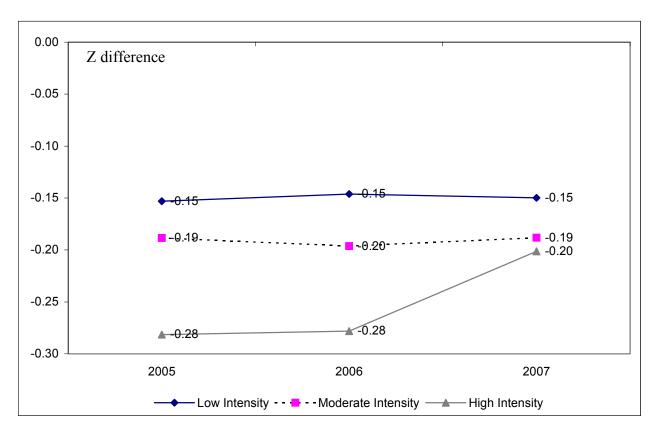


Figure 18: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores and Comparison Group Mean by Mathematics Activity Intensity Group and School Year: 2007 Grade 7

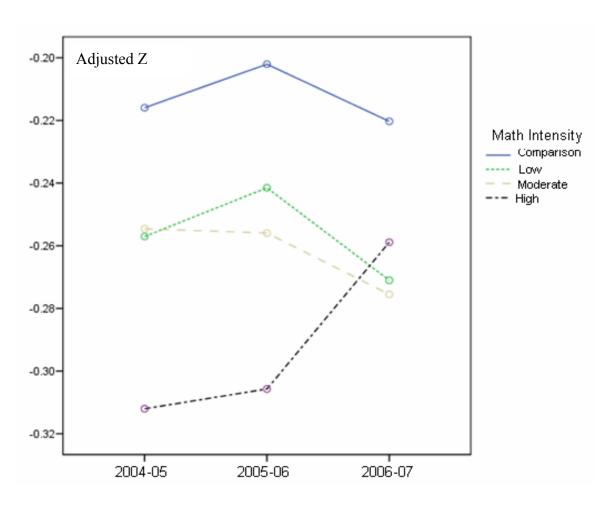


Figure 19: Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade 7

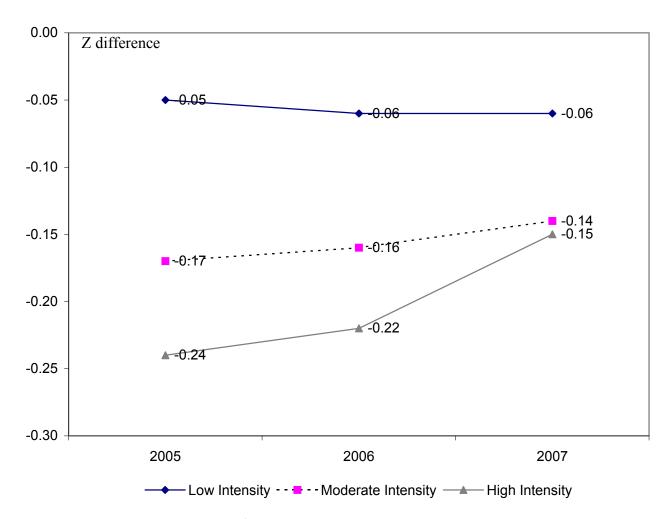


Figure 20: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores and Comparison Group Mean by Mathematics Activity Intensity Group and School Year: 2007 Grade 8

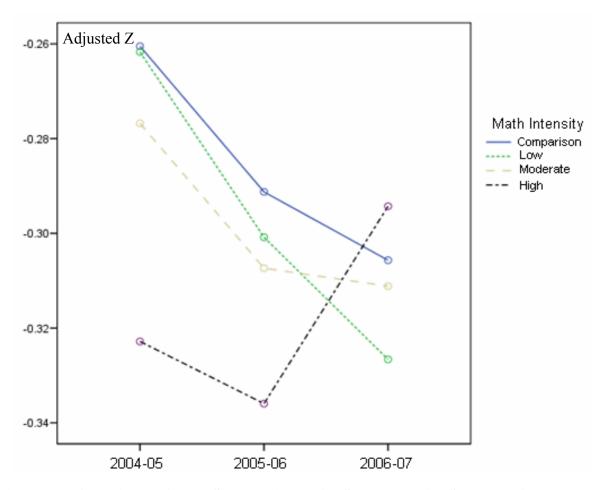


Figure 21: Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade 8

Grade 9. The group X school year interaction effect was statistically significant ( $F_{6,68400}$  = 4.87, p < .001). High-intensity students had strong gains relative to the state's average (-0.43 to -0.34Z), moderate-intensity students had modest gains (-0.44 to -0.40Z), while the performance of low-intensity and comparison students declined (-0.35 to -0.36Z and -0.28 to -0.29Z, respectively; see Table 5). Likewise, high- (+0.10Z) and moderate-intensity (+0.06Z) students improved relative to comparison students, while low-intensity student performance remained constant (see Figure 22). As shown in Figure 23, covariate-adjusted performance revealed dramatic gains in the performance of high-intensity students, more modest gains for moderate-intensity students, and slight declines in the performance of comparison and low-intensity students. Post-hoc analyses showed that moderate- and high-intensity students had statistically significantly higher gains than either comparison or low-intensity students ( $\Delta = +.05$ 

for moderate- and high-intensity groups versus  $\Delta = -.01$  for the low-intensity and comparison groups).

Grade 10. The group X school year interaction effect was statistically significant ( $F_{6,24288}$  = 3.74, p = .001). As shown in Figure 22, both *high*- and *moderate-intensity* students gained +0.07Z relative to *comparison* students. A strong, statistically significant negative quadratic effect of time was also observed across groups ( $F_{1,12144}$  = 75.33, p < .00001), which is reflected in the "upside-down U" shaped curves depicted in Figure 25. Relative to the state's average, the difference in 2007 and 2005 performance of *moderate-intensity* and *high-intensity* students was negligible, while *low-intensity* and *comparison* student performance declined by -0.03Z and -0.07Z, respectively (see Table 5). Post-hoc analyses showed that *moderate*- and *high-intensity* students had constant performance ( $\Delta$  = .00), while *comparison* students and *low-intensity* students had a statistically significant decline ( $\Delta$  = -.07 and -.03, respectively.

Grade 11. The group X school year interaction effect was statistically significant ( $F_{6,19854}$  = 2.53, p < .05). All 21<sup>st</sup> CCLC groups improved modestly relative to *comparison* students in terms of absolute performance (see Figure 26), which is also reflected in the plot of covariate-adjusted means in Figure 27. All groups declined precipitously relative to the state's average: *comparison* students declined from -0.29 to -0.50Z, *low-intensity* student performance declined from -0.31 to -0.45Z, *moderate-intensity* student performance declined from -0.31 to -0.42Z, and *high-intensity* student performance declined from -0.46 to -0.63Z (see Table 5). Post-hoc analyses showed that all groups had a statistically significant decline in performance, though the declines were less for *moderate-* and *high-intensity* students ( $\Delta$  = -.21, -.15, -.11, and -.11 for *comparison*, *low-*, *moderate-*, and *high-intensity* students, respectively).

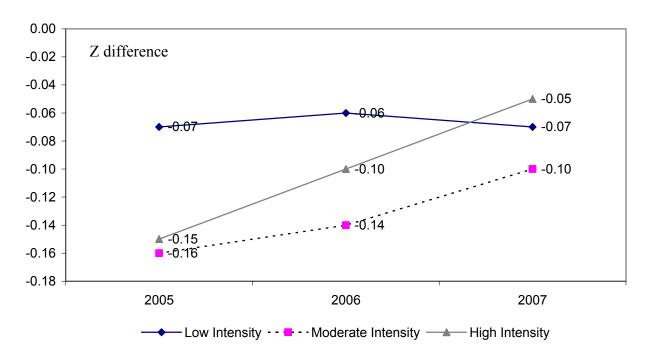


Figure 22: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores and Comparison Group Mean by Mathematics Activity Intensity Group and School Year: 2007 Grade 9

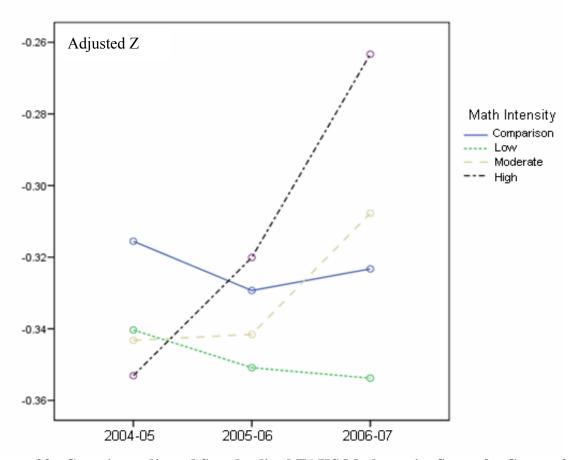


Figure 23: Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade 9

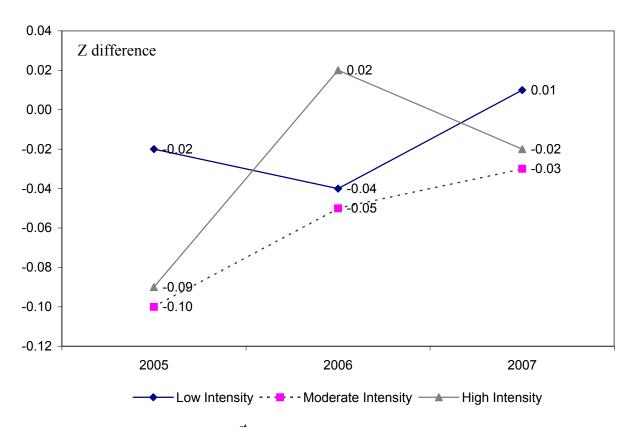


Figure 24: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores and Comparison Group Mean by Mathematics Activity Intensity Group and School Year: 2007 Grade 10

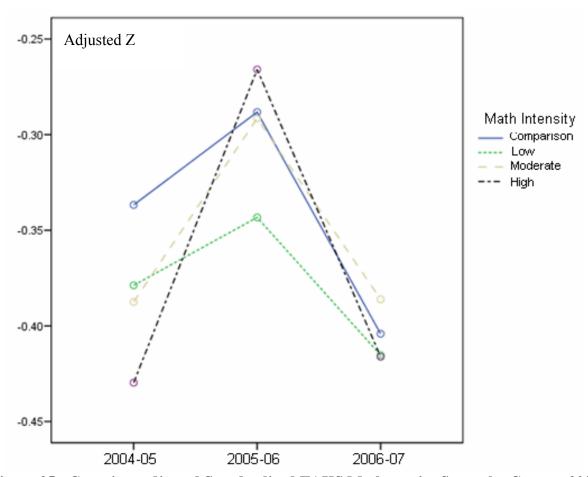


Figure 25: Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade 10

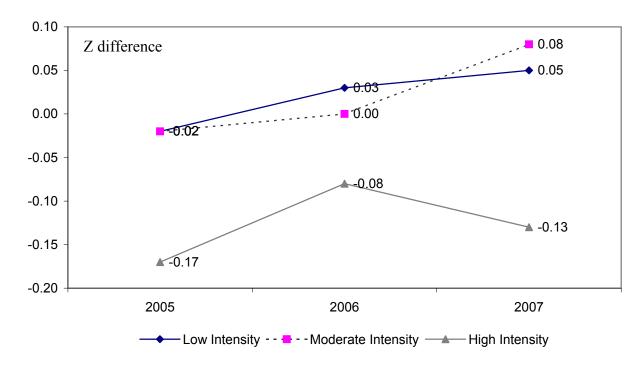


Figure 26: Difference Between 21<sup>st</sup> CCLC Standardized TAKS Mean Mathematics Scores and Comparison Group Mean by Mathematics Activity Intensity Group and School Year: 2007 Grade 11

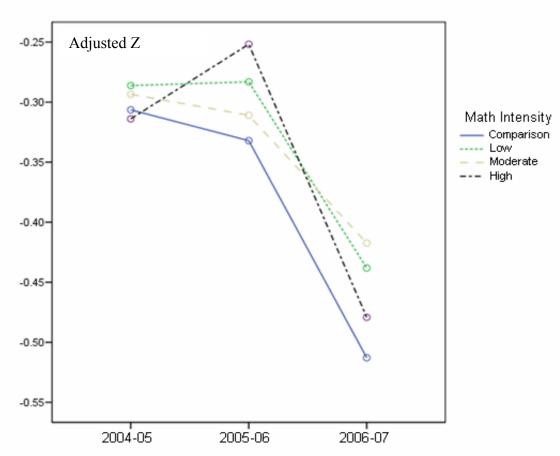


Figure 27: Covariate-adjusted Standardized TAKS Mathematics Scores by Group: 2007 Grade 11

Summary Mathematics results. Figure 28 displays the standardized mean gains for 21<sup>st</sup> CCLC students in the *low-*, *moderate-*, and *high-intensity* groups relative to *comparison* students between the 2004-05 and 2006-07 school years. Students in the *high-intensity* group in all grades made substantial gains relative to *comparison* students, with the gains in unadjusted TAKS score performance ranging from +0.06Z to +0.10Z. *Moderate-intensity* students also gained relative to *comparison* students, although the gains tended to be somewhat less in most grades. The consistent pattern of results for all grade levels, coupled with statistically significant *group X school year* interaction effects, suggest a positive, cumulative effect of participation in 21<sup>st</sup> CCLC mathematics activities on TAKS mathematics achievement, with the most consistent and strongest gains in TAKS scores obtained by students who participated most often in 21<sup>st</sup> CCLC mathematics activities.

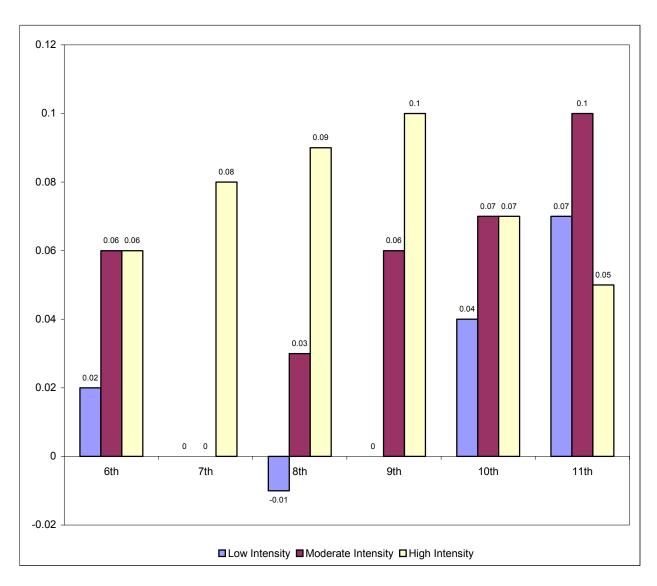


Figure 28: Net 2005-2007 Gain in Standardized TAKS Mathematics Scores Relative to Non-CCLC by Mathematics Activity Attendance Intensity Group and Grade, Texas 21<sup>st</sup> CCLC Students

## Summary of Findings for Task 1

What is the relationship between cumulative student attendance at 21st CCLC activities and growth in academic achievement in reading and mathematics, after controlling for student background characteristics? Cumulative 21st CCLC reading activity attendance between 2004-05 and 2006-07 had a statistically significant, positive association with trends in student reading performance relative to comparison students for most cohorts in Grades 6-11. In particular, students who attended 91 or more reading activities (high-intensity students) over the three-year period consistently had higher covariate-adjusted gains in TAKS reading scores than comparison students. Those who attended 30 to 90 activities (moderate-intensity students) had higher gains than *comparison* students, and occasionally had higher gains than *high-intensity* students. Generally, performance trends of those students who attended fewer than 30 activities were flat. In terms of progress on TAKS tests relative to state norms, high-intensity students outpaced *comparison* students by +0.03 to +0.08Z across grade-level cohorts (median = +0.06Z), while moderate-intensity students did so by +0.01 to +0.08Z (median = +0.05Z). Results for Grades 9 and 11 were somewhat anomalous, because *moderate-intensity* students outperformed high-intensity students. This result could be attributable to chance (sampling fluctuation) given the relatively small effect, or to sampling bias whereby academically stronger students saw less need or were less encouraged by teachers to attend as much as were weaker students.

