EVALUATION OF OST PROGRAMS FOR YOUTH

Patterns of Youth Retention in OST Programs, 2005-06 to 2006-07

Lee M. Pearson
Christina A. Russell
Elizabeth R. Reisner

Policy Studies Associates, Inc.

June 2007

Contents

June 2007

Summary

This report presents the results of analyses examining the extent to which youth who participated in programs supported by the Out-of-School Time Programs for Youth (OST) initiative during the FY 2006 programs period (school year 2005-06, or Year 1) continued to participate in the FY 2007 program period (school year 2006-07, or Year 2). The report also describes the characteristics of youth participants and OST programs with differing program retention patterns. In addition, these analyses review enrollment and retention patterns of youth who participated in OST programs during the summer of 2006.

Analysis findings indicate that many OST programs were successful in re-enrolling large percentages of New York City youth for a second year of OST services. Of the participants who attended an OST program in the initiative's first year and were eligible to return to that program, 37 percent enrolled in the same OST program in 2006-07, according to Year 2 enrollment data available as of December 15, 2006. At the program level, retention rates were highest in Option I programs. Within Option I, retention rates were higher in elementary-grades programs than in programs serving older youth. Overall, Option I center-based programs achieved higher rates of participant retention than did Option I school-based programs.

OST programs delivered services to over 13,000 participants in 176 locations across the city during the summer of 2006. The evidence suggests that summer programming boosted school-year participation in Year 2. Programs that offered summer services achieved significantly higher Year 1 to Year 2 retention rates than did programs that did not offer summer services.

Programs that were most successful in retaining students from the 2005-06 to 2006-07 school years differed from programs with lower retention rates in important ways. Programs with higher rates of youth retention paid their program directors higher salaries and employed program directors with more advanced educational credentials. Programs with higher youth retention were also more likely to include a parent liaison on staff, especially a volunteer parent liaison. These programs served youth who reported in Year 1 a greater sense of belonging, more positive interactions with program staff, and higher academic self-esteem. Programs with high youth retention most often had a strong academic or arts focus, and they offered activities intended to improve participants' academic performance through enrichment activities that included active, hands-on learning experiences (e.g., youth creating a poem collaboratively using both words and physical actions, youth analyzing a song to probe its meaning).

One of the strongest predictors of participant retention was program attendance in Year 1. Examined at the participant level and across grades, eligible youth who attended an Option I OST program at a rate of at least 66 percent in Year 1 had better than even odds of participating again in Year 2.

Evaluation Context

In 2006-07, the second year in which services were delivered under the OST initiative, the New York City Department of Youth and Community Development (DYCD) aimed to extend its reach to 65,000 youth in 550 programs throughout the city. Working closely with the city's nonprofit community and the New York City Department of Education (DOE), DYCD continued efforts begun earlier to foster a comprehensive, coordinated system of support for high-quality out-of-school time programs to serve increasing numbers of the city's youth and their families.

As originally conceived and currently implemented in the OST initiative, program engagement is a central indicator of the success of the OST enterprise. Recognizing that consistent program attendance is related to positive youth outcomes, DYCD established enrollment and attendance targets in its contracts with OST providers. In the second year of the initiative, DYCD worked to encourage high participation levels by: (1) offering technical assistance to all OST programs on methods to increase attendance levels; (2) adjusting reimbursement levels for programs that did not meet participation targets; (3) promoting partnerships between schools and providers to support recruitment and retention efforts; and (4) working to better understand and respond to the needs and preferences of participants.

In this report, OST evaluators used data obtained from OST Online, the initiative's program-management and data-collection system, to examine evidence of student engagement in the OST initiative, as measured by participant retention from the first to the second program year. Analyses also examined retention patterns associated with youth participation in OST programs during the summer of 2006. In particular, this report addresses the following questions:

> To what extent did first-year OST participants continue to attend their OST programs in the second year of the initiative?

> What was the relationship between summer participation in OST programs and school-year participation?

> In what ways did participants' patterns of program attendance and retention vary based on the features of their OST programs and on their expressed reactions to the program in the first year?

The analyses presented here are rooted in the theory of change that guides the three-year evaluation of the OST initiative. This theory posits that high-quality, well-designed OST programs can contribute to positive outcomes for youth in areas of both social and educational functioning. However, for youth to fully benefit from these OST programs, they must have continuous exposure over time to the activities and supports that the programs provide. Youth need to participate in high-quality OST programming on a regular and sustained basis, in order to benefit in measurable ways from participation. Evidence from prior research makes clear that regular program attendance is strongly associated with development of the types of positive social and education-related youth outcomes sought through the OST initiative (Chaput, Little, &

Weiss, 2004). Previous studies also have found that youth who participate in out-of-school time programming for a longer duration and with greater frequency display the strongest benefits (Huang, Gribbons, Kim, Lee, & Baker, 2000; Reisner, White, Russell, & Birmingham, 2004).