The relationship between cumulative  $21^{st}$  CCLC mathematics activity attendance and gains in mathematics achievement was moderately strong, statistically significant, and positive for cohorts in Grades 6-10 in 2007—in each case, *high-intensity* students outpaced *moderate-, low-*, and *comparison* groups; *moderate-intensity* students outpaced *low-intensity* and *comparison* groups; and *low-intensity* and *comparison* groups had similar achievement patterns. *High-intensity* students made between +0.06Z and +0.10Z more progress toward state norms than did *comparison* students (median = +0.08Z) across grade levels, and *moderate-intensity* students made between 0.00 and +0.10Z more progress (median = +0.06Z). Grade 11 *moderate-intensity* students performed somewhat better than *high-intensity* students. As described above, this outcome could be attributable to chance or sampling bias.

For all students included in the analyses, the performance of Grade 11 students relative to state norms declined substantially in both reading and mathematics between 2006 and 2007. This may be a reflection of the increased emphasis on analytical reasoning skills in the Grade 10

and exit-level exams relative to exams in the lower grades; for example, the Grade 10 and Grade 11 ELA exams introduce a writing component. It may also be partly attributable to a shift in the composition of state norms, as lower-achieving students begin to drop out of school, thereby increasing the mean performance of the norm group.

In terms of the generalizability of the findings, the primary limitation of this study is that longitudinally matched TAKS scores were generally not available for special education and LEP students, which resulted in the exclusion of many of these students from our analyses. Otherwise, match rates were quite high, and the findings are pertinent to students who are similar to those who participated in this study. Because the study is retrospective in nature, it is possible that program effects are confounded with other unmeasured student variables. For example, student participation in 21<sup>st</sup> CCLC activities is voluntary, so students in the *high-intensity* group may be more motivated to improve their achievement than others, may have a greater degree of parental support for education, et cetera. Another potential threat to the validity of the findings stems from the fact that students were not randomly assigned to treatment levels, and that highintensity students tended to have lower initial TAKS scores. Thus, there is potential for the "regression to the mean" phenomenon to be confounded with program effects, because students who score very low relative to state norms will tend to score higher on subsequent performance measures due to a statistical artifact. Although regression to the mean cannot be ruled out as a partial explanation for the effects observed in this study, it cannot fully account for the many instances in which high-intensity student performance started lower and finished higher than the performance of students in the low- and moderate-intensity groups, whose measured performance would also be affected by regression to the mean. In other words, if regression to the mean was the sole explanation for the observed effects, then group means would remain in the same order across years.

Notwithstanding these caveats, this study provides rigorous evidence that cumulative participation in subject-specific 21<sup>st</sup> CCLC activities tended to have a positive effect on TAKS achievement in reading and mathematics in Texas. Median effect size estimates (the difference between 2005 and 2007 adjusted standardized means) associated with the *high-intensity* attendance categories were +0.06Z for reading, and +0.10Z for mathematics. In other words, the expected average performance for *high-intensity* reading students would exceed the scores of 52% of similar students who did not attend any reading sessions, while the average performance

for *high-intensity* mathematics students would exceed the scores of 54% of similar, but non-participating, students. In comparison, effect size estimates associated with decreasing class size from 25 to 15 students for low-socioeconomic status students in Grade 3 have been estimated at +0.25*Z* and +0.18*Z* for reading and mathematics (Finn & Achilles, 1990), and a meta-analysis of the effects of comprehensive reform models found median effect size estimates for the Success for All and the School Development Program models were +0.11 and +0.08 in third-party comparison group studies (Borman, Hewes, Overman, & Brown, 2003). Thus, while 21<sup>st</sup> CCLC effects in Texas were not large enough to close the achievement gap relative to the state average, they seem reasonably large relative to the lower cost of implementing 21<sup>st</sup> CCLC when compared to other large-scale interventions.

From a practical perspective, the results of this study suggest that 21<sup>st</sup> CCLC students who regularly attend approximately one subject-specific tutoring session per week for three years will make modest, but measurable gains in the subject for which they receive tutoring. Not surprisingly, minimal or sporadic participation in these activities was not associated with academic gains. Thus, we recommend that 21<sup>st</sup> CCLC centers adopt practices that would enhance regular, sustained student participation in subject-specific tutoring activities. These practices might include providing incentives for student participation and improving communication with feeder schools and parents.

# Task 2: To investigate the variables that mediate or moderate the relationship between program participation and student-level outcomes.

# Task 4: To determine specific programmatic features associated with the various student achievement outcomes included in the evaluation.

In this section, we address evaluation Tasks 2 and 4 because both require the use of the same powerful statistical techniques. The purpose of Task 2 is to investigate the variables that mediate or moderate the relationship between program participation and student-level outcomes (i.e., Are certain types of student characteristics predictive of improvements in student achievement?). The purpose of Task 4 is to determine specific programmatic features associated with the various student achievement outcomes including exploring any moderating relationships among center characteristics and the relationships between student background traits and academic achievement (e.g., Are certain types of programming associated with achievement gains of special education students?). These evaluation tasks were accomplished by using a series of hierarchical linear models (HLM) for both standardized 2007 TAKS reading and 2007 TAKS mathematics scale scores. HLM is a very powerful statistical analysis procedure used to examine educational outcomes (i.e., student achievement) by controlling for differences in student characteristics (i.e., prior achievement, ethnicity, etc.) and context differences (i.e., characteristics of 21<sup>st</sup> CCLC programs). The computation of standardized TAKS scores and the formulation of the center-level variables employed in these analyses are described in Task 1 of this report.

#### Methods

*Sample*. Of 81,178 students in Grades 4 through 11 who attended 21<sup>st</sup> CCLC centers, 70,598 (87.0%) had matching demographic data, 21<sup>st</sup> CCLC data, and 2007 English TAKS scores. Of these, 62,230 (76.7%) had matching 2006 TAKS scores. Finally, students who did not have legitimate scores on both 2007 English and 2007 Mathematics TAKS were eliminated, as were all students who attended one of the two 21<sup>st</sup> CCLC centers that provided insufficient data to be included in the HLM analyses. These changes resulted in a final sample size of 58,642 21<sup>st</sup> CCLC students (72.2% of all 21<sup>st</sup> CCLC students) and a center inclusion rate of 99.6% (563 of 565 centers).

Of the final sample of students, most were economically disadvantaged (82%), 18% were classified as having limited LEP, 9% were gifted, 8% were receiving special education services,

and 62% were classified as "at risk." There were slightly more female students (51%) than male students (49%). About one-fourth were African American (24%) and two-thirds (65%) were Hispanic, while 10% were White, and 1% were Asian.

*Measures*. The HLM technique includes different "levels" of analysis that examine student achievement as a function of student or center variables. Standardized 2007 TAKS reading, English Language Arts, or mathematics scale scores were used as outcome measures at Level 1 (students within centers) in the HLM analyses. Level 1 student predictors (student characteristics to be controlled or adjusted for) included corresponding 2006 TAKS standardized scores (serving as "pretest" or pre-program measures), the total number of tutoring days attended in either reading or mathematics, and "dummy-coded" variables representing economic disadvantaged status (0 = not disadvantaged, 1 = disadvantaged), gifted status (0 = not classified gifted, 1 = gifted), LEP status (0 = not LEP, 1 = LEP), special education status (0 = did not receive special education services), gender (0 = male, 1 = female), African American status (0 = not African American, 1 = African American), and Hispanic status (0 = not Hispanic, 1 = Hispanic).

Level 2 center variables included dummy codes representing the grade levels served by the center: (a) elementary only, (b) elementary and middle, (c) middle only, (d) middle and high, or (e) high school only). Additional Level 2 dummy codes represented the program cluster membership of each center: (a) mostly recreation; (b) enrichment and tutoring; (c) enrichment and Supplemental Education Services (SES); (d) mostly enrichment; (e) recreation, (f) careers, and leadership; or (g) enrichment and recreation. These six primary program clusters were identified in cluster analyses<sup>5</sup>, which are reported in detail in Task 5. Thus, Level 1 controlled for differences in student characteristics and Level 2 for differences in center characteristics, thus yielding a highly precise and powerful analytical approach.

### Analyses

To determine specific programmatic features associated with the various student achievement outcomes (Task 4), two two-level HLM analyses were performed. One used the standardized 2007 TAKS scale scores in reading (HLM1) and the other used standardized 2007

<sup>&</sup>lt;sup>4</sup> Dummy codes are a means of representing variables representing group or "category" membership, where there is not a meaningful continuous score (as on an achievement test). So, the numerical codes (e.g., 0 = males and 1 = female) are arbitrary and represent a category membership rather than a level of attainment.

<sup>&</sup>lt;sup>5</sup> Cluster analysis is a statistical method of quantitatively identifying discernable groupings of items (or people) that share similarities across multiple variables.

TAKS scale scores in mathematics (HLM2) as outcome variables. Both used the corresponding 2006 achievement ("pretest") scores, economic disadvantaged status, gifted status, LEP status, special education status, female status, African American status, and Hispanic status as Level 1 predictors. Because HLM is a complicated and sophisticated statistical procedure, description of its properties may be found for interested readers in Appendix A. HLM is a correlational-type of approach, meaning that it is examining relationships between variables (e.g., "Reading Program A is associated with the highest achievement gains for disadvantaged students.") rather than necessarily implying causality (e.g., Reading Program A causes or produces higher gains for atrisk students.").

#### Results

For interested readers, a technical, statistically-oriented reporting of results is provided in Appendix B. The following section presents the results in more applied language.

\*\*Reading\*\*

Are programmatic features of centers associated with student achievement outcomes (Task 4 model)? Analysis of the center-level mean standardized 2007 TAKS reading score for students attending 21<sup>st</sup> CCLC centers indicated that these students scored about three-tenths of a standard deviation below the Texas average in 2006-07. This finding implies that the 21<sup>st</sup> CCLC centers are serving students in need of additional academic support.

All of the student-level variables, except special education status, that were used to control for individual differences were statistically significant, meaning that they reliably correlated with (were predictors of) TAKS reading achievement. The p-value in parentheses indicates the "level of significance" of each variable, where p < .05 is the criterion for being considered statistically significant (or reliable):

- economically disadvantaged status (p < .001): disadvantaged students scored lower than not-disadvantaged students.
- LEP status (p < .001): LEP students scored lower than not-LEP students
- special education status (*p* = .131): there were no significant differences, seeming due to the effects of special education status being suppressed due to inclusion of other variables (e.g., 2006 TAKS reading scores) that accounted for the same portion of variance in 2007 TAKS reading scores.
- gifted status (p < .001): gifted students surpassed non-gifted students.

- 2006 TAKS reading score (p < .001): the higher the 2006 TAKS score, the higher the 2007 TAKS score tended to be.
- Female status (p < .001): Females scored higher than males.
- African American status (*p* < .001): African American students scored lower than non-African American students.
- Hispanic status (p < .001): Hispanic students scored lower than non-Hispanic students.

Do programmatic features of centers moderate the relationship between program participation and student-level outcomes (Task 2 model)? Across centers, the relationship between the number of reading tutoring sessions attended and the 2007 TAKS reading scores, after controlling for other student-level predictors, was not statistically significant (p = .381). However, the relationship was positive and statistically significant for students attending centers that served predominately elementary and middle school students (p = .040). Median effect size estimates (the difference between 2005 and 2007 adjusted standardized means) associated with the high-intensity attendance categories were +0.06Z for reading, and +0.10Z for mathematics. In other words, the expected average performance for high-intensity reading students would exceed the scores of 52% of similar students who did not attend any reading sessions, while the average performance for high-intensity mathematics students would exceed the scores of 54% of similar, but non-participating, students. These estimated center effects (+.06 to +.12) are comparable to those currently being found in state and national studies of the effects of Supplemental Education Services (SES), which directly concentrates on tutoring to raise test scores.

Do  $21^{st}$  CCLC center variables moderate the relationships between student characteristics and academic achievement? With regard to 2007 TAKS reading achievement scores, no relationships were observed between center-level variables and student characteristics pertaining to (a) gifted status, (b) special education status, (c) 2006 TAKS reading scores, (d) female status, or (e) Hispanic status. Three center-level variables had statistically significant, negative associations with economically disadvantaged status: *Elementary Only* grade level configuration (p < .05), *Middle School Only* grade level configuration (p < .05), and *Mostly Enrichment* program type (p < .05). Thus, these effects suggest that:

 Economically disadvantaged students who attended 21<sup>st</sup> CCLCs that (a) served elementary grades only or (b) middle grades only, or (c) offered *Mostly Enrichment* programming scored lower on the 2007 TAKS reading test than did economically disadvantaged students who attended other program types.

For LEP students, statistically significant, negative associations were observed for centers serving predominately middle and high (p < .05) students and those serving predominately high school students (p < .01). Thus, more success with LEP students in reading scores was associated with centers serving lower (elementary-level grades).

For African American students, another statistically significant, negative association (p < .05) suggested that:

• African American students who attended *Recreation, Careers, and Leadership* program types scored lower in reading than those attending other program types.

#### **Mathematics**

Are programmatic features associated with student achievement outcomes (Task 4 model)? The center-level mean standardized 2007 TAKS mathematics score for centers serving "other" grade levels in the "mostly recreation" program type cluster was -0.27, indicating that students in these centers scored about one quarter (0.25) of a standard deviation below Texas norms. All student-level predictors were statistically significant and in the same direction described above for TAKS reading (e.g., females > males, etc.): economically disadvantaged status (p < .001); LEP status (p < .001); special education status (p < .001), gifted status (p < .001), 2006 mathematics score (p < .001), female status (p < .001), African American status (p < .001), and Hispanic status (p < .001). The various grade-level configurations served by the centers were not related to student achievement across centers. The various program cluster types had no effect on center-level achievement, except for the lower scores associated with the "Enrichment and Tutoring" center type (p < .05).

Do programmatic features moderate the relationship between program participation and student-level outcomes (Task 2 model)? Across centers, the relationship between number of mathematics tutoring sessions attended and 2007 TAKS mathematics test scores, after controlling for other student-level predictors, was not statistically significant (p = .299). The lack of relationship between attendance and achievement was consistent (not significantly different) across center grade levels served or across program cluster type variables.

Do 21<sup>st</sup> CCLC variables moderate the relationships between student characteristics and academic achievement? No statistically significant relationships were observed between center-level variables and the relationship of student achievement with economically disadvantaged status, gifted status, 2006 mathematics scores, African American status, or Hispanic status. However, the following patterns were significant:

• LEP students and special education students who attended the "*Recreation, Careers, and Leadership*" program type performed substantially lower on the 2007 TAKS mathematics test than similar students attending other types of programs.

# Summary and Conclusions for Task 2 and Task 4

Grade level configurations served by the centers were not related to overall student performance in reading or mathematics after controlling for student background characteristics. A statistically significant relationship was observed between grade level configuration variables and tutoring sessions attended in reading. Specifically, for centers serving predominately elementary and middle school grades, student attendance was more strongly related to TAKS reading scores (i.e., higher attendance was associated with higher TAKS reading achievement) than occurred in other centers. In mathematics, the overall impact of attendance on student achievement and the apparent efficacy of subject-specific tutoring sessions was similar across centers regardless of the grade levels served by the centers.

For both reading and mathematics, the "Enrichment and Tutoring" program cluster type was associated with lower overall TAKS achievement after controlling for student characteristics. This finding may reflect a tendency for centers to offer this type of programming where the population served is struggling academically. Thus, the negative result is not necessarily due to poor programming but could reflect attempts to deal with more at-risk students. More investigation of program quality is suggested to answer this question.