The OST evaluation measures program engagement in ways that are consistent with the following four measures of OST program engagement (Chaput et al., 2004):

- **Enrollment:** Whether youth spend any time in an OST program

- **Intensity:** The amount of time that youth spend in a program during a given period

- **Duration:** A youth's attendance history across program years

- **Breadth:** The variety of OST activities in which youth participate

The first-year evaluation report described program engagement in terms of enrollment and intensity of participation, and concluded that in their start-up year OST programs successfully enrolled students but struggled to maintain high youth participation rates (Russell, Reisner, Pearson, Afolabi, Miller, & Mielke, 2006). In 2005-06, OST programs enrolled an impressive 50,000-plus participants in more than 500 programs throughout New York City. Findings about the intensity of participation were more modest, however: in elementary- and middle-grades programs, a quarter of participants received the minimum threshold of hours of programming sought by DYCD, as did about a third of high school participants. In 2006-07 and 2007-08, evaluators are continuing to track whether the intensity of youth participation in OST programming increases as programs become more established in their schools and communities, a pattern found in prior studies (e.g., Reisner et al., 2004).

This report focuses on analyses of program retention from Year 1 to Year 2 of the OST initiative, as a precursor to planned analyses of youth outcomes based on duration of participation. Using enrollment data obtained from OST Online for the 2005-06 school year, summer 2006, and the 2006-07 school year, this report examines rates of youth retention across the OST initiative and in specific OST programs, in order to identify patterns of high, medium, and low program retention associated with relevant participant and program characteristics. The report also describes patterns of enrollment in summer OST programming. Finally, for participants enrolled in one of the 15 OST programs selected at random for especially close review in the OST evaluation (known as the in-depth sample), this report presents early findings regarding the associations between youths' program experiences and their program retention.

Program Retention from Year 1 to Year 2

The evaluation examined the overall rate at which OST participants from the 2005-06 school year re-enrolled in the same OST program in the 2006-07 school year. These analyses accounted for the possibility that some participants would have aged out because they had reached the highest grade served in their OST program (which generally occurred because a

program was designed to serve the students in a particular school that in turn served a particular grade range).[1] So, for example, the analysis of retention in an OST program based in an elementary school serving grades K-5 would exclude students who were fifth-graders in 2005-06 because those students could not have continued to participate in the same program as sixth-graders in 2006-07.

The analysis of Year 2 retention could not account for the possibility that some Year 1 participants may have been turned away from OST programs in Year 2 due to limited numbers of DYCD-funded program slots. Programs typically enrolled interested youth at the beginning of the school year on a first-come first-served basis. It is very possible that some Year 1 participants were put on waiting lists for Year 2 participation, due to shortages of slots in particular OST programs. Youth on the waiting lists either stood by until slots opened up or decided not to pursue Year 2 enrollment. Neither DYCD nor the OST evaluators know how many Year 1 participants may have been affected in this way.

Of the 38,860 participants who attended an OST program in the initiative's first year and were eligible to return to that program, 14,527 (37 percent) enrolled in the same OST program in 2006-07. Computed at the program level, OST programs retained an average of 36 percent of eligible youth. These percentages are slightly different because the participant average weights all participants the same, while the program average weights all programs the same. The small difference would arise because many OST programs with low enrollments apparently have lower retention rates than do many programs with high enrollments, and the program average does not take account of programs' differing enrollment sizes.

The average rates of participant retention in OST programming varied considerably across programs. In the 497 programs for which both 2005-06 and 2006-07 enrollment data were available, the percent of 2005-06 participants who re-enrolled for the 2006-07 year ranged from 0 to 100. To examine this wide variation, evaluators categorized OST programs into one of three retention levels, based on their average rate of participant re-enrollment:

■ **Low retention:** Less than one-third of eligible Year 1 participants returned to the program in Year 2.

■ **Medium retention:** Between one-third and two-thirds of participants re-enrolled in Year 2.

■ **High retention:** More than two-thirds of participants continued participation.

As illustrated in Exhibit 1, half of OST programs re-enrolled fewer than one-third of eligible Year 1 participants in Year 2 of the program. Eleven percent of programs retained at least two-thirds of participants and were classified as having a high retention rate.

---

[1] For all programs (both center-based and school-based), evaluators empirically determined the highest grade served by examining the grade levels of participants served by the program in either 2005-06 or 2006-07. If a participant was enrolled in the highest grade ever served by the program in 2005-06, we considered the participant to have aged out of the program in 2006-07 and hence excluded that youth from the retention analysis. Including the 2006-07 school year in the review permitted analyses to accommodate programs that added a new grade in that year.

The analyses that follow describe program features associated with OST programs in each of these retention categories, focusing on the features of programs that succeeded in re-enrolling a high percentage of their first-year participants. These analyses should not be interpreted to imply causality. Nevertheless, identification of program elements that distinguish high-retention OST programs provides early insights into features that may be associated with positive youth outcomes in later years of the evaluation.

Exhibit 1
Number of OST Programs at Each Level of
Participant Retention from 2005-06 to 2006-07

Retention Level	All Programs (n=497)
Low Retention	246 (50%)
Medium Retention	199 (40%)
High Retention	52 (11%)

Note: Percentages do not necessarily total 100 due to rounding.