Finally, the negative relationships between LEP, special education, and African American status with reading and mathematics achievement were markedly more negative for centers predominately offering "Recreation, Careers, and Leadership" programs. Relative to their peers attending other types of centers, African American students were significantly less successful in reading achievement, and LEP and special education students were significantly less successful in TAKS mathematics achievement. Programs with the "Recreation, Careers,

and Leadership" emphasis may offer too few opportunities for direct academic support to these students, although other explanations for these findings cannot be ruled out due to the correlational nature of the design.

# Task 3: To Develop and Conduct Statewide Survey Assessment to Attain a Better Understanding of the Nature of Existing Programs

To supplement and augment data gathered on an annual basis through the TEA's administrative data system, statewide surveys of 21<sup>st</sup> CCLC grantee directors, center directors, and center staff will be developed, piloted, and refined. These surveys will generate rich data that will serve to both fill out the statewide profile of the 21<sup>st</sup> CCLC program and to create quality implementation scales for use in models of program impact on student achievement. Because discourse around program quality is essential to creating sound, informative instruments, an intensive development process was employed, bringing together current literature in the field of after-school evaluation, expertise from those involved at a programmatic level and those at the forefront of program quality research, and knowledge of psychometric validation and scaling procedures with survey instruments.

### Survey Development Process

The three surveys were developed by employing a structured review process of existing instruments in the field. Eight instruments were included in this review, including four observation tools and four surveys:

#### Instrument

Assessment of Afterschool Program Practices Tool (APT) – NIOST Out-of-School Time Observation Instrument (OST) – PSA Program Quality Self-Assessment Tool (PQSAT) – NYSAN Youth Program Quality Assessment (YPQA) – High/Scope Berkeley Policy Associates Staff Survey Learning Point Associates District Survey Michigan State University Staff Survey Policy Studies Associates Director Survey

The process for review proceeded as follows:

- 1) One team member completed an initial review of survey instrument(s).
- 2) Each team member first coded the items on the instruments by category or construct, as determined by the broad domain of program quality addressed by the item. The following working list of categories framed this coding process:

- a. Program Vision & Design
- b. Attendance, Eligibility & Recruitment
- c. Program Culture & Environment
- d. Structural Program Features
- e. Staffing
- f. Leadership & Program Administration
- g. Program Content
- h. Program Processes
- i. Relationships
- j. Family, School & Community Linkages
- Item-level information was then recorded in a database to create a bank of items for survey development.
- 4) All of the databases were merged and item-level data—sorted by category—were provided to the survey development team to guide instrument construction and creation of a matrix of survey respondents and categories of program quality.
- 5) Item-level data included: category/construct, indicator/measure, specific item wording, item scale, level of inference required, clarity, face validity, content validity, and overall item endorsement.

Categories of program quality were assigned to appropriate survey respondents in a matrix to ensure adequate coverage. The database was then used to select items to map to each broad category. Prior to implementation, the instrument review process and instruments for review were commented on and approved by experts from Policy Studies Associates. After development, instruments were reviewed by an outside expert and by a psychometrician at Learning Point Associates. Revisions were also made to the surveys to reflect feedback from the TEA.

### Survey Pilot

The surveys were approved for pilot purposes only and will be piloted online in February 2008. Survey instruments can be found in the Appendix C. Twelve grantee directors will be randomly selected to participate and will receive a small incentive, in the form of an after-school programming resource, to encourage their participation. Two center directors affiliated with the selected grantees will also be randomly selected. Center directors will be asked through an online

module to provide the contact information for up to six center staff members who work in their center for more than 50 percent of operational time. Two to three staff members will be randomly selected from each center to complete the pilot survey of center staff. Together, this pilot plan should yield 10 grantee director respondents, 20 center director respondents, and 40 center staff respondents. All respondents will also be asked to provide feedback on the survey instrument itself, including length and difficulty.

Pilot survey results will be analyzed in January and February 2008, so that appropriate revisions can be made to the survey instruments. The pilot data will inform the survey development team on issues of length, burden, and clarity and will also provide indications of item performance.

## Survey Administration

After revision based on the pilot phase, the surveys will be administered statewide in spring 2008. The universe of grantee directors and center directors will be invited to participate. Depending on the success of the center staff pilot, a similar technique will likely be employed to identify and recruit staff members for participation in the roll out of the full survey.

Results of the survey research phase will be presented by respondent type, with item response frequencies and cross-tabulations. In addition to simple descriptive data, psychometric validation and scaling techniques will be employed to create scale scores on the various constructs of program quality. These scale scores can be used both for comparisons and tests of difference as well as for inclusion in models of impact on student achievement.

Task 5: To Develop a Profile and Description of 21<sup>st</sup> CCLC Programs, Operations, Staffing Patterns, and Students Served

For the past four years, 21<sup>st</sup> CCLC across the state of Texas have provided students in high-poverty communities the opportunity to participate in academic enrichment programs and other youth development and support activities designed to enhance their academic well-being. The following section of this report provides a brief overview of the characteristics and attributes of 21<sup>st</sup> CCLC grantees and their centers in Texas that were funded by the Texas Education Agency (TEA) under the auspices of the 21<sup>st</sup> CCLC program and that operated during the 2006-07 school year.<sup>6</sup> A complete program profile is available in a separate document, *A Profile of Texas 21<sup>st</sup> Century Community Learning Centers*, 2006-07 (Bonney et al., 2008), and is presented in summary form in this annual report.

Using data collected directly from 21<sup>st</sup> CCLC grantees via a web-based data collection tool maintained by TEA, this section of the report explores how these Texas 21<sup>st</sup> CCLC grantees structured their programs, what services and activities were provided by 21<sup>st</sup> CCLC grantees during this period, facets of center operations and staffing, the composition of the student population that attended grant-fund activities at the centers, and the extent to which students participated in 21<sup>st</sup> CCLC activities. It is important to point out that findings from this effort are intended to provide a purely descriptive look at the 21<sup>st</sup> CCLC program in Texas.<sup>7</sup> The information presented here—and in comprehensive form in the profile report—provides a deeper exploration of the nature of the 21<sup>st</sup> CCLC program from a statewide perspective.

While there is a growing consensus on those constructs that warrant the greatest attention in after-school program quality assessment and improvement efforts (e.g., strong linkages to the school day, supportive relationships, positive social norms, opportunities for meaningful youth involvement, etc.), there continue to be some lingering questions around how issues of program quality may be differentially influenced by where a given program falls in each of the following subgroups:

<sup>&</sup>lt;sup>6</sup> It is important to note that most of the grantees active during the course of the 2006-07 school year also operated programming during the summer of 2006. Where appropriate, we have opted to report on summer 2006 operational information as well.

<sup>&</sup>lt;sup>7</sup> In many of the sections that follow, bar charts will be used to convey much of the descriptive data highlighted in this report, and many of the findings identified will be predicated on a visual inspection of subgroup differences depicted in the charts in question. In this regard, for the most part, inferential statistics have not been employed to test for statistical significance in subgroup differences.

- The location of the grantee in the grant life cycle (e.g., first year program as opposed to a program in their last year of 21<sup>st</sup> CCLC funding);
- The target population served by a program, especially in terms of the grade level served;
- The program model employed by the grantee (e.g., mostly tutoring and homework help as opposed to an emphasis on offering arts enrichment);
- The institutional experience of an organization running a 21<sup>st</sup> CCLC-funded program (i.e., the organization has had more than one 21<sup>st</sup> CCLC grant);
- The type of organization managing the 21<sup>st</sup> CCLC program, especially when comparing school districts with non-LEA grantees.

A significant goal of this 21<sup>st</sup> CCLC program profile endeavor is to explore how the 145 21<sup>st</sup> CCLC grantees and 587 centers in operation during the 2006-07 school year varied across each of these subgroups while also considering various operational characteristics and attributes. It is important to note that part of the objective in this approach is to identify which combination of grantee and center characteristics may prove most useful when exploring academic achievement outcomes of students participating in these after-school programs—an undertaking for future research efforts.

### **Grantee Characteristics**

Grantees play an integral role in the provision of 21<sup>st</sup> CCLC programming. As the recipients of the grant monies from the TEA, grantees act as fiscal agents and each fiscal agent may oversee up to five centers. Table 6 depicts the composition of grantees by organization type. Grant recipients are predominately school districts (80%) with intermediate education agencies comprising an additional 9%. Community-based organizations (CBOs) and nationally affiliated non-profit associations (NANPAs) comprise a total of only 4% of all grantees.

Table 6. Composition of Grantees by Type

Grantee Type	Percentage of Total Grantees
School Districts	80%
Education Agencies	9%
Charter Schools	4%
Other	3%
CBOs	2%
NANPAs	2%

Note. Based on 145 grantees reporting.

Given the framework for eligibility and administration of 21<sup>st</sup> CCLC grants in Texas, as well as an understanding of the composition of grantees by type, grantee maturity and previous experience, additional funding sources, and centers per grantee were also explored. *Mature* grantees—those that were in their third year of operation in the 2006-07 school year—comprise the largest group of grantees (61%), while *Sustaining* grantees, in their fourth year of operation and receiving reduced funding levels from the state, comprised 23% of grantees. The remaining 16% of grantees were *New* and in their first year of operation. It is notable that the vast majority of grantees (84%) will be in the sustaining phase of their grant during the 2007-2008 school year. The majority of grantees (68%) had no previous experience as a 21<sup>st</sup> CCLC grantee at the receipt of their grant while 32% had previous experience.

The median number of centers operated by a grantee is five and the median grant amount per center is \$162,213. Intermediate education agencies and school districts commonly operate the maximum number of five centers. Not surprisingly, charter school grantees operate one center, while CBOs and NANPAs typically operate four and three centers, respectively.

Grantees often look to other funding sources to supplement their 21<sup>st</sup> CCLC grants. Of the most commonly cited additional funding sources, almost all grantees (93%) indicated that local school districts supplement their 21<sup>st</sup> CCLC monies, while 92% indicated that Title I funds were used. Other federal sources (87%) and other state sources (86%) were also commonly used in conjunction with the 21<sup>st</sup> CCLC grant.

## **Program Activities**

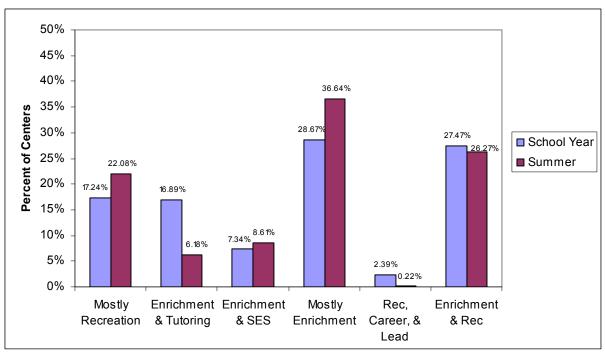
In the provision of 21<sup>st</sup> CCLC programming, activities data constitute the best measure of program model and emphasis at the center level. This information also allows a better understanding of what opportunities are afforded to participants in the context of the program. In terms of activities provided during the school year, almost all centers offered activities classified as academic enrichment (97%) and recreation (92%) and a majority of centers also offering tutoring (51%) and homework help (53%). During the summer, both enrichment and recreational activities were still predominant, with 93% and 78% of centers providing these types of activities respectively. Not surprisingly, the percent age of centers offering tutoring and homework help activities during the summer dropped substantially from levels witnessed during the school year.

Based on activities data, it appears that the relative emphasis centers give to different activities can be utilized to effectively classify centers into six primary program clusters. As shown in Figure 29, the 586 centers operating during the 2006-07 school year (SY) and the 453 centers operating during the summer of 2006 (Sum) were classified exclusively into one of the following six primary clusters:

- 1. Centers mostly providing recreational activities (SY = 101, Sum = 100);
- 2. Centers providing mostly enrichment and tutoring (SY = 99, Sum = 28);
- 3. Centers providing mostly enrichment and Supplemental Education Services SES<sup>8</sup> (SY = 43, Sum = 39);
- 4. Centers providing mostly enrichment activities (SY = 168, Sum = 166);
- 5. Centers providing mostly career/job training, leadership, and recreational activities (SY = 14, Sum = 1);
- 6. Centers providing mostly enrichment and recreation activities (SY = 161, Sum = 119).

71

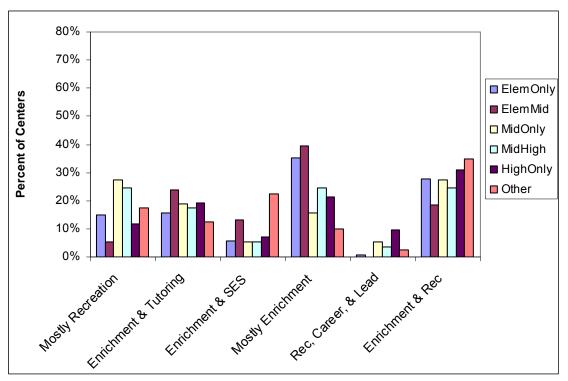
<sup>&</sup>lt;sup>8</sup> It is unclear exactly how grantees are interpreting the term Supplemental Education Services when reporting activities information. While this term has a very specific meaning under the auspices of NCLB, no guidance is provided within the TEA data collection system regarding the meaning of this term, which may have lead to inconsistent usage across grantees when identifying a given activity as SES.



*Note.* Based on 586 centers reporting for the 2006-07 school year and 453 centers reporting for summer 2006

Figure 29: Primary Program Clusters Based on the Hours of Activity Offered in a Given Category, School Year and Summer

When these program clusters are considered with other grantee and center level characteristics, a number of interesting findings result. For example, centers that serve elementary students are more apt to emphasize academic enrichment programming while centers that serve secondary students are more apt to emphasize recreational programming, as shown in Figure 30. This may suggest that centers serving older youth find it necessary to offer more recreation activities in order to attract and retain students in after-school programming.



Note. Based on 586 centers reporting for the 2006-07 school year

Figure 30: Primary Program Clusters Based on the Hours of Activity Offered in a Given Category During the School Year by Grade Level Served

In addition, when program cluster is considered both as a function of the relative maturity of the grantee (i.e. *New*, *Mature*, or *Sustaining*) and the total number of participation hours offered at a given site, there is some evidence that over time centers may move increasingly toward an enrichment model of program delivery irrespective of program cluster, and they may be less dependent on recreational and homework help activities to fill their programming slate.

### **Operations**

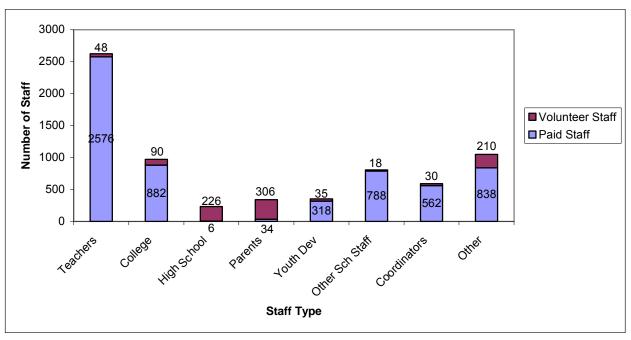
In terms of center operation during the 2006-07 reporting period, a number of findings are worthy of note. Operations data allowed for the exploration of school year and summer times of operation (before school, during school, after school, and on the weekends) as well as number of hours, days, and weeks per term. Of interest is the fact that almost all centers offered programming after school, and that centers serving middle and high school students were most likely to offer programming before school and on weekends. While a series of differences emerged in terms of operations among centers based on grantee maturity, of particular note was the lower percentage of *Sustaining* centers providing before school programming relative to their

*New* and *Mature* counterparts. This finding was especially interesting in light of the further finding that the percentage of *Sustaining* centers providing before school programming has grown during both the 2005-06 and 2006-07 school years.

A similar finding was found to be associated with *Mature* centers between the 2005-06 and 2006-07 school years. It appears that both *Sustaining* and *Mature* grantees increasingly offered before school programming, while centers associated with *New* grantees started with a higher percentage of centers offering programming before school. This may suggest there is a general increase in the percentage of centers offering programming before school across the board.

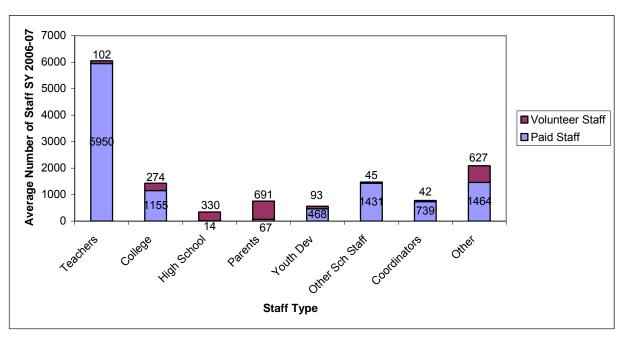
## Staffing

Staffing data revealed several interesting findings as well. School day teachers constituted the largest single group of staff employed by 21<sup>st</sup> CCLCs and the majority of program staff were paid, as evidenced in Figure 31 and Figure 32. The number of staff was greater during the school year than during summer, likely attributable to an overall increase in operating hours and higher student attendance during the school year. School day teachers by far represented the largest number of staff working in 21st CCLCs across each term examined, and there were some minor differences across terms in the percentage of total staff made up by school day teachers. This is especially noticeable between summer staffing levels and those associated with the school year, where school day teachers were more apt to represent a higher percentage of total staff during the latter timeframe.



Note. Based on 453 centers providing data on 6,967 total staff.

Figure 31: Number of Staff of a Given Type – Summer 2006

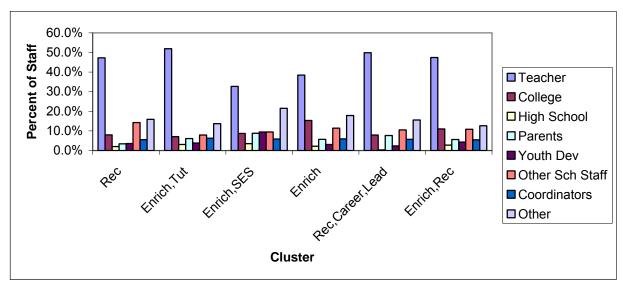


*Note.* Based on 586 centers providing data on 13,494 total staff during the Fall and 13,481 total staff during the Spring. It should also be noted that the percentage of volunteers relative to all staff is slightly higher during the Spring than the Fall (16.9% and 15.7% respectively).

Figure 32: Average Number of Staff of a Given Type – School Year 2006-07

In terms of grantee maturity, of particular interest was the finding that though college students composed approximately 10% of all staff for all terms when all centers are considered collectively, centers associated with *Sustaining* grantees reported that over 22% of all summer staff were college students, in contrast to 11% of all staff for centers associated with *Mature* grantees. Finally, a number of differences were found to be associated with centers falling within the six program cluster types in terms of the percentage of different types of staff used to deliver programming.

As shown in Figure 33, centers in the *Mostly Enrichment and Tutoring* cluster had the highest percentage of their staff made up of school day teachers (52%), while centers in the *Enrichment and SES and Enrichment* clusters had the lowest percentages (33% and 39%, respectively). By comparison, centers in the *Enrichment* cluster were more likely to rely upon college students and other non-teaching school day staff to staff their programs than their counterparts represented in the other five cluster types, while the centers in the *Enrichment and SES* cluster demonstrated a higher reliance collectively on staff classified as youth development workers (10%); parents (9%); and other non-teaching school day staff (9%).



*Note.* Based on 586 centers reporting for the 2006-07 school year. The *n* values for the cluster groups are as follows: Rec = 101; Enrich, Tut = 99; Enrich, SES = 43; Enrich = 168; Rec, Career, Lead = 14; Enrich = 161.

Figure 33: Staff Type by Cluster (Programming Offerings) – SY 2006-07 Aggregate

In summary, staffing data revealed the following key findings:

- School day teachers constituted the largest single group of staff employed by 21st CCLCs.
- Most staff members were paid.
- The number of staff was greater during the school year than during summer, likely attributable to an overall increase in operating hours and higher student attendance during the school year.

In addition, school day teachers by far represented the largest number of staff working in 21<sup>st</sup> CCLCs across each term examined, and there were some minor differences across terms in the percentages of total staff made up by school day teachers. This is especially noticeable between summer staffing levels and those associated with the school year, where school day teachers were more apt to represent a higher percentage of total staff during the latter timeframe.

In terms of grantee maturity, of particular interest was the finding that though college students composed approximately 10% of all staff for all terms when all centers are considered collectively, centers associated with *Sustaining* grantees reported that over 22% of all summer staff were college students, in contrast to 11% of all staff for centers associated with *Mature* grantees. Future analyses may be warranted to determine if this difference seems to be associated with the step down in funding witnessed by grantees as they near the end of their grant.

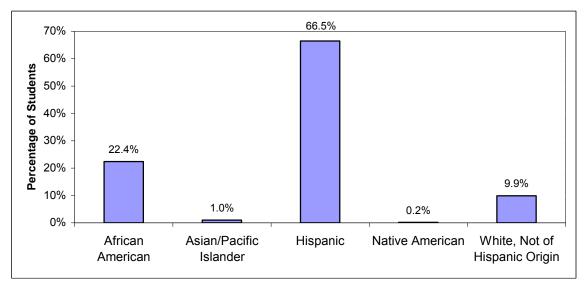
Finally, a number of differences were found to be associated with centers falling within the six program cluster types in terms of the percentages of different types of staff used to deliver programming. Such results may further bolster the case that quality assessment approaches may need to account for the program and staffing models being employed. For example, one would expect that the constructs emphasized in assessing program quality among centers providing mostly tutoring services and largely employing school-day teachers would likely be qualitatively different from those in centers providing mostly recreation services and employing a larger proportion of youth development workers and students drawn from area high schools and colleges.

### Student Attendance

One way of examining the reach of the 21<sup>st</sup> CCLC program is to examine the participation of students with different needs and backgrounds. The following section highlights the attributes associated with students participating in Texas 21<sup>st</sup> CCLC programs, including demographic

information and attendance patterns across the various enrichment activities offered during the 2006-07 reporting period.

Figure 34 illustrates the ethnic background of students who attended 21<sup>st</sup> CCLC programming. In terms of students' ethnicity, the majority of students were of Hispanic descent (67%). African American students comprised the second largest ethnic group (22%), followed by White, non-Hispanics (10%), Asian-Pacific Islanders (1%) and Native American students (0.2%).



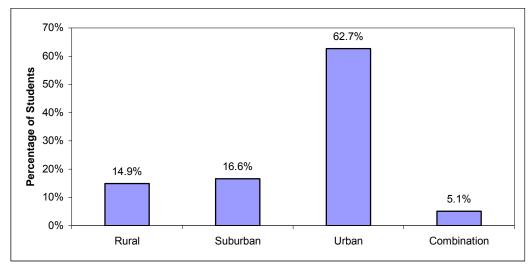
Note. Based on 134,066 students.

Figure 34: Percentages of Students of Various Ethnic Backgrounds Served During the Summer of 2006 and the 2006-07 School Year

The context within which 21<sup>st</sup> CCLC programming is delivered can vary significantly from one community to another, ranging from urban centers characterized by high levels of poverty to fairly isolated rural communities characterized by few opportunities for youth to participate in structured activities outside the regular school day. In light of these differences, a series of analyses were performed to examine how attendance patterns varied across rural, suburban, and urban communities. Because the available data do not necessarily indicate which centers could be classified in each of these categories, feeder school locale was used as a proxy for center locale. In this case, a feeder school was defined as any public school attended by a student during the school day that participates in 21st CCLC programming at a given center. Feeder schools in Texas were matched with the Common Core of Data (CCD) to determine the

locale (rural, suburban, or urban) of each school. The CCD is a database maintained by the U.S. Department of Education on public elementary and secondary education, which includes descriptive information about schools, districts, students, staff, and fiscal data, including revenues and expenditures. Consequently, the center associated with a given feeder school was assigned that same locale category. Those centers that served feeder schools in different categories (e.g., urban and suburban feeder schools) were assigned to a group labeled "combination."

As shown in Figure 35, the vast majority of students attended centers in an urban area (63%). Suburban centers served 17% of students, rural centers served 15%, and combination centers served 5% of Texas 21<sup>st</sup> CCLC students.



Note. Based on 133,111 students in 587 centers.

Figure 35: Percentages of Students Attending Centers by Locale

In terms of gender, male and female students were equally represented in the 21<sup>st</sup> CCLCs in Texas. Across the summer, fall, and spring terms during the 2006-07 reporting period, females accounted for 50.1% of participating students and males accounted for 49.9%.

Among the more notable findings on student attendance patterns concerned the higher attendance rates in all core and non-core subject areas by students attending centers affiliated with school-based grantees as compared to non-school-based grantees, with the exception of mentoring where non-school-based grantees were only slightly more apt to provide this type of activity. Another attendance finding relates to the negative relation between center maturity and the attendance rate in programming during the school year. In terms of the attendance rate in

programming related to core academic subject areas, *New* grantees showed the highest attendance rates, followed by *Mature* grantees, and finally those *Sustaining* grantees. This was not the case, however, when the institutional experience of a grantee was considered where grantees with prior experience demonstrated a higher attendance rate than those without experience.

In efforts to compare program cluster membership and attendance patterns, there seems to be a preponderance of evidence that centers in the *Mostly Enrichment* cluster had both the highest absolute number of days attended and the highest attendance rate in core academic and non-core activities.

In addition, a series of HLM analyses were undertaken to explore the extent to which student grade level, grantee maturity measured by months since grant award, and the percentage of total activity hours dedicated to tutoring and academic enrichment activities might serve to predict levels of student attendance during the 2006-07 school year. A goal of undertaking these analyses was to specify what percentage of the overall variability both *within* centers and *across* centers in terms of student attendance could be attributed to variability in these variables. In this regard, for example, a perfect predictor would be said to account for 100% of the variance in student attendance across centers. Results from this analyses demonstrated that overall there is a negative relationship between the attendance rate in 21st CCLC programming and the grade level of students, so as centers seek to serve older students, the attendance rate is likely to decline. In terms of center level variance in student attendance, the student grade level variable was found to account for almost 15% of the center-level variance in attendance levels, a modest amount.

Attendance results also suggest that overall there is a negative relationship between the attendance rate in 21st CCLC programming and the grade level of students, so as centers seek to serve older students, the attendance rate is likely to decline. In terms of center level variance in student attendance, the student grade level variable was found to account for almost 15% of the center-level variance in attendance levels, a modest amount.

In addition, both a greater degree of grantee maturity and a higher percentage of hours dedicated to academic enrichment are also likely to have a positive impact on the student attendance rate when controlling for other variables included in the model, including student grade level. However, collectively, these variables provided relatively little value in explaining

the variance across centers in terms of the student attendance rate, accounting for roughly 6% of the center variance in average student attendance.

Finally, grantee maturity as measured by months since grant award also was found to moderate the relationship between student grade level and the attendance rate, suggesting that on average more mature grantees are less likely to witness a decline in the student attendance rate as the grade level of students increases as compared to their less mature counterparts. Here again, however, the percentage of variance in the relationship between student grade level and student attendance accounted for by the grantee maturity variable was quite small (roughly 4%).

# Summary of Findings for Task 5

The primary purpose of this report was to provide an overview of the programmatic characteristics associated with 21st CCLCs operating in Texas during the summer of 2006 and the 2006-07 school year. The complete domain of relevant analyses, including supportive methods sections and appendices, is available in a separate report (Bonney et al., 2008).

In providing this overview, particular attention was given to exploring grantee characteristics; the role and nature of center activities, operations, staffing; and student attendance. In addition, we explored how certain program characteristics differed across subgroups formed in each of the following areas:

- 1. The student grade levels served by a center
- 2. The type of grantee organization
- 3. The maturity of a grantee
- 4. The experience of a grantee as a prior 21st CCLC grantee
- 5. The model by which a center offers programming

The following summary highlights a selection of the most interesting findings from this endeavor.

Centers could be classified into six primary clusters based on the relative emphasis given to offering certain categories of activities:

- 1. Centers mostly providing recreational activities (SY = 101, Sum = 100);
- 2. Centers providing mostly enrichment and tutoring (SY = 99, Sum = 28);
- 3. Centers providing mostly enrichment and SES (SY = 43, Sum = 39);
- 4. Centers providing mostly enrichment activities (SY = 168, Sum = 166);

- 5. Centers providing mostly career/job training, leadership, and recreational activities (SY = 14, Sum = 1);
- 6. Centers providing mostly enrichment and recreation activities (SY = 161, Sum = 119).

These results are of interest given that the six clusters in question demonstrate that there is a fair degree of heterogeneity in terms of how centers in Texas are structuring their programs and the types of activities they are giving the greatest degree of emphasis to when serving students. Such diversity also may suggest that state-supported efforts to improve the quality of after-school programming may need to be varied and nuanced in light of the programmatic approach a given center has adopted in relation to serving its target student population.

When program cluster is considered with other grantee and center level characteristics, a number of interesting findings result. For example, centers that primarily serve elementary students are more apt to emphasize academic enrichment programming while centers serving secondary students emphasize recreational programming. This may suggest that centers serving older youth find it necessary to offer a higher level of recreation activities in order to attract and retain students in after-school-related programming.

In addition, when program cluster is considered along with the relative maturity of the grantee (i.e. *New*, *Mature*, or *Sustaining*) and the total number of participation hours offered at a given site, there is some evidence to suggest that over time centers increasingly move toward emphasizing academic enrichment programming irrespective of program cluster. They also seem to become less dependent on recreational and homework help activities to fill their programming slate. Why this movement takes place is purely a matter of speculation at this point, although it would be interesting to explore the extent to which this movement is driven (1) by program monitoring and support strategies employed by TEA and (2) by a realization among center staff of what constitutes effective programming both in terms of attracting and retaining students and in terms of meeting desired center outcomes.

While operational differences were noted among centers based on grantee maturity (i.e., *New, Mature*, and *Sustaining*), little evidence was found to suggest that centers make meaningful changes to their operational characteristics over time in terms hours and timeframes of operation. This finding is especially intriguing given an expectation that programs witnessing a step-down in state 21<sup>st</sup> CCLC funding as they move into the later years of their grant would find themselves

in a position where modifications to their operations may be warranted. This may also suggest that grantees are having some degree of success in finding other resources to support programming as grant funding declines. Ferreting out how centers navigate reductions in grant funds also warrants consideration in future analyses.

Among the results highlighted in the staffing section worthy of note include the finding that while school day teachers represent the largest number of staff working in 21<sup>st</sup> CCLCs across both the summer and school year timeframes, there are some differences across terms in the percentage of total staff that are school day teachers. This is especially noticeable between summer staffing levels and those associated with the school year, where school day teachers are more apt to represent a higher percentage of total staff. In addition, as a percentage of total staff, school day teachers are slightly less apt to be associated with programs that serve elementary students in some capacity as compared to programs serving only middle and/or high school students. This difference is especially pronounced during the spring term where programs serving high school students in some capacity are especially likely to be characterized by a relatively high level of school day teacher involvement in staffing 21st CCLCs.

Among the most notable findings regarding student attendance in 21st CCLC programming concerned the higher average rate of attendance in almost all core academic and non-core subject areas among students attending centers operated by school-based grantees as compared to non-school-based grantees. In light of these results, it may be appropriate to further examine what additional characteristics seem to distinguish school-based from non-school based grantees, especially in terms of possible differences in the procedures and processes employed to recruit student participants and to deliver programming.