Patterns of Variation in Program Retention

Variation by program option. DYCD supports OST programs under three program options, of which Option I is the largest, supporting programs that are school- or center-based and that serve youth in grades K-12. Option II programs are allowed to provide a much lower frequency and duration of school-based or center-based programming. Because Option II programs use private match funds to supplement at least 30 percent of their OST funding, they are allotted a lower per-child OST reimbursement than is used in either Option I or Option III programs. Option III programs operate in collaboration with the Department of Parks and Recreation during the school year only.

The rates at which participants re-enrolled in an OST program in 2006-07 varied considerably by program option, as shown in Exhibit 2. Less than half of Option I programs had low rates of retention, compared with nearly two-thirds of Option II programs and all Option III programs. At the participant level, in Option I OST programs, 40 percent of eligible youth continued enrollment for a second year, compared with 30 percent of youth in Option II programs and 8 percent of youth in Option III programs.

Exhibit 2
Number of OST Programs at Each Level of
Participant Retention from 2005-06 to 2006-07, by Program Option

Retention Level	Option I (n=403)	Option II (n=84)	Option III (n=10)
Low Retention	183 (45%)	53 (63%)	10 (100%)
Medium Retention	174 (43%)	25 (30%)	0
High Retention	46 (11%)	6 (7%)	0

Note: Percentages do not necessarily total 100 due to rounding.

Variation by program location. As shown in Exhibit 3, a higher percentage of center-based programs achieved a high level of participant retention (17 percent of programs) than did school-based programs (8 percent). Similar proportions of school-based and center-based programs experienced low and medium retention rates, consistent with the participant-level finding of overall moderate re-enrollment in both school-based and center-based programs. No differences between school- and center-based programs were evident when programs were broken down by grade span served. Analyzed at the *participant* level, retention did not vary significantly based on whether the participant's program was center-based or school-based: both types of programs re-enrolled an average of 40 percent of eligible participants.

Exhibit 3
Number of Option I OST Programs at Each Level of
Participant Retention from 2005-06 to 2006-07, by Program Location

Retention Level	School-based (n=264)	Center-based (n=139)
Low Retention	123 (47%)	60 (43%)
Medium Retention	119 (45%)	55 (41%)
High Retention	22 (8%)	24 (17%)

Note: Percentages do not necessarily total 100 due to rounding.

Variation by grade level. Within Option I programs, elementary-grades students were more likely to continue participation in an OST program for a second year than were older students. Fifty percent of 2005-06 participants who attended an elementary-grades OST program enrolled in the same OST program in 2006-07, compared with 31 percent of middle-grades participants and 29 percent of high school participants.

These participant-level patterns of program retention by grade level remain the same when analyzed at the program level: elementary-grades OST programs were most successful in

retaining participants from the 2005-06 school year to 2006-07, and high school programs were most likely to have low rates of retention, as shown in Exhibit 4.

Exhibit 4
Number of Option I OST Programs at Each Level of
Participant Retention from 2005-06 to 2006-07, by Grade Level

Retention Level	Elementary (n=168)	Middle (n=120)	High (n=115)
Low Retention	41 (24%)	69 (58%)	73 (64%)
Medium Retention	97 (58%)	44 (37%)	33 (29%)
High Retention	30 (18%)	7 (6%)	9 (8%)

Note: Percentages do not necessarily total 100 due to rounding.

Program retention across the OST initiative. Analyses were also conducted to examine the rate at which youth continued participating in OST programming for a second year in any program across the DYCD initiative, not just the program that the youth attended in the first year. Of the 46,535 participants who attended an Option I, II, or III program in 2005-06, a total of 15,654 (34 percent) were enrolled in an OST program in 2006-07, excluding youth who were in grade 12 in 2005-06 and therefore not expected to continue OST participation. This rate is lower than the 37 percent of participants who continued in the same program, because the 37 percent excludes youth who would have aged out of their elementary- or middle-grades program at the end of the 2005-06 school year.

These figures suggest that the vast majority of participants who continued enrollment for a second year remained within their original OST program. In fact, only 5 percent of the youth who were enrolled in both 2005-06 and 2006-07 transferred to a new OST program in the second year of the OST initiative, according to data available in OST Online. As DYCD continues to help OST programs build capacity and expand services throughout New York City, this rate of program transfer can be expected to increase, as youth have more opportunities to enroll in a new OST program when they age out of their current program or move to a new neighborhood.

Comparison to retention rates found in another large initiative. To put the OST retention pattern in perspective, it may be useful to examine after-school retention rates computed in the evaluation of programs operated by The After School Corporation (TASC) prior to the initiation of the OST program. Among students in grades K-5 who participated in a TASC program in the first year of the initiative (1998-99) and would not have aged out of their particular program (n=8,958), 49 percent enrolled in the same program the following school year (Policy Studies Associates, Inc., unpublished analysis). The rate of program retention was 39 percent for first-year TASC participants in grades 6 and 7 (n=1,226). In addition, evaluators found that the majority of TASC participants who did not continue their program participation were no longer enrolled in the same school, according to data extracted from DOE databases. The TASC elementary-grades retention rate of 49 percent is similar to the finding reported above for OST elementary-grades participants, at 50 percent. The lower retention rate for OST middle-grades participants (31 percent in OST, compared to 39 percent in TASC) may reflect OST's less

frequent program offerings, in comparison to TASC's daily programming for middle-grades youth.