In terms of efforts to compare program cluster membership and attendance patterns, there seems to be a preponderance of evidence that centers in the mostly enrichment cluster demonstrated both the highest absolute number of days attended and the highest rate of attendance in core and non-core activities. Here again, further efforts to explore how the processes and procedures employed in designing and delivering activities in centers in the mostly enrichment cluster as compared to centers in the other five clusters would seem appropriate and warranted.

Finally, employing multilevel modeling techniques, student grade level, the number of months since a grantee received their award, and the percentage of total activity hours dedicated

to providing academic enrichment activities were all found to be significant predictors of the rate of student attendance in 21<sup>st</sup> CCLC programming, and although the contribution some of these predictors made in explaining center-level variance in the rate of student attendance, each of these variables warrants further consideration in models oriented toward exploring the program's impact on student achievement outcomes.

In terms of further directions in the development of reports akin to this one that attempt to explore the nature of 21<sup>st</sup> CCLC programming in Texas, it seems appropriate that additional effort should be dedicated to exploring how programs evolve over time by relying on more cross year comparisons of program operations at the center and grantee levels, an undertaking that will prove increasingly feasible as the TEA data collection system used to support these analyses becomes more mature and refined.

### Task 5 Recommendations

Although this is the initial report in what will ultimately be a larger, more comprehensive evaluation effort spanning 2008, it seems appropriate to offer some preliminary recommendations regarding how TEA should both treat and act upon the results highlighted in this report. Our first recommendation relates to the analyses that were undertaken to form the six center clusters (e.g., Mostly Enrichment, Mostly Enrichment and Recreation, etc.) predicated on the relative emphasis a given center gave to offering various types of activities during the course of the summer of 2006 and the 2006-07 school year. In light of the program's emphasis on the provision of academic enrichment activities and the achievement of meaningful improvements in student academic behaviors and achievement, some may find the existence of some of the clusters (such as the Mostly Recreation cluster) to be strange or even problematic and in need of remedy. However, we would urge caution in using these results as a rationale for asking some centers in Texas, especially those with a recreational bent, to revise their service delivery approach without further evidence to link such programs to less than desirable academic achievement and behavioral improvement outcomes among participating youth.

In this regard, some studies have shown that positive academic outcomes can be achieved through after-school programs that are not necessarily overtly academic in nature. For example, Birmingham et. al. (2005) demonstrated that other characteristics like opportunities for skill building and mastery, intentional relationship building, and exposure to new learning opportunities like dance, music, and art were more often associated with high performing after-

school programs in terms of improving state assessment outcomes than program characteristics that demonstrated an explicit focus on academic content.

In addition, Durlak and Weissberg's (2007) meta-analysis of outcomes in after-school programs demonstrated that programs that adopted practices that were sequenced, used active forms of learning, were focused on having program components devoted to social or personal skill building, and explicitly targeted the building of specific social or personal skills were more likely to have a positive impact on a whole host of academic outcomes and behaviors than programs that lacked these characteristics. The key in the Durlak and Weissberg study was the manner in which programming was delivered rather than the specific content of the programming in question. In this regard, centers falling within the Mostly Recreation cluster highlighted in this report could potentially be quite effective in achieving the academic outcomes sought by the 21st CCLC program if they have effectively adopted the types of evidence-based approaches documented by Durlak and Weissberg.

Generally, then, we would recommend that TEA withhold judgment on the appropriateness of centers that have opted to adopt a program model where the provision of academic enrichment activities appears secondary in importance until further efforts may be undertaken to explore the degree to which such programs are able to cultivate certain types of desired youth outcomes.

It is also important to note that at this point in time in the project that we have not collected or analyzed any data that indicates the extent to which Texas 21st CCLCs have adopted the types of practices and processes associated with positive youth outcomes, but statewide program surveys—scheduled for administration in spring 2008—are intended to yield this information. Grantee directors, center directors, and center staff will be surveyed during this undertaking employing the instruments and processes described in Task 3 to augment and supplement the state administrative data reported as part of Task 5, particularly in critical areas such as staffing and activity provision. We intend to use scales of program implementation and quality, created from program profile data presented in the preceding sections and the soon-to-be collected survey data to explore and possibly explain the variation in the outcomes of interest for 21st CCLC, including attendance and student achievement.

Yet, even though this assessment still needs to done, we still believe that TEA should further explore how it can use training and technical assistance resources to further expose

grantees to these types of processes and practices oriented toward enhancing the quality of their offerings. We feel there are two concrete ways in which TEA can accomplish this goal. The first is to encourage grantees in Texas to use one or more of the *validated* self-assessment tools that have been created in recent years that are meant to help providers of after-school programs further understand what constitutes high quality after-school programming in light of the latest research, how they measure up to these criteria, and what steps can be taken to improve their program relative to these criteria. There are a large number of tools in the field at present that purport to be effective self-assessment tools, and we would recommend that TEA be very deliberate in considering which tools seem most aligned with program priorities for 21st CCLC in Texas. We also would posit that some tools are better suited for some programs than others, depending upon the program and staffing models being employed by the program, the maturity of the grantee, and the grade level of students being served.

In addition, in light of the finding that as grantees mature there is less likely to be a problem with the rate of attendance in programs as the grade level of participating students increases, it would seem that programs over time come to understand what programming, instructional, recruitment, and staffing configurations are more likely to yield better youth attendance. Instead of waiting for new programs to discover this in due time, it would seem that some of this insight could be imparted to new and emerging programs by their more mature counterparts through a communities of practice model. In this regard, each 21st CCLC program could be asked to nominate frontline or midlevel staff to participate in monthly communities of practice meetings, conference calls, or webinars in which they have the opportunity to hear from their peers (especially their more experienced peers) about what they have found to work in their programs and what has proven effective from a program improvement standpoint. To be attractive to participating staff, these communities of practice should be oriented toward further developing these frontline and midlevel staff as leaders in their after-school programs and in helping set the agenda for how TEA utilizes its training and technical assistance funds that make-up the state's annual allocation from ED.

It is quite possible that TEA already has some variations of each these strategies, (encouraging self-assessment and supporting communities of practice) already in place. Even if this is the case, we encourage TEA to review the frameworks that are anchoring these undertakings, assessing to what extent they seem to be reflective of some of the more interesting

research that has emerged in recent years in regards to what constitutes quality in after-school programs (Granger, Durlak, Yohalem, & Reisner, 2007; Little, 2007; Wilson-Ahlstrom & Yohalem, 2007; Vandell et. al., 2005; Yohalem & Wilson-Ahlstrom, 2007).

### **CONCLUSIONS**

This study provides rigorous evidence that cumulative participation in subject-specific 21<sup>st</sup> CCLC activities tended to have a positive effect on TAKS achievement in reading and mathematics. From a practical perspective, the results of this study suggest that 21<sup>st</sup> CCLC students who regularly attend approximately one subject-specific tutoring session per week for three years will make modest, but measurable gains in the subject for which they receive tutoring. Not surprisingly, minimal or sporadic participation in these activities was not associated with academic gains. Thus, we recommend that 21<sup>st</sup> CCLC centers adopt practices that would enhance regular, sustained student participation in subject-specific tutoring activities. These practices might include providing incentives for student participation and improving communication with feeder schools and parents. While 21<sup>st</sup> CCLC effects in Texas were not large enough to close the achievement gap relative to the state average, they seem reasonably large to warrant strong consideration of program continuation.

For both reading and mathematics, the "Enrichment and Tutoring" program cluster type was associated with lower overall TAKS achievement after controlling for student characteristics. This finding may reflect a tendency for centers to offer this type of programming where the population served is struggling academically. Thus, the negative result is not necessarily due to poor programming but could reflect attempts to deal with more at-risk students. More investigation of program quality is suggested to answer this question.

Negative relationships between LEP, special education, and African American status with reading and mathematics achievement were markedly more negative for centers predominately offering "Recreation, Careers, and Leadership" programs. Relative to their peers attending other types of centers, African American students were significantly less successful in reading achievement, and LEP and special education students were significantly less successful in TAKS mathematics achievement. Programs with the "Recreation, Careers, and Leadership" emphasis may offer too few opportunities for direct academic support to these students, although other explanations for these findings cannot be ruled out due to the correlational nature of the design.

Regarding the identification of six primary clusters based on the relative emphasis given to certain categories of activities, there is a fair degree of heterogeneity in terms of how centers in Texas are structuring their programs. Such diversity also may suggest that state-supported efforts to improve the quality of after-school programming may need to be varied and nuanced in light of the programmatic approach a given center has adopted in relation to serving its target student population.

In terms of a movement toward emphasizing academic enrichment programming irrespective of program cluster, it may be interesting to explore the extent to which this movement is driven (1) by program monitoring and support strategies employed by TEA and (2) by a realization among center staff of what constitutes effective programming both in terms of attracting and retaining students and in terms of meeting desired center outcomes. We would recommend that TEA withhold judgment on the appropriateness of centers that have opted to adopt a program model where the provision of academic enrichment activities appears secondary in importance until further efforts may be undertaken to explore the degree to which such programs are able to cultivate certain types of desired youth outcomes.

It is also important to note that at this point in time in the project, we have not collected or analyzed any data that indicates the extent to which Texas 21st CCLCs have adopted the types of practices and processes associated with positive youth outcomes. Statewide program surveys—scheduled for administration in spring 2008—are intended to yield this information.. These data may be valuable in the exploration and possible explanation the variation in the outcomes of interest for 21st CCLC, including attendance and student achievement.

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# Appendices

## Appendix A

## Technical Reporting of Results

## Reading

Unconditional model (Task 2 and Task 4). A fully unconditional HLM model of standardized 2007 TAKS reading scores (i.e., one with no student-level or center-level predictors) was used to estimate the between- and within-center variance components. The within-center variance,  $\sigma^2$ , was 0.833, while the between-center variance in the intercepts,  $\tau_{00}$ , was 0.053, yielding an intraclass correlation of 0.06. Thus, about 6% of the variance in 2007 TAKS reading scores was between centers, and about 94% was between students within centers. The unconditional reliability of the intercepts was 0.80, which indicated that variation in performance at the center level could be reliably modeled as a function of other center level predictors.

Model relating programmatic features associated with student achievement outcomes (Task 4 model). The center-level mean standardized 2007 TAKS reading score for centers serving "other" grade levels in the "mostly recreation" program type cluster was -0.34, indicating that students in these centers scored about three-tenths of a standard deviation below Texas norms. The mean slopes ( $\gamma$ 's) for most student-level predictors were statistically significant: economically disadvantaged status ( $\gamma = -0.09$ ; p < .001); LEP status ( $\gamma = -0.19$ ; p < .001); special education status ( $\gamma = 0.04$ ; p = .131), gifted status ( $\gamma = 0.52$ ; p < .001), 2006 reading score ( $\gamma = 0.39$ ; p < .001), female status ( $\gamma = 0.09$ ; p < .001), African American status ( $\gamma$ = -0.22; p < .001), and Hispanic status ( $\gamma$  = -0.15; p < .001). The effects of special education status were likely suppressed due to inclusion of other variables that accounted for the same portion of variance in 2007 reading scores (e.g., 2006 reading scores, economically disadvantaged status). As shown in Table A1, the various grade level configurations served by the centers were not related to differences in the mean level of student achievement across centers, with the strongest effect associated with centers serving only elementary grades ( $\gamma =$ 0.05; p = .081). Likewise, the various program cluster types had no effect on center-level adjusted mean achievement, except for the Enrichment and Tutoring type ( $\gamma = -0.07$ ; p < .01; see Table A1 which was associated with lower student achievement than other cluster types).

Model investigating whether programmatic features moderate the relationship between program participation and student-level outcomes (task 2 model). The reliability of the slopes relating reading tutoring session attendance to 2007 TAKS reading scores was 0.106, suggesting there was sufficient variability in the slopes across centers to warrant modeling the slopes at Level 2. As shown in Table A2, across centers the relationship between number of reading tutoring sessions attended and 2007 reading test scores, after controlling for other student-level predictors, was not statistically significant. However, a positive and statistically significant relationship was observed between attendance-achievement slopes and the Elementary and Middle grade level configuration ( $\gamma_{92}$ = 0.0017; p = .040). By adding the Elementary and Middle grade  $\gamma$  coefficient to  $\gamma_{90}$ , we obtain an attendance-achievement slope of +0.0012 for centers with Elementary and Middle grade configurations. Thus, for every 100 tutoring sessions attended in these centers, one could expect a rather sizeable gain of +0.12 standard deviation units in TAKS reading scale scores.

Exploratory analyses of the moderating effects of 21st CCLC variables on the relationships between student characteristics and academic achievement. The reliability estimates of all Level 1 coefficients were high enough (i.e., >.05) to permit Level 2 modeling of the respective slopes: economically disadvantaged status (0.13), gifted status (0.26), LEP status (0.26), special education status (0.27), 2006 reading score (0.78), female status (0.13), African American status (0.14), and Hispanic status (0.21). No relationships were observed between achievement-student characteristics slopes and center-level variables for gifted status, special education status, 2006 reading scores, female status, or Hispanic status. Three center-level variables had statistically significant, negative associations with economically disadvantaged status: elementary only grade level configuration ( $\gamma = -0.08$ ; p < .05), middle school only grade level configuration ( $\gamma = -0.08$ ; p < .05), and Mostly Enrichment program type ( $\gamma = -0.06$ ; p < .05). In other words, economically disadvantaged students who attended centers that (a) served only elementary grades, (b) served only middle school grades, or (c) provided "mostly enrichment activities" performed lower than similar disadvantaged students who attended other program types. For LEP slopes, statistically significant negative associations were observed for middle and high ( $\gamma = -0.16$ ; p < .05) and high school only ( $\gamma = -0.28$ ; p < .01) grade configurations, indicating that older LEP students attending 21st CCLC centers scored much lower relative to state norms than did their younger peers. A statistically significant, negative

relationship was observed between Recreation, Careers, and Leadership program type and African American status-achievement slopes ( $\gamma = -0.11$ ; p < .05).

### **Mathematics**

Unconditional model. A fully unconditional model of standardized 2007 TAKS mathematics scores was used to estimate the between- and within-center variance components. The within-center variance,  $\sigma^2$ , was 0.777, while the between-center variance in the intercepts,  $\tau_{00}$ , was 0.075, yielding an intraclass correlation of 0.09. Thus, about 9% of the variance in 2007 TAKS reading scores was between centers, and about 91% was between students within centers. The unconditional reliability of the intercepts was 0.85, which indicated that variation in performance at the center level could be reliably modeled as a function of other center level predictors.

Model relating programmatic features associated with student achievement outcomes (Task 4 model). The center-level mean standardized 2007 TAKS mathematics score for centers serving "other" grade levels in the "mostly recreation" program type cluster was -0.27, indicating that students in these centers scored about one quarter of a standard deviation below Texas norms. The mean slopes ( $\gamma$ 's) for all student-level predictors were statistically significant: economically disadvantaged status ( $\gamma$  = -0.03; p < .001); LEP status ( $\gamma$  = -0.08; p < .001); special education status ( $\gamma$  = 0.12; p < .001), gifted status ( $\gamma$  = 0.44; p < .001), 2006 mathematics score ( $\gamma$  = 0.55; p < .001), female status ( $\gamma$  = -0.02; p < .001), African American status ( $\gamma$  = -0.22; p < .001), and Hispanic status ( $\gamma$  = -0.11; p < .001). As shown in Table A3, the various grade level configurations served by the centers were not related to differences in the mean level of student achievement across centers. The various program cluster types had no effect on center-level adjusted mean achievement, except for the Enrichment and Tutoring type ( $\gamma$  = -0.04; p < .05; see Table A3).

Model investigating whether programmatic features moderate the relationship between program participation and student-level outcomes (Task 2 model). The reliability of the slopes relating mathematics tutoring session attendance to 2007 TAKS mathematics scores was 0.184, suggesting there was sufficient variability in the slopes across centers to warrant modeling the slopes at Level 2. As shown in Table A4, across centers the relationship between number of reading tutoring sessions attended and 2007 reading test scores, after controlling for other

student-level predictors, was not statistically significant. No statistically significant relationships were observed between attendance-achievement slopes and center grade levels served or program cluster type variables.

Exploratory analyses of the moderating effects of  $21^{st}$  CCLC variables on the relationships between student characteristics and academic achievement. The reliability estimates of all Level 1 coefficients were high enough (i.e., >.05) to permit Level 2 modeling of the respective slopes: economically disadvantaged status (0.12), gifted status (0.37), LEP status (0.25), special education status (0.45), 2006 mathematics score (0.76), female status (0.11), African American status (0.17), and Hispanic status (0.19). No statistically significant relationships were observed between center-level variables and slopes for economically disadvantaged status, gifted status, 2006 mathematics scores, African American status, or Hispanic status. The Recreation, Careers, and Leadership program type was associated with statistically significant, negative effects on LEP slopes ( $\gamma = -0.17$ ; p < .01) and special education status slopes ( $\gamma = -0.37$ ; p < .01), indicating that LEP students and special education students attending this program type performed substantially lower than similar students attending other types of programs.

Table A1. Final Estimation of Fixed Effects with Robust Standard Errors: Relationship of Center-level Variables with Covariate-adjusted<sup>1</sup> Intercepts, Standardized 2007 TAKS Reading Scores

Fixed Effect	Symbol	Coefficient	Standard Error	t-ratio	df	p
Intercept <sup>2</sup>	γ00	-0.34	0.03	-11.34	552	<.001
Elementary Only	γ01	0.05	0.03	1.75	552	.081
Elementary and Middle	$\gamma_{02}$	0.04	0.04	1.13	552	.260
Middle Only	γ03	0.04	0.03	1.41	552	.160
Middle and High	$\gamma_{04}$	0.02	0.03	0.54	552	.587
High School	γ <sub>05</sub>	0.01	0.04	0.14	552	.889
Only Enrichment and	γ06	-0.07	0.02	-2.80	552	.006
Tutoring Enrichment and SES	γ07	-0.04	0.03	-1.21	552	.227
Mostly Enrichment	$\gamma_{08}$	-0.03	0.02	-1.44	552	.151
Recreation, Careers,	γ09	-0.05	0.05	-0.98	552	.330
and Leadership Enrichment and Recreation	γ010	-0.01	0.02	-0.70	552	.482

<sup>1</sup>Based on grand mean centering of student-level predictors: economically disadvantaged status, LEP status, SPED status, gifted status, 2006 reading score, female status, African American status, and Hispanic status. <sup>2</sup>Intercept equals center-level grand mean for multigrade, primarily recreation center type.

Table A2. Final Estimation of Fixed Effects with Robust Standard Errors: Relationship of Center-level Variables with Reading Tutoring Sessions Attended Slopes, Standardized 2007 TAKS Reading Scores

Fixed Effect	Symbol	Coefficient	Standard Error	t-ratio	df	p
Intercept <sup>1</sup>	γ90	-0.0005	0.00054	-0.88	552	.381
Elementary Only	γ91	0.0008	0.00058	1.41	552	.160
Elementary and Middle	γ92	0.0017	0.00081	2.05	552	.040
Middle Only	γ93	0.0009	0.00065	1.31	552	.190
Middle and High	γ94	0.0005	0.00064	0.79	552	.428
High School	γ95	0.0006	0.00123	0.491	552	.623
Only Enrichment and	γ96	-0.0003	0.00057	-0.45	552	.655
Tutoring Enrichment and SES	γ97	-0.0003	0.00061	-0.41	552	.679
Mostly Enrichment	γ98	-0.0004	0.00042	-0.91	552	.365
Recreation, Careers,	γ99	-0.0003	0.00132	-0.26	552	.793
and Leadership Enrichment and Recreation	γ910	0.0002	0.00046	0.42	552	.677

<sup>&</sup>lt;sup>1</sup>Intercept equals center-level mean sessions-attended X 2007 standardized reading score slope for multigrade, primarily recreation center type.

Table A3. Final Estimation of Fixed Effects with Robust Standard Errors: Relationship of Center-level Variables with Covariate-adjusted<sup>1</sup> Intercepts, Standardized 2007 TAKS Mathematics Scores

Fixed Effect	Symbol	Coefficient	Standard Error	<i>t</i> -ratio	df	p
Intercept <sup>2</sup>	γ00	-0.27	0.04	-7.72	552	<.001
Elementary Only	γ01	0.02	0.03	0.56	552	.574
Elementary and Middle	γ02	0.00	0.04	-0.01	552	.992
Middle Only	γ03	0.00	0.04	-0.07	552	.943
Middle and High	$\gamma_{04}$	-0.01	0.04	-0.37	552	.712
High School	γ <sub>05</sub>	-0.03	0.04	-0.82	552	.411
Only Enrichment and	γ06	-0.05	0.03	-2.13	552	.033
Tutoring Enrichment and SES	γ07	-0.04	0.03	-1.33	552	.184
Mostly Enrichment	γ08	-0.03	0.02	-1.39	552	.166
Recreation, Careers,	γ09	-0.01	0.06	-0.23	552	.822
and Leadership Enrichment and Recreation	γ010	-0.04	0.02	-1.72	552	.086

<sup>1</sup>Based on grand mean centering of student-level predictors: economically disadvantaged status, LEP status, SPED status, gifted status, 2006 mathematics score, female status, African American status, and Hispanic status. <sup>2</sup>Intercept equals center-level grand mean for multigrade, primarily recreation center type.

Table A4. Final Estimation of Fixed Effects with Robust Standard Errors: Relationship of Center-level Variables with Reading Tutoring Sessions Attended Slopes, Standardized 2007 TAKS Mathematics Scores

Fixed Effect	Symbol	Coefficient	Standard Error	t-ratio	df	p
Intercept <sup>1</sup>	γ90	0.0007	0.00067	1.04	552	.299
Elementary Only	γ91	-0.0005	0.00065	-0.83	552	.407
Elementary and Middle	γ92	-0.0008	0.00097	-0.87	552	.383
Middle Only	γ93	-0.0006	0.00071	-0.83	552	.408
Middle and High	γ94	-0.0006	0.00072	-0.79	552	.432
High School	γ95	-0.0009	0.00093	-1.01	552	.314
Only Enrichment and	γ96	-0.0007	0.00059	-1.25	552	.211
Tutoring Enrichment and SES	γ97	0.0002	0.00058	0.41	552	.682
Mostly Enrichment	γ98	0.0005	0.00048	1.06	552	.292
Recreation, Careers,	γ99	0.0000	0.00149	-0.04	552	.969
and Leadership Enrichment and Recreation	γ910	0.0004	0.00047	0.91	552	.362

<sup>&</sup>lt;sup>1</sup>Intercept equals center-level mean sessions-attended X 2007 standardized mathematics score slope for multigrade, primarily recreation center type.

## Appendix B

Technical Description of the HLM Analyses and Its Properties

To determine specific programmatic features associated with the various student achievement outcomes (evaluation Task 4), two-level HLM analyses were performed using standardized 2007 TAKS scale scores in reading (HLM 1) or mathematics (HLM 2) as outcome variables and corresponding 2006 achievement ("pre-program" or "pretest") scores, economic disadvantaged status, gifted status, LEP status, special education status, female status, African American status, and Hispanic status as Level 1 predictors. All student-level predictors were centered on their grand means and modeled as fixed effects, while the Level 1 intercepts were allowed to vary randomly. These Level 1 intercepts are analogous to adjusted means attained through analysis of covariance, and represent mean student performance in each center after accounting for the fixed effects of the Level 1 predictors. The Level 1 intercepts were then employed as outcomes in the Level 2 (between centers) models, which examined relationships between the structural variables representing grade levels served and the programmatic variables representing program cluster type. In equation form, the HLM addressing evaluation Task 4 for reading was:

### Level 1 Model

ZREAD07 = 
$$\beta_0 + \beta_1$$
 \*(Economically Disadvantaged) +  $\beta_2$ \*(LEP) +  $\beta_3$ \*(SPED) +  $\beta_4$ \*(Gifted) +  $\beta_5$ \*(ZREAD06) +  $\beta_6$ \*(Female) +  $\beta_7$ \*(African American) +  $\beta_8$ \*(Hispanic) +  $r$ 

### Level 2 Model

$$\beta_0 = \gamma_{00} + \gamma_{01}*(\text{Elementary Only}) + \gamma_{02}*(\text{Elementary and Middle}) + \gamma_{03}*(\text{Middle Only}) + \gamma_{04}*(\text{Middle and High}) + \gamma_{05}*(\text{High School Only}) + \gamma_{06}*(\text{Enrichment and Tutoring}) + \gamma_{07}*(\text{Enrichment and SES}) + \gamma_{08}*(\text{Mostly Enrichment}) + \gamma_{09}*(\text{Recreation}, \text{Careers}, \text{and Leadership}) + \gamma_{010}*(\text{Enrichment and Recreation}) + u_0$$

$$\beta_1 = \gamma_{10} + u_1$$

$$\beta_2 = \gamma_{20} + u_2$$

$$\beta_3 = \gamma_{30} + u_3$$

$$\beta_4 = \gamma_{40} + u_4$$

$$\beta_5 = \gamma_{50} + u_5$$

$$\beta_6 = \gamma_{60} + u_6$$

$$\beta_7 = \gamma_{70} + u_7$$

$$\beta_8 = \gamma_{80} + u_8$$

In the Level 2 model,  $\gamma_{00}$  represents the mean 2007 standardized reading score (adjusted for student-level predictors) for centers serving multiple grade levels in the "mostly recreation" programming cluster, while the other  $\gamma$ 's represent the mean differences in adjusted mean achievement between centers with the indicated trait and multiple grade, mostly recreation centers. A similar model was estimated for mathematics achievement.

To investigate the variables that mediated or moderated the relationship between program participation and student-level outcomes (evaluation Task 2), reformulated two-level HLM analyses were performed. Specifically, the number of reading or mathematics tutoring sessions attended during 2007 was incorporated as a random effect in the Level 1 models. Thus, the slopes associated with the number of reading or mathematics tutoring sessions attended were treated as outcomes in the Level 2 model to determine whether grade levels served or program cluster type moderated the relationships between subject-specific program participation (as indicated by number of tutoring sessions attended in the pertinent subject area) and student outcomes.

#### Appendix C

### LEARNING POINT ASSOCIATES TEXAS 21<sup>ST</sup> CCLC EVALUATION CENTER STAFF SURVEY

Thank you for taking the time to participate in the pilot of the Texas 21<sup>st</sup> Century Community Learning Centers (21<sup>st</sup> CCLCs) surveys. This survey is conducted by Learning Point Associates, an independent, non-profit education evaluation organization under contract to the Texas Education Agency. **Your responses to the survey are strictly confidential.** Results for a particular respondent or a particular program will not be released in any form. The aggregated results will be used by Learning Point Associates in conducting the statewide study of the 21<sup>st</sup> CCLC program, in particular to provide a descriptive profile of 21<sup>st</sup> CCLCs across the state. **This is not an evaluation of any individual respondent, center, or grant.** 

If you have any questions or need assistance in completing the survey, please contact Manolya Tanyu (<a href="mailto:manolya.tanyu@learningpt.org">manolya.tanyu@learningpt.org</a>) or Chloe Hutchinson (<a href="mailto:chloe.hutchinson@learningpt.org">chloe.hutchinson@learningpt.org</a>) via email or at 1-800-356-2735. Thank you in advance for your participation.

Name	:
Job Title	:
Center Name	: Center ID:
ABOUT YOU	Ţ
1. In total, how	w many years have you worked as a youth worker or teacher?
2. How many	of those years have been with this program (including current year)?
3. What is you	ar highest level of education?
(	O Less than high school
•	O High school or GED
(	O Some college, other classes/training not related to a degree
(	O Completed two-year college degree
(	O Completed four-year college degree
(	O Some graduate work
(	O Master's degree or higher

O Yes O No  5. Which of the following best describes your primary role in the program?  O I teach or lead regular program activities (e.g., group leader). O I assist in activities (e.g., assistant group leader). O I am a master teacher or educational specialist (e.g., supervise or train other program staff). O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor). O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?  ———————————————————————————————————	4. Do you hold a teaching credential or certification?
5. Which of the following best describes your primary role in the program?  O I teach or lead regular program activities (e.g., group leader). O I assist in activities (e.g., assistant group leader). O I am a master teacher or educational specialist (e.g., supervise or train other program staff). O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor). O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	O Yes
O I teach or lead regular program activities (e.g., group leader). O I assist in activities (e.g., assistant group leader). O I am a master teacher or educational specialist (e.g., supervise or train other program staff). O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor). O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	O No
O I assist in activities (e.g., assistant group leader). O I am a master teacher or educational specialist (e.g., supervise or train other program staff). O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor). O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	5. Which of the following best describes your primary role in the program?
O I am a master teacher or educational specialist (e.g., supervise or train other program staff).  O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor).  O I am the parent liaison.  O I perform administrative duties.  6. Did you work in this center last year?  O Yes  O No  7. Do you hold another job in addition to your work at this center?  O Yes  O No  8. On average, how many hours per week do you work in this program?	O I teach or lead regular program activities (e.g., group leader).
other program staff).  O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor).  O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	
O I am an activity specialist (e.g., dance instructor, music instructor, martial arts instructor). O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	
martial arts instructor).  O I am the parent liaison. O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	
O I perform administrative duties.  6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	
6. Did you work in this center last year?  O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	O I am the parent liaison.
O Yes O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	O I perform administrative duties.
O No  7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	6. Did you work in this center last year?
7. Do you hold another job in addition to your work at this center?  O Yes O No  8. On average, how many hours per week do you work in this program?	O Yes
O Yes O No  8. On average, how many hours per week do you work in this program?	O No
O No  8. On average, how many hours per week do you work in this program?	7. Do you hold another job in addition to your work at this center?
8. On average, how many hours per week do you work in this program?	O Yes
	O No
9. On average, how many students do you work with on a daily basis in the program?	8. On average, how many hours per week do you work in this program?
	9. On average, how many students do you work with on a daily basis in the program?