Impact of Summer Participation on Retention

As part of its efforts to provide comprehensive out-of-school time services to families throughout New York City, DYCD funded certain OST programs to provide services to youth during the summer of 2006. According to data entered in OST Online, 13,160 youth participated in 176 OST programs during the summer months. These included 131 Option I programs serving elementary- and middle-grades youth and 45 Option II programs serving youth of all grade levels. Of the 176 programs that enrolled participants in summer 2006, 160 also provided services in both the 2005-06 school year and the 2006-07 school year. The remaining 16 programs were open only in summer 2006.

For Option I programs, evaluators examined the relationship of summer participation to each program's number of summer slots. Like the school-year programs, Option I summer programs were each funded for a certain number of slots, based on program providers' projections. Actual enrollments differed from projections in many instances, however. Of the 131 Option I summer programs, 54 percent (71 out of 131) met their target enrollment by enrolling youth in at least 99 percent of available slots. Programs serving younger youth were more likely to meet their target enrollments. Fifty-eight percent of Option I elementary-grades programs (52 out of 89) met their targets, compared with 45 percent of middle-grades programs (19 out of 42). No information is available to indicate whether any youth was turned away from any summer program, nor is it known how programs determined which youth to serve and which to turn away, if in fact they denied summer services to anyone.

Evaluators examined whether there were any systematic differences in retention patterns among Option I programs based on their under- or over-enrollment of summer participants relative to their number of summer slots. Analyses found no differences between school-based and center-based programs in their incidence of over- or under-enrollment relative to slots. Similarly, both under-enrolled and fully/over-enrolled programs retained the same percent of youth from summer to Year 2. Also, both under-enrolled and fully/over-enrolled programs served the same proportion of Year 1 participants in summer 2006.

Evaluators examined the rates of retention from school-year to summer programming. On average, about one-third of youth (34 percent) who attended an OST program during the 2005-06 school year that also provided services during summer 2006 continued their participation during the summer months. Among Option I programs, center-based OST programs had substantially higher rates of program retention between the 2005-06 school year and summer 2006 than did school-based programs. About half (52 percent) of participants who were enrolled in an Option I center-based program with a summer component continued participation during the summer, compared with 29 percent of participants who were enrolled in a school-based program that offered summer programming. Analyses also found important differences in summer retention by grade level, with 41 percent of eligible elementary-grades

participants enrolling in the summer component, compared with 18 percent of middle-grades participants.

Evidence indicates that attendance in summer programs boosted school-year participation in Year 2. Overall, OST programs that offered summer programming achieved an average retention rate of 41 percent from 2005-06 to 2006-07, significantly higher than the average 33 percent retention rate for programs without summer services. Across all programs that offered services in summer 2006 and the 2006-07 school year, 49 percent of summer participants continued their enrollment in 2006-07 school-year programming. This was true for 49 percent of Option I participants and 51 percent of Option II participants. Among Option I programs, center-based programs reported a higher proportion of summer participants continuing their enrollment during the school year than did school-based programs (61 percent, compared with 43 percent). Elementary-grades programs achieved a higher rate of retention between summer and the following school year than did middle-grades programs (54 percent, compared with 30 percent).

Patterns of Association Linking Retention to Structural and Institutional Features

The theory of change that guides the OST evaluation is based on the proposition that certain features of OST programs contribute to high-quality programming and positive youth outcomes. These contributing components include a set of structural and institutional features and a set of process and content features. Relevant structural and institutional features include staff qualifications and support, program size and group configurations, program resources, and external partnerships and outreach. Evaluators examined the structural and institutional features of Option I programs that were characterized by various levels of program retention. In these analyses, retention level may serve, in effect, as an indicator of a program's appeal and attractiveness to youth and families over time.

Program features that varied significantly based on program retention level are described below. All differences reported are statistically significant at $p<.05$ based on either a chi-square test or a Pearson's correlation (r). For chi-square analyses, measures of association are characterized using the gamma statistic (γ), which indicates the strength of the relationship between two ordinal variables. Similar to correlation coefficients, gamma values range from -1 to 1, with values close to 0 indicating little or no relationship. Conventions for educational research suggest that a value between 0.10 and 0.20 indicates a "small but meaningful" association, a value between 0.21 and 0.50 an "important" association, and a value of 0.51 or higher an "impressive" association (Cohen, 1988; Lipsey, 1990).

Staff Salaries and Qualifications

Analyses examined available data on staff compensation and qualifications to identify possible associations with program retention level. Notably, programs that were successful at retaining youth from the 2005-06 to 2006-07 school years were more likely to employ a program director who earned at least $50,000 per year, compared to programs with lower retention rates.

Across all Option I programs, program directors earned a salary of at least $50,000 in 47 percent of high-retention programs, compared with 23 percent of medium-retention programs and 24 percent of low-retention programs (γ=.18), as shown in Exhibit 5. After breaking down Option I programs by grade level, this pattern remained significant among Option I high school programs but not among elementary- or middle-grades programs. In high school programs, 71 percent of programs with high retention paid program directors at least $50,000, compared with 31 percent of medium-retention programs and 15 percent of low-retention programs, as shown in Exhibit 6. In high school programs, the relationship between retention level and program director salary met the "impressive" criterion (γ=.60).

In addition, the program director's level of education was positively associated with high rates of program retention in middle-grades programs and in school-based programs. Program directors of high-retention programs were significantly more likely to have a master's degree than were program directors at medium-retention programs. Directors of programs with low retention did not follow this pattern of association, however.

Exhibit 5
Percent of Option I Programs in Which the Program Director
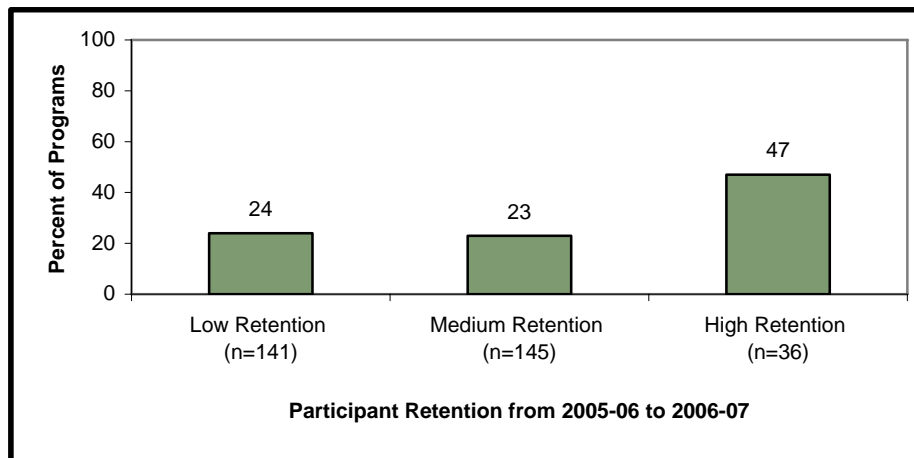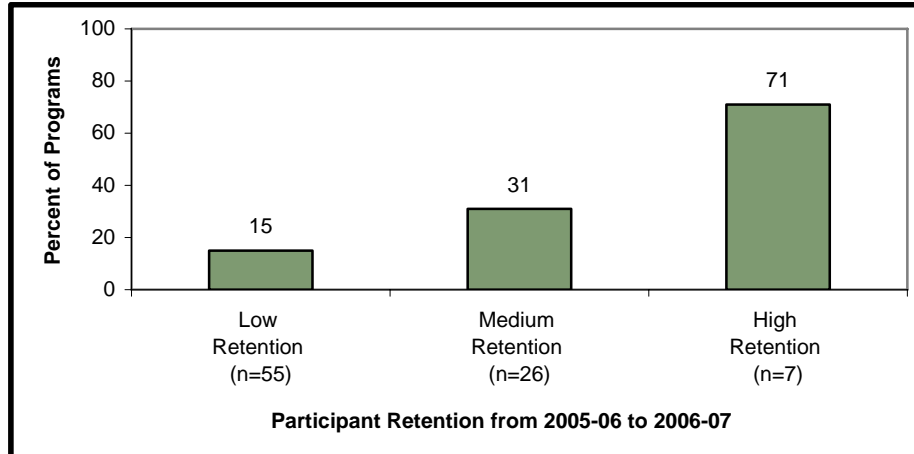**Earned at Least $50,000 per Year, by Participant Retention Rate**

Exhibit 6
Percent of Option I High School Programs in Which
the Program Director Earned at Least $50,000 per Year,
**by Participant Retention Rate**

Broken down by grade-level subgroup, evaluators found that 86 percent of directors of middle-grades programs with high rates of participant re-enrollment had at least a master's degree, compared with 26 percent of directors with a master's degree in medium-retention programs and 42 percent of directors in low-retention programs. Similarly, 62 percent of directors of school-based programs with high retention rates had at least a master's degree, compared with 35 percent of directors in programs that achieved medium retention and 47 percent of directors in programs with low retention. However, the magnitudes of these associations were too low to be considered meaningful ordinal relationships (γ=.06 for each).

Outreach to Families

Outreach to families was also associated with high levels of participant retention. In particular, programs with higher rates of participant retention were more likely to have a parent liaison on staff, either as a volunteer or paid staff member. About half (53 percent) of Option I programs with high rates of youth re-enrollment in 2006-07 had a parent liaison in the first year of the initiative, compared with 39 percent of programs with medium retention and 31 percent of programs with low retention (γ=.23), as shown in Exhibit 7. This trend was especially evident in center-based programs: 55 percent of center-based OST programs with high retention rates had a parent liaison, compared with 28 percent of medium-retention programs and 23 percent of low-retention programs (γ=.36), as shown in Exhibit 8. Having a parent liaison on staff was also significantly associated with high retention rates for high school programs: 63 percent of high school programs with high retention had a parent liaison, compared with 17 percent of high school programs with medium retention and 22 percent of programs with low retention (γ=.22), as shown in Exhibit 9. These relationships were of an "important" magnitude for each of these groups, especially for center-based programs.

Exhibit 7
Percent of Option I Programs with a Parent Liaison on Staff,
by Participant Retention Rate
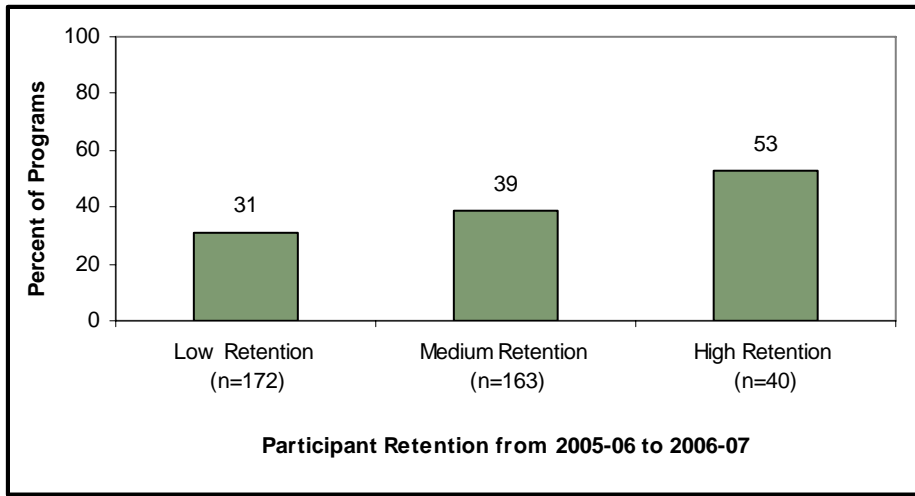
To understand more about the characteristics of parent liaisons, evaluators asked whether retention patterns differed when parent liaisons worked as volunteers or as paid staff. Analyses of the retention patterns associated with volunteer versus paid parent liaisons revealed that positive associations were statistically significant only in the case of volunteer parent liaisons. The same linear patterns were evident for programs with paid parent liaisons, but those associations were not statistically significant and thus could have been the result of chance. In particular, among Option I programs with high retention, 41 percent had a volunteer parent liaison, as did 24 percent of medium-retention programs and 14 percent of low-retention programs (γ=.39).

Exhibit 8
Percent of Option I Center-Based Programs
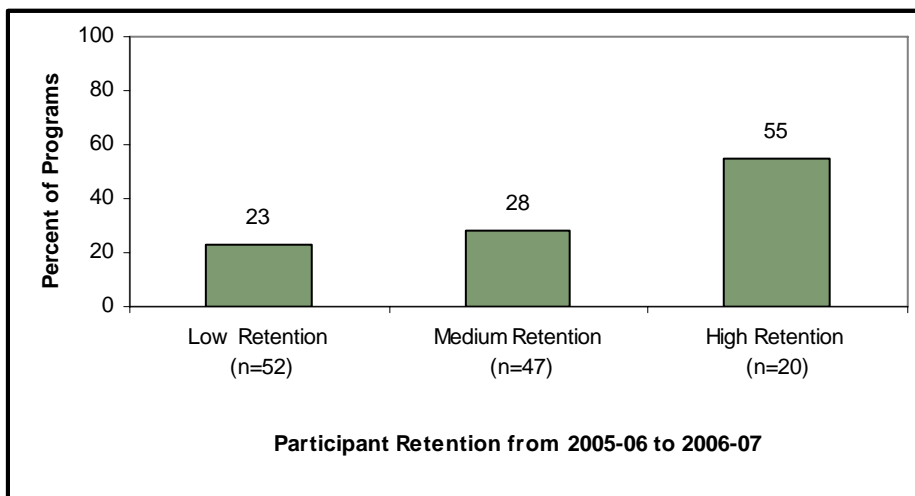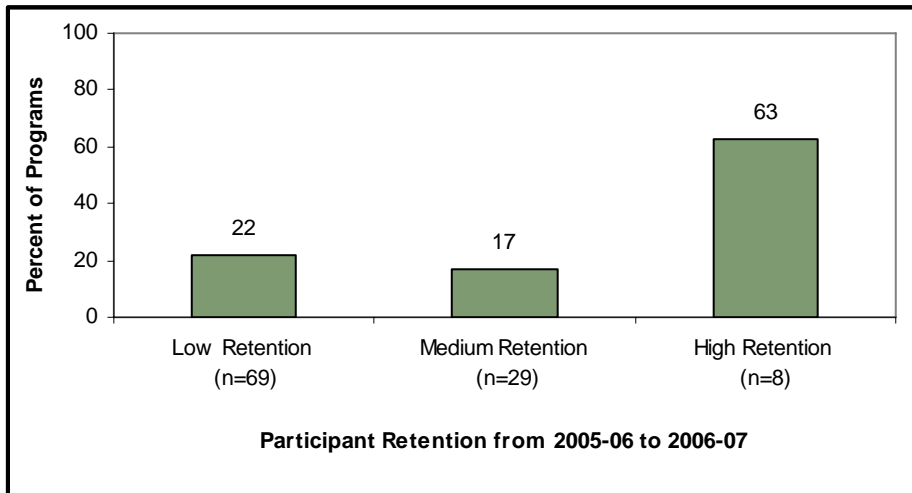**with a Parent Liaison on Staff, by Participant Retention Rate**

Exhibit 9
Percent of Option I High School Programs
with a Parent Liaison on Staff, by Participant Retention Rate

Similarly, medium-retention programs were significantly more likely to report that they intentionally reached out to participants' families in the first year of the initiative than were low-retention programs. High-retention programs did not reliably fit into the pattern of association between family outreach and retention, however, perhaps because many high-retention programs had already included parent liaisons on staff, thus demonstrating a commitment to family outreach irrespective of their response to the survey questions on family outreach. Among Option I programs, 73 percent of programs with high rates of retention reported that supporting working families was a major objective, as did 77 percent of programs with medium levels of retention and 62 percent of programs with low rates of retention (γ=.26). This pattern was strongest in school-based programs, in which 76 percent of high-retention programs reported a primary goal of supporting working families, compared with 77 percent of medium-retention programs and 59 percent of low-retention programs (γ=.35).

Patterns of Association Linking Retention to Process and Content Features

The evaluation's theory of change states that the presence of certain process and content features of OST programs promotes positive youth outcomes, including youth engagement. Analyses of retention patterns suggest that the program processes and content features with the most significant relationship to youth retention are the development of positive relationships between youth and staff and the availability of activities with rich program content. Patterns of significant difference are described below.

Positive Relationships

Program retention was positively associated with participant reports of their sense of belonging in the OST program (r=.42) and their reports of the quality of their interactions with staff (r =.40), indicating that programs that successfully provided a safe, welcoming, and age-appropriate environment were best able to foster longer-term youth participation.

Rich Program Content

Programs with high retention rates (i.e., at least two-thirds of first-year participants re-enrolling for a second year) were more likely to report certain types of program objectives than were programs with medium or low retention rates. Among Option I programs, those with high retention rates were more likely to identify helping youth improve their academic performance as a major program objective than were programs with lower rates of re-enrollment in 2005-06: 93 percent of programs with high retention reported this was a major objective, as did 91 percent of programs with medium retention and 83 percent of programs with high retention (γ=.33), as shown in Exhibit 10.

Exhibit 10
Percent of Option I Programs Reporting That Improving Participants' Academic Performance Was a Major Objective, by Participant Retention Rate
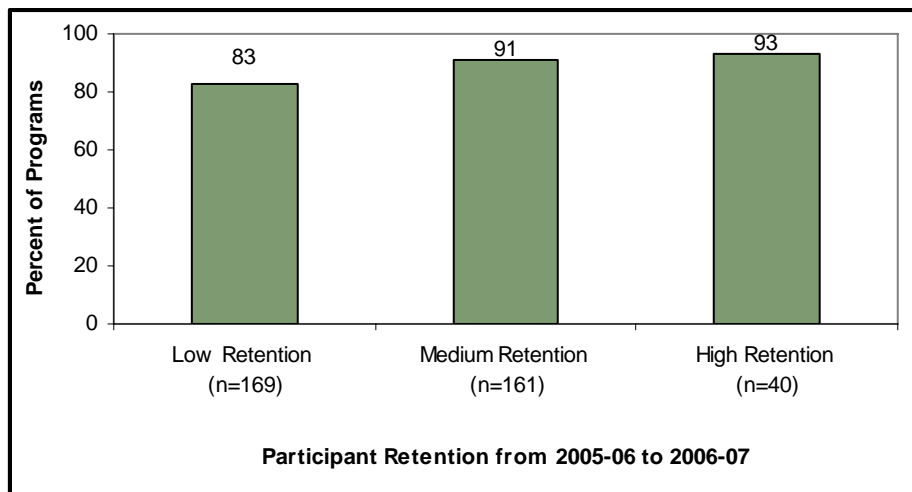
Similarly, programs with high retention were significantly more likely to report a focus on providing hands-on enrichment activities, as shown in Exhibit 11: 90 percent of programs with a high retention rate reported this as a major objective in 2005-06, compared with 87 percent of programs with a medium retention rate and 74 percent of programs with low retention (γ=.40). This pattern was especially pronounced for high school programs: all high school programs with a high rate of re-enrollment reported that providing hands-on enrichment activities was a major objective, compared with 72 percent of high school programs with a

medium retention rate and 47 percent of programs with low retention ($\gamma=.62$), as shown in Exhibit 12. Analyses also found significant associations between programs' reports of prioritizing hands-on enrichment activities and rates of retention in center-based programs. Ninety-five percent of center-based programs with a high rate of retention reported that providing hands-on enrichment activities was a goal, as did 89 percent of center-based programs with a medium rate of retention and 70 percent with a low rate ($\gamma=.59$), as shown in Exhibit 13. Examples of active, hands-on learning experiences from Year I site visits included the following: youth creating a poem collaboratively using both words and physical poses to depict the poetic narrative; youth listening to a song and analyzing its meaning and relevance.

Attracting and retaining middle-grades youth in out-of-school time programming is notoriously challenging. Patterns of association with program retention in Option I middle-grades programs provide insight into the types of experiences that appeal to youth in this age group and that encourage them to continue participation. Among middle-grades programs in the evaluation's participant survey sample, program retention from 2005-06 to 2006-07 was significantly correlated with participant reports that the OST program exposed them to new experiences ($r=.47$), as measured by a survey scale constructed by the evaluation. This survey scale was composed of the following items:

- The activities really get me interested
- I get a chance to do a lot of new things
- There is a lot for me to choose to do
- I get to work on projects that really made me think
- I get to do things that I don't usually get to do anywhere else

Exhibit 11
Percent of Option I Programs Reporting That Providing
Hands-on Academic Enrichment Activities Was a Major Objective,
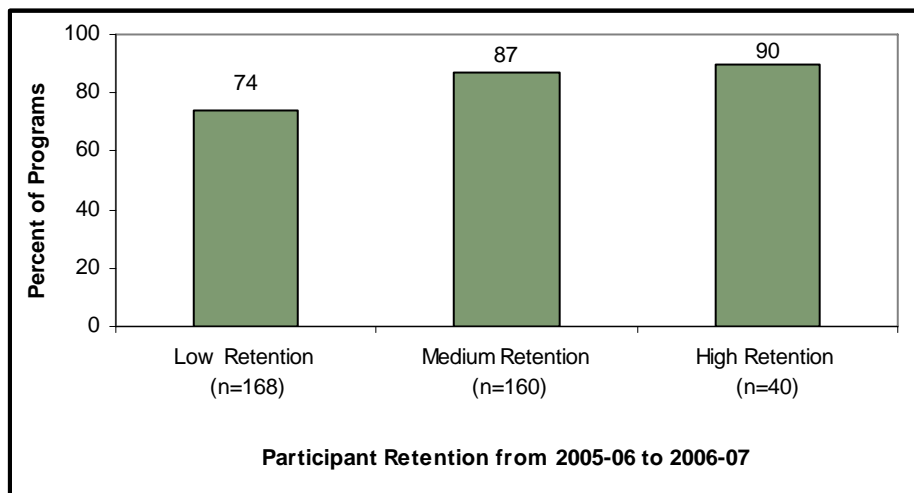**by Participant Retention Rate**

Exhibit 12
Percent of Option I High School Programs Reporting That Providing
Hands-on Academic Enrichment Activities Was a Major Objective,
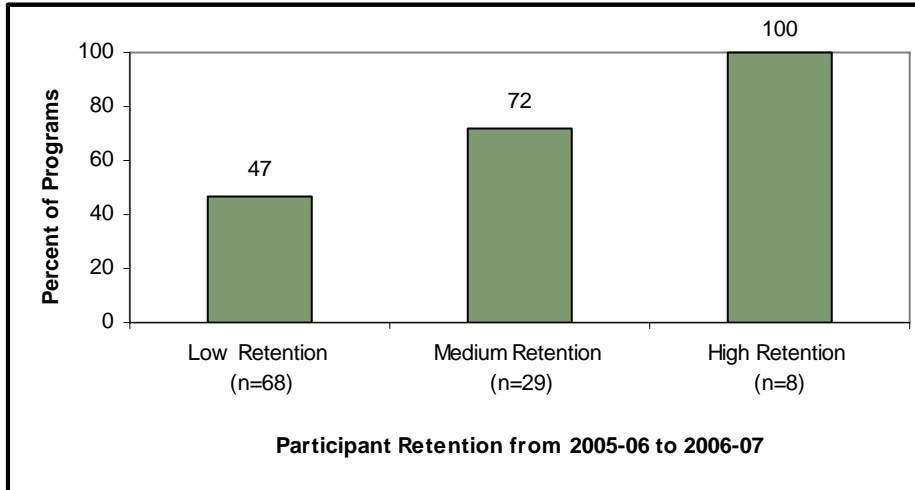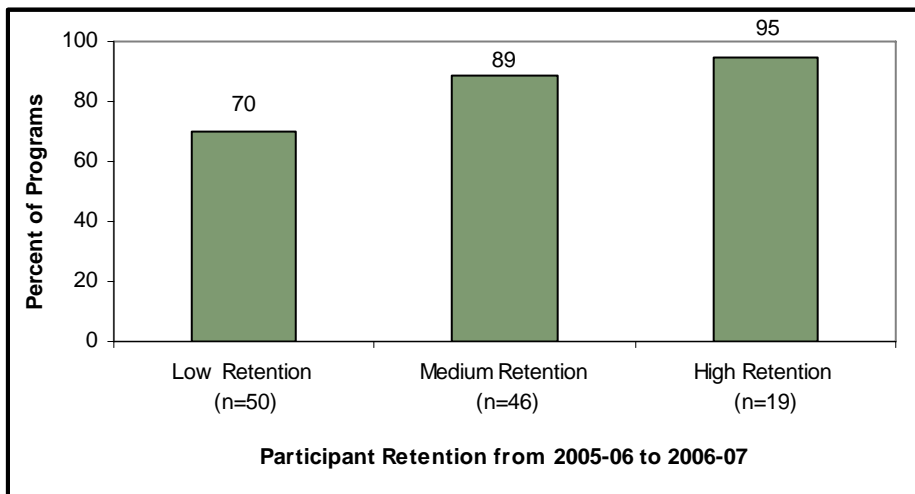**by Participant Retention Rate**

Exhibit 13
Percent of Option I Center-Based Programs Reporting That Providing
Hands-on Academic Enrichment Activities Was a Major Objective,
by Participant Retention Rate

Examples of such experiences observed in Year