### ABOUT YOUR PROGRAM

10. To what extent do the following statements reflect programming at your center?	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Groups are small enough for staff to meet participants' needs.	О	0	0	О	О
b. The time allowed for activities is generally appropriate.	O	0	0	0	0
c. Participants have freedom in selecting at least some of their activities.	О	О	О	0	О
d. Participants have regular opportunities to lead activities.	О	О	О	О	О
e. Participants have regular opportunities to spend time alone if needed or desired.	О	О	О	О	О
f. This program has a process in place for obtaining participants' input and suggestions.	O	O	О	O	О
g. Procedures for dealing with participant behavior issues are in place.	O	0	0	0	0
h. Procedures for dealing with participant behavior issues are effective.	О	0	0	О	О
i. Participants with special needs are successfully integrated.	О	0	0	О	О

11. To what extent do the following statements reflect programming at your center?	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Staff ask for and listen to student opinions about the way things should work in this program.	O	O	O	O	О
b. Staff create environments where young people feel trusted, respected, and empowered.	Ο	O	0	0	О
c. Staff provide ongoing opportunities for youth to reflect on their experiences and offer feedback.	0	0	0	Ο	О
d. Staff effectively motivate and inspire young people to think, make decisions, and solve problems.	Ο	O	O	O	О
e. Staff listen to youth more than talk at them.	O	О	О	Ο	О
f. Staff actively and continuously consult and involve youth.	О	О	0	0	О
g. Staff cultivate opportunities for young people to lead.	О	О	О	О	О

k all
4

12. How often do staff of this program meet together to discuss program-related issues

14. In reference to your current program, would you		
characterize most staff meetings as	Yes	No
a. Well organized?	0	О
b. Open to input from staff?	0	О
c. Open to disagreement from staff?	0	О
d. Achieving agreement from all participants when necessary?	0	О

15. During your first months on the job, were you	Yes	No
a. Mentored by more experienced staff?	0	О
b. Offered any kind of "beginners' seminar"?	0	О
c. Given shared planning time with a more experienced staff member?	0	О
d. In daily communication with your supervisor about how things were going?	0	О

16. Which of the following types of training, related specifically to this program, were required and/or offered to you in the past 12 months, and			
which did you attend? Please check all that apply.	Required	Offered	Attended
a. Classroom management	0	0	О
b. Academic enrichment/content specific (i.e., literacy)	0	О	О
c. Activity planning	О	О	О
d. Conflict resolution	О	О	О
e. Working with a diverse student population	О	О	О
f. Child development; developmentally appropriate practice	О	О	О
g. Maintaining health and safe environments	О	О	О
h. Family and community engagement	О	О	О
i. Other ( <i>Please specify</i> :)	О	0	О

17. Approximately how many total hours of program-related training have you received during the past 12 months?

O More than 20 hours

O 16-20 hours

O 11-15 hours

O 5-10 hours

O Fewer than 5 hours

O No hours

18. How often do center staff	Frequently	Sometimes	Never
a. Communicate with each other?	O	О	O
b. Work as a team?	О	0	О
c. Work individually?	О	О	О

19. Please rate your agreement with the following statements about your center's staff:	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
a. Staff at this center communicate effectively with each other.	О	0	О	0	О
b. Staff at this center help out even though it may not be part of their official assignment.	0	0	О	0	О
c. Staff at this center have an effective process for making group decisions.	О	0	О	0	О
d. Staff at this center have an effective process for solving problems.	0	0	0	0	О

20. Please rate your agreement with the following statements about your job:	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
a. I enjoy working in this program.	Ο	Ο	О	0	Ο
b. I have the materials I need to do a good job.	0	O	О	0	О
c. I have the space I need to do a good job.	0	0	О	О	О
d. I get the support I need to do a good job.	0	О	О	О	О
e. I get the feedback I need from my supervisor.	О	О	О	О	О
f. I find working in this program rewarding.	0	0	О	О	О
g. In most ways, this job is close to my ideal.	0	0	О	О	O
h. The condition of my current job is excellent.	O	0	O	О	O
i. I am satisfied with this job.	O	0	О	О	O

21. How often do you lead or participate in			
program activities that are	Frequently	Sometimes	Never
a. Based on written plans for the session, assignments, and projects?	O	О	О
b. Well planned in advance?	О	0	О
c. Tied to specific learning goals?	О	0	О
d. Based on a curriculum model that was written by others?	О	0	О
e. Focused on helping youth improve their TAKS scores?	О	0	О
f. Providing academic remediation and support for youth?	0	О	О
g. Providing homework help or tutoring for youth?	О	О	О

22. How often are participants afforded the following opportunities in your program?	At least 4 to 5 hours per week	About 1 to 3 hours per week	A few hours per month	Less than one hour per month	Never
a. Work on an individual project or activity	О	0	0	О	О
b. Work collaboratively with other students in small groups	О	0	0	0	О
c. Have the freedom to choose activities or projects	О	0	0	0	О
d. Work on projects that take more than one day to complete	O	O	O	О	О
e. Lead group activities	О	0	0	0	О
f. Provide feedback on the activities in which they are participating	О	0	0	0	О
g. Participate in activities that are specifically designed to help students get to know one another	O	0	0	0	0
h. Make formal presentations to the larger group of students	О	O	О	0	О

23. How often do you provide activities for participants in the following areas?	At least 4 to 5 hours per week	About 1 to 3 hours per week	A few hours per month	Less than one hour per month	Never
a. Activities to support academic skills development and/or academic achievement	0	0	О	0	О
b. Activities to support artistic development and social and cultural awareness	Ο	О	О	О	О
c. Activities to support physical fitness, recreation, and healthy life skills	0	0	O	0	О
d. Activities to support civic engagement and community services	0	0	O	О	О
e. Activities to support career exploration and development	0	О	О	0	О
f. Activities to support college or career readiness	О	О	О	О	О

24. How often do staff engage in the following activities to promote or encourage reading skills?	At least 4 to 5 hours per week	About 1 to 3 hours per week	A few hours per month	Less than one hour per month	Never
a. Staff read to youth.	О	О	0	0	О
b. Staff facilitate youth engagement in reading (e.g., using differing intonations/facial expressions, asking listeners with questions).	Ο	O	O	O	O
c. Staff sit with youth who are reading.	О	0	0	0	О
d. Staff help youth sound out words, figure out meaning from context, encourage youth when stuck.	О	О	О	О	О
e. Staff help youth find books or reading materials.	0	0	О	О	О
f. Staff model reading comprehension strategies (e.g., make personal connections or predictions, ask questions, summarize, consider differing meanings).	О	Ο	O	O	Ο

25. How often do participants practice or build the following reading skills?	At least 4 to 5 hours per week	About 1 to 3 hours per week	A few hours per month	Less than one hour per month	Never
a. Youth read independently, not as part of homework.	О	О	0	0	О
b. Youth play word games.	О	О	0	0	О
c. Youth receive reading assistance by staff/tutor.	О	О	О	О	О
d. Youth are read to.	О	O	0	0	О
e. Youth read in practical situations (e.g., read instructions).	0	O	О	0	О
f. Youth investigate unfamiliar vocabulary words.	О	О	О	0	О

26. How often do staff engage in the following activities to promote or encourage mathematical reasoning and problem solving skills?	At least 4 to 5 hours per week	About 1 to 3 hours per week	A few hours per month	Less than one hour per month	Never
a. Staff engage youth in hands- on math games, or projects that utilize math.	0	0	0	0	О
b. Staff encourage youth to use math in practical situations or to see connections to math in their everyday life.	О	О	О	О	О
c. Staff ask "why," "how," and "what if" questions related to math.	О	О	0	0	О
d. Staff describe how they are using math to solve a problem.	0	0	О	О	0
e. Staff offer youth games that require mathematical reasoning or problem solving.	О	О	О	О	О
f. Staff encourage youth to explain their reasoning and justify their thinking related to math-related problems and projects.	0	Ο	0	0	0
g. Staff encourage youth to solve math problems in cooperative groups.	0	0	0	0	О
h. Staff encourage youth to receive and provide math help from peers.	О	О	О	О	О
i. Staff encourage youth to solve everyday problems using math.	О	О	О	О	О

27. How often do participants practice or build the following math skills?	At least 4 to 5 hours per week	About 1 to 3 hours per week	A few hours per month	Less than one hour per month	Never
a. Youth use math in practical situations.	О	О	О	О	О
b. Youth play math games or engage in activities requiring mathematical problem solving.	О	О	О	О	О
c. Youth solve math problems in groups.	О	О	О	О	О
d. Youth solve everyday problems using math.	0	0	0	0	О
e. Youth explain the source or nature of a math problem.	0	O	О	О	О
f. Youth explain their math reasoning or justify their thinking to staff.	О	О	О	О	О
g. Youth brainstorm potential solutions on own or in groups.	О	О	0	0	О

28. Please indicate whether you receive each of the following and how often you use it in providing academic support activities:	Receive, and Use Frequently	Receive, and Use Sometimes	Receive, but Never Use	Do Not Receive
a. Students' academic or education plans	О	0	0	О
b. Students' standardized test scores	О	О	O	O
c. Students' grades	O	О	O	O
d. Input from students' school-day teachers	О	0	0	О
e. Input from parents	О	О	O	O
f. Other ( <i>Please</i> specify:)	0	0	0	О

29. How often do you or other center staff discuss the following with teachers at the participants'			
school(s) who are not center staff?	Frequently	Sometimes	Never
a. Curriculum concepts being taught in school	0	0	О
b. Homework assignments	О	О	О
c. The academic needs or progress of students participating in the program	О	О	О
d. Issues related to program logistics	О	О	О
e. Program attendance	О	О	О
f. Students' behavioral problems	О	О	О
g. How to make academic support in the program more effective	О	О	О
h. Other ( <i>Please specify</i> :)	0	0	О

30. How often do you or other center staff	Frequently	Sometimes	Never
a. Send materials about the program home to parents?	O	О	О
b. Hold events or meetings to which parents are invited?	O	О	О
c. Hold events or meetings to which community members are invited?	O	О	O
d. Have conversations with parents over the phone?	O	О	O
e. Meet with one or more parents?	O	0	0

31. How much of a challenge to implementing high-quality programming are each of the following?	Significant Challenge	Moderate Challenge	Minimal Challenge	Not a Challenge
a. Adequacy of facilities and availability of space	0	0	0	0
b. Adequacy of instructional materials	O	O	0	О
c. Communication between center staff and staff at participants' school(s)	0	0	0	О
d. Recruitment of youth to participate	0	0	0	О
e. Youth attendance	0	0	0	О
f. Student readiness for or engagement in programming	0	0	0	О
g. Parent and family involvement	0	0	0	О
h. Sufficiency of program funding	0	0	0	О
i. Adequacy of staff training and experience	О	О	0	О
j. Other ( <i>Please</i> specify:)	О	О	0	О

THANK YOU FOR COMPLETING THE SURVEY!

## LEARNING POINT ASSOCIATES $Texas\ 21^{st}\ CCLC\ Evaluation$ Center Director/Program Coordinator Survey

Thank you for taking the time to participate in the pilot of the Texas 21<sup>st</sup> Century Community Learning Centers (21<sup>st</sup> CCLCs) surveys. This survey is conducted by Learning Point Associates, an independent, non-profit education evaluation organization under contract to the Texas Education Agency. **Your responses to the survey are strictly confidential.** Results for a particular respondent or a particular program will not be released in any form. The aggregated results will be used by Learning Point Associates in conducting the statewide study of the 21<sup>st</sup> CCLC program, in particular to provide a descriptive profile of 21<sup>st</sup> CCLCs across the state. **This is not an evaluation of any individual respondent, center, or grant.** 

If you have any questions or need assistance in completing the survey, please contact Manolya Tanyu (<a href="mailto:manolya.tanyu@learningpt.org">manolya.tanyu@learningpt.org</a>) or Chloe Hutchinson (<a href="mailto:chloe.hutchinson@learningpt.org">chloe.hutchinson@learningpt.org</a>) via email or at 1-800-356-2735. Thank you in advance for your participation.

Name.

1 (011110)	
Job Title:	
Center Name:	Center ID:
ABOUT YOU	
1. In total, how	many years have you worked as a youth worker or teacher?
2. How many of	those years have been with this program (including current year)?
3. How many of current year)? _	f those years have been in a director or coordinator capacity (including

4. What is your highest level of education?
O Less than high school O High school or GED O Some college, other classes/training not related to a degree O Completed two-year college degree O Completed four-year college degree O Some graduate work O Master's degree or higher
5. Do you hold a teaching credential or certification?
O Yes O No
6. Did you work in this center last year?
O Yes, as the center director/program coordinator O Yes, as a staff member O Yes, other ( <i>Please specify</i> : O No
7. Do you hold another job in addition to your work at this center?
O Yes O No
8. On average, how many hours per week do you work in this program?

#### ABOUT YOUR PROGRAM

9. Which of the foll	owing groups of youth does your center seek to serve? Please check all
that apply.	
O Op	en enrollment for all interested youth
O Yo	uth who scored "below proficient" on local or state assessments
	uth identified by their school as needing special assistance in reading nd/or math
O Yo	uth who are English-language learners
O Yo	uth who are eligible to receive free- or reduced-priced lunch
O Yo	uth who are recommended by school-day teachers or counselors
O Yo	uth with siblings already attending the program
O Yo	uth who participate in other programs sponsored by our
organization	າ
O Yo	uth who are referred through our organization
O Otl	her (Please specify:)
that apply.  O Proby low O Procontinuous of the desired apply.	ograms or activities offered by your center selected? <i>Please check all</i> ograms are selected and designed based on student needs identified cal and state assessments. Ograms are selected and designed around curriculum guidelines. Ograms are selected and designed to align with standards adopted by istrict or state.
	eacher feedback
2	her (Please specify:)
11. Do you use a practivities?	ublished or externally developed curriculum to guide any of your
O Ye O No	

12. To what extent is each of the following an	Primary	Secondary	Not an
objective or goal of programming at your center?	Objective	Objective	Objective
a. Provide a safe environment for youth	О	О	О
b. Help youth improve their academic	0	0	O
performance (e.g., grades, test scores)	O	O	O
c. Help youth improve their TAKS scores	O	О	О
d. Help youth develop socially	O	Ο	О
e. Provide opportunities for cultural enrichment	O	O	O
f. Provide recreational activities	O	Ο	О
g. Provide physical fitness or athletic	O	О	0
opportunities			
h. Provide activities to support college or career	O	О	O
readiness			
i. Provide health/well-being/life skills	O	О	О
development			
j. Provide community service or civic	Ο	О	О
engagement opportunities	0	0	0
k. Provide leadership opportunities for youth	О	0	O
Provide hands-on academic enrichment activities	O	О	О
m. Help parents and/or other adults with literacy or other skills (e.g., parenting)	О	0	О
n. Help connect youth to their community	О	О	О
o. Support working families	О	О	О
p. Promote respect for diversity among youth	О	О	О
q. Help connect parents with their child's school	0	0	0
and/or community	0	0	0
		I	I
r. Identify health or social services youth need	О	O	O
s. Provide youth with positive adult guidance and/or mentors	О	0	0
t. Other ( <i>Please specify</i> :)	O	О	O

13. Please indicate which of these program objectives constitute the	
top three priorities for your center:	
a. Provide a safe environment for youth	О
b. Help youth improve their academic performance (e.g., grades, test scores)	0
c. Help youth improve their TAKS scores	0
d. Help youth develop socially	0
e. Provide opportunities for cultural enrichment	0
f. Provide recreational activities	0
g. Provide physical fitness or athletic opportunities	O
h. Provide activities to support college or career readiness	О
i. Provide health/well-being/life skills development	О
j. Provide community service or civic engagement opportunities	О
k. Provide leadership opportunities for youth	О
l. Provide hands-on academic enrichment activities	О
m. Help parents and/or other adults with literacy or other skills (e.g., parenting)	0
n. Help connect youth to their community	0
o. Support working families	0
p. Promote respect for diversity among youth	0
q. Help connect parents with their child's school and/or community	O
r. Identify health or social services youth need	0
s. Provide youth with positive adult guidance and/or mentors	O
t. Other ( <i>Please specify</i> :)	0

14. How often does your program provide			
activities for participants in the following			
areas?	Frequently	Sometimes	Never
a. Activities to support academic skills	0	0	0
development and/or academic achievement	O	O	O
b. Activities to support artistic development and			0
social and cultural awareness	O	O	O
c. Activities to support physical fitness,		0	0
recreation, and healthy life skills	O	O	O
d. Activities to support civic engagement and		0	0
community services	O	O	0
e. Activities to support career exploration and		0	0
development	U	U	0
	0	0	0
f. Activities to support college or career readiness	U	U	O

15. To what extent do the following					
statements reflect programming at your center?	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Groups are small enough for staff to meet participants' needs.	0	O	О	0	О
b. The time allowed for activities is generally appropriate.	О	О	О	О	О
c. Participants have freedom in selecting at least some of their activities.	О	О	О	0	О
d. Participants have regular opportunities to lead activities.	О	0	0	0	О
e. Participants have regular opportunities to spend time alone if needed or desired.	O	О	О	О	О
f. This program has a process in place for obtaining participants' input and suggestions.	O	О	О	О	О
g. Procedures for dealing with participant behavior issues are in place.	O	О	О	О	О
h. Procedures for dealing with participant behavior issues are effective.	O	O	0	0	О
i. Participants with special needs are successfully integrated.	О	О	О	0	О

16. To what extent do the following statements reflect programming at your center?	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Staff ask for and listen to student opinions about the way things should work in this program.	O	0	0	0	О
b. Staff create environments where young people feel trusted, respected, and empowered.	0	О	0	0	О
c. Staff provide ongoing opportunities for youth to reflect on their experiences and offer feedback.	Ο	О	Ο	Ο	О
d. Staff effectively motivate and inspire young people to think, make decisions, and solve problems.	O	О	О	О	О
e. Staff listen to youth more than talk at them.	О	О	O	O	О
f. Staff actively and continuously consult and involve youth.	О	О	О	О	О
g. Staff cultivate opportunities for young people to lead.	О	О	О	О	О

17. Approximately what proportion of current program staff worked at your center last year (2006-07)?

$\bigcirc$ 1	Г	11	1 10
O $M$	lore	than	nair

- O About half
- O Less than half
- O None
- O Don't know

18. Does you	ur center have a parent liaison or parent outreach coordinator?
	O Yes, as a volunteer position
	O Yes, as a paid part time position
	O Yes, as a paid full time position
	O No
19. Does you data clerk)?	ur center have an administrative support position (e.g., an attendance or
,	O Yes, as a volunteer position
	O Yes, as a paid part time position
	O Yes, as a paid full time position
	O No
20. Does you	ur center have a master teacher or education specialist?
	O Yes, as a volunteer position
	O Yes, as a paid part time position
	O Yes, as a paid full time position
	O No
21. How ofte	en do you hold staff meetings with your center staff?
	O At least once a week
	O 2-3 times per month
	O Once a month
	O 1-2 times per academic term
	O Less than 1-2 times per academic term
	O Never
	O Other (Please specify:)
22. What are that apply.	e the most common topics or agenda items at these meetings? Please check all
	O Program attendance
	O Curriculum
	O Planning program activities
	O Students and/or their needs
	O Training/professional development for staff in a particular area

	O Program rules and operating procedures
	O Program goals and purposes
	O Other (Please specify:)
23. Do you re supervisor?	equire staff to submit written activity or lesson plans to you or another
	O I require most or all staff to submit activity plans on a regular basis. O I require some staff to submit activity plans on a regular basis. O I occasionally ask staff to submit activity plans. O I do not ask staff to submit activity plans.
24. How ofte	n do you make changes to your grant plan?
	O Frequently, once a month or more often O Sometimes, 1-2 times per academic term O Rarely, less than 1-2 times per academic term O Never
25. In your ogapplication?	pinion, how aligned is programming at your center to your grant
	O Very aligned O Moderately aligned O Somewhat aligned O Not aligned O Don't know/ I have not seen the grant application.

26. Which of the following types of training, related specifically to this program, were required and/or offered to you in the past 12 months, and which did			
you attend? Please check all that apply.	Required	Offered	Attended
a. Program management and operations	0	О	О
b. Academic enrichment/content specific (i.e., literacy)	О	О	О
c. Activity planning	0	О	О
d. Conflict resolution	О	О	О
e. Working with a diverse student population	0	О	О
f. Child development; developmentally appropriate practice	0	О	О
g. Maintaining health and safe environments	0	О	О
h. Family and community engagement	0	О	О
i. Other ( <i>Please specify</i> :)	О	О	О

27. Approximately how many total hours of program-related training have you received during the past 12 months?

O More than 20 hours

O 16-20 hours

O 11-15 hours

O 5-10 hours

O Fewer than 5 hours

O No hours

28. Approximately how many total hours of program-related training have members of your staff received, on average, during the past 12 months?

O More than 20 hours

O 16-20 hours

O 11-15 hours

O 5-10 hours

O Fewer than 5 hours

O No hours

29. Please rate your agreement with the following statements about your center's staff:	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
a. Staff at this center communicate effectively with each other.	О	O	О	O	O
b. Staff at this center help out even though it may not be part of their official assignment.	0	0	0	0	0
c. Staff at this center have an effective process for making group decisions.	О	О	О	О	О
d. Staff at this center have an effective process for solving problems.	О	О	О	О	О

30. Please rate your agreement with the following statements about your job:	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know
a. I enjoy working in this program.	0	O	О	O	О
b. I have the materials I need to do a good job.	О	О	О	О	О
c. I have the space I need to do a good job.	О	О	О	О	О
d. I get the support I need to do a good job.	О	О	О	О	О
e. I get the feedback I need from my supervisor.	0	О	О	О	О
f. I find working in this program rewarding.	0	О	О	О	О
g. In most ways, this job is close to my ideal.	О	О	О	O	О
h. The condition of my current job is excellent.	О	O	О	O	O
i. I am satisfied with this job.	О	O	О	O	О

31. Please indicate whether you receive each of the following and how often you use it in planning program activities:	Receive, and Use Frequently	Receive, and Use Sometimes	Receive, but Never Use	Do Not Receive
a. Students' academic or education plans	О	0	0	О
b. Students' standardized test scores	О	О	О	О
c. Students' grades	0	О	Ο	0
d. Input from students' school- day teachers	O	0	0	0
e. Input from parents	О	О	O	О
f. Other ( <i>Please</i> specify:)	О	О	О	О

32. How often do you discuss the following with principals, teachers, or other key staff at the			
participants' school(s) who are not center staff?	Frequently	Sometimes	Never
a. Curriculum concepts being taught in school	0	0	О
b. Homework assignments	O	О	О
c. The academic needs or progress of students participating in the program	О	0	О
d. Issues related to program logistics	0	0	О
e. Program attendance	О	О	О
f. Students' behavioral problems	О	О	О
g. How to make academic support in the program more effective	О	О	О
h. Other ( <i>Please specify</i> :)	О	О	О

33. How often do you	Frequently	Sometimes	Never
a. Send materials about the program home to parents?	О	О	О
b. Hold events or meetings to which parents are invited?	О	О	О
c. Hold events or meetings to which community members are invited?	О	О	О
d. Have conversations with parents over the phone?	О	О	O
e. Meet with one or more parents?	O	0	0

34. How often does your center provide the following types of events or activities for parents			
and families?	Frequently	Sometimes	Never
a. Classes to help parents develop their own skills (e.g., GED preparation, computer skills, etc.)	0	0	О
b. Parenting classes (e.g., classes to help parents learn about the school system and communicate with the school, how to help their children with schoolwork and prepare for tests, etc.)	0	0	О
c. English as a Second Language (ESL) classes	0	0	О
d. Opportunities to hear from and talk with representatives from local agencies or other organizations (e.g., health, police, employment and training programs)	0	0	О
e. Opportunities to attend cultural or recreational events in the community	0	0	О
f. Events at the program (e.g. meetings, performances, etc.)	О	О	О
g. Other ( <i>Please specify</i> :)	0	О	О

35.	Do you	ı evaluate	your	program	or assess	program	effectiveness?
-----	--------	------------	------	---------	-----------	---------	----------------

O Yes

O No

[IF YES to 35]

	the following types of evaluation does your program cond	luct? Please check
all that apply.		
	O Surveys of youth needs or interests	
	O Quality assessment	
	O Formal evaluation of youth outcomes	
	O Formal evaluation of program quality	
	O Formal evaluation of parental involvement	
	O Other ( <i>Please specify</i> :	)
[IF YES to 35	]	,
-	•	
37. How ofte	n do you conduct evaluation or program assessment activi	ities?
	O At least once a week	
	O 2-3 times per month	
	O Once a month	
	O 1-2 times per academic term	
	O Less than 1-2 times per academic term	
	O Never	
	O Other (Please specific	)

38. How much of a challenge to implementing high-quality programming are each of the following?	Significant Challenge	Moderate Challenge	Minimal Challenge	Not a Challenge
a. Adequacy of facilities and availability of space	О	О	О	О
b. Adequacy of instructional materials	О	О	0	О
c. Communication between center staff and staff at participants' school(s)	О	0	О	О
d. Recruitment of youth to participate	О	О	0	О
e. Youth attendance	О	O	О	О
f. Student readiness for or engagement in programming	0	0	0	0
g. Parent and family involvement	О	О	О	О
h. Sufficiency of program funding	O	0	O	0
i. Adequacy of staff training and experience	0	0	0	0
j. Other ( <i>Please</i> specify:)	0	О	0	0

# LEARNING POINT ASSOCIATES $Texas~21^{\text{st}}~CCLC~Evaluation$ Grantee~Director/Project~Coordinator~Survey

Thank you for taking the time to participate in the pilot of the Texas 21st Century Community Learning Centers (21st CCLCs) surveys. This survey is conducted by Learning Point Associates, an independent, non-profit education evaluation organization under contract to the Texas Education Agency. Your responses to the survey are strictly confidential. Results for a particular respondent or a particular program will not be released in any form. The aggregated results will be used by Learning Point Associates in conducting the statewide study of the 21st CCLC program, in particular to provide a descriptive profile of 21st CCLCs across the state. This is not an evaluation of any individual respondent, center, or grant.

If you have any questions or need assistance in completing the survey, please contact Manolya Tanyu (<a href="mailto:manolya.tanyu@learningpt.org">manolya.tanyu@learningpt.org</a>) or Chloe Hutchinson (<a href="mailto:chloe.hutchinson@learningpt.org">chloe.hutchinson@learningpt.org</a>) via email or at 1-800-356-2735. Thank you in advance for your participation.

Name.

Job Title:			
Grantee Name:		Grantee ID:	
ABOUT YOU			
1. In total, how m	nany years have you worked as a _	youth worker or teach	ner?
2. How many of t	those years have been with this p	program (including cur	rent year)?
3. How many of t	those years have been in a directo	or or coordinator capa	city (including

4. What is your highest level of education?
O Less than high school O High school or GED O Some college, other classes/training not related to a degree O Completed two-year college degree O Completed four-year college degree O Some graduate work O Master's degree or higher
5. Do you hold a teaching credential or certification?
O Yes O No
6. Did you work in this same position last year?
O Yes O No
7. On average, how many hours per week do you work in your capacity as grantee director/ project coordinator?

ABOUT YOUR PROGRAM

8. To what extent is each of the following an objective or goal of programming at centers funded by your grant?	Primary Objective	Secondary Objective	Not an Objective
a. Provide a safe environment for youth	О	О	О
b. Help youth improve their academic performance (e.g., grades, test scores)	О	О	О
c. Help youth improve their TAKS scores	0	0	О
d. Help youth develop socially	0	0	О
e. Provide opportunities for cultural enrichment	О	О	О
f. Provide recreational activities	О	О	О
g. Provide physical fitness or athletic opportunities	0	0	О
h. Provide activities to support college or career readiness	0	0	О
i. Provide health/well-being/life skills development	О	О	О
j. Provide community service or civic engagement opportunities	О	О	О
k. Provide leadership opportunities for youth	О	О	О
1. Provide hands-on academic enrichment activities	О	О	О
m. Help parents and/or other adults with literacy or other skills (e.g., parenting)	О	О	О
n. Help connect youth to their community	О	О	О
o. Support working families	0	0	О
p. Promote respect for diversity among youth	О	О	О
q. Help connect parents with their child's school and/or community	О	О	О

r. Identify health or social services youth need	О	0	О
s. Provide youth with positive adult guidance and/or mentors	О	0	О
t. Other ( <i>Please specify</i> :)	О	0	О

9. Please indicate which of these program objectives constitute the top	
three priorities for centers funded by your grant:	
	O
a. Provide a safe environment for youth	
b. Help youth improve their academic performance (e.g., grades, test	O
scores)	
c. Help youth improve their TAKS scores	Ο
A 7 A	0
d. Help youth develop socially	0
e. Provide opportunities for cultural enrichment	О
f. Provide recreational activities	O
g. Provide physical fitness or athletic opportunities	О
h. Provide activities to support college or career readiness	O
i. Provide health/well-being/life skills development	О
j. Provide community service or civic engagement opportunities	О
k. Provide leadership opportunities for youth	Ο
l. Provide hands-on academic enrichment activities	О
m. Help parents and/or other adults with literacy or other skills (e.g.,	0
parenting)	0
n. Help connect youth to their community	О
o. Support working families	О
p. Promote respect for diversity among youth	Ο
q. Help connect parents with their child's school and/or community	O
r. Identify health or social services youth need	Ο
s. Provide youth with positive adult guidance and/or mentors	О
t. Other ( <i>Please specify</i> :)	0

10. To what extent is the provision of activities in the following areas a priority for centers funded by your grant?	Primary Priority	Secondary Priority	Not a Priority
a. Activities to support academic skills development and/or academic achievement	0	О	O
b. Activities to support artistic development and social and cultural awareness	0	О	O
c. Activities to support physical fitness, recreation, and healthy life skills	0	0	О
d. Activities to support civic engagement and community services	0	О	O
e. Activities to support career exploration and development	0	0	О
f. Activities to support college or career readiness	0	О	O

11. To what extent are centers funded by your grant:	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Providing students with learning opportunities not available during the regular school day?	О	О	О	О	0
b. Providing enough available spots to serve all interested students?	0	O	0	0	0
c. Providing curriculum and instruction that reinforce concepts aligned with the school day?	0	О	Ο	0	0
d. Contributing to the overall effectiveness of their feeder schools?	0	0	0	0	0
e. Contributing to improved student skills in reading?	О	0	O	О	0
f. Contributing to improved student skills in math?	0	0	O	О	О
g. Contributing to improved student behaviors?	O	О	О	0	О

12. To what extent are centers funded by your grant:	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Coordinating program offerings with each other?	О	О	0	О	О
b. Offering programming coordinated with the regular school day?	O	0	0	Ο	О
c. Employing school day teachers who work directly in the centers in addition to the regular school day?	O	О	0	0	O
d. Facilitating interaction between center staff and school day teachers to support program delivery?	O	О	0	0	0
e. Establishing mechanisms for communication between school day teachers and center staff?	Ο	0	0	0	О
f. Offering programming to engage and involve students' families?	O	О	O	О	0
g. Establishing mechanisms for communication between center staff and participants' parents?	О	О	0	О	0

13. To what extent are you involved in:	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. The overall management of centers funded by your grant?	0	0	О	O	О
b. The daily operations of centers funded by your grant?	O	0	0	О	О
c. Allocating funds and managing fiscal operations of centers funded by your grant?	0	0	0	Ο	О
d. Coordinating transportation to and from centers funded by your grant?	0	0	0	Ο	О
e. Providing curriculum materials for centers funded by your grant?	0	0	0	Ο	О
f. Hiring staff for and/or staffing centers funded by your grant?	0	0	0	Ο	О
g. Providing staff development for staff at centers funded by your grant?	0	O	0	Ο	О

14. To what extent are you involved in:	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Program goal-setting for centers funded by your grant?	О	О	О	O	О
b. Linking program goals to program design for centers funded by your grant?	0	O	О	0	О
c. Evaluating program implementation in centers funded by your grant?	0	0	0	0	О
d. Assessing student progress in centers funded by your grant?	0	О	О	0	О
e. Establishing measures of program effectiveness for centers funded by your grant?	0	O	О	0	О
f. Collecting program data from centers funded by your grant?	0	О	О	0	О
g. Facilitating the submission of or supplying program data for state and federal reporting requirements?	О	О	О	О	О

15. To what extent are staff at centers funded by your grant expected to:	Very Much	Moderately	Somewhat	Not at All	Not Applicable
a. Report data to the grantee office on program operations	О	О	О	0	О
b. Report data to the grantee office on program outcomes	О	О	О	O	О
c. Develop tutorial or other student learning plans for program participants	О	О	О	О	О
d. Align student learning plans to district or state standards	О	О	O	O	О

16. How much of a challenge to implementing high-quality				
programming are each of the	Significant	Moderate	Minimal	Not a
following?	Challenge	Challenge	Challenge	Challenge
a. Adequacy of facilities and availability of space	О	Ο	О	О
b. Adequacy of instructional materials	О	О	О	О
c. Communication between center staff and staff at participants' school(s)	0	О	О	О
d. Recruitment of youth to participate	О	O	O	O
e. Youth attendance	0	О	0	О
f. Student readiness for or engagement in programming	0	O	O	О
g. Parent and family involvement	0	О	О	О
h. Sufficiency of program funding	0	O	О	O
i. Adequacy of staff training and experience	О	О	О	О
j. Other ( <i>Please</i> specify:)	О	О	О	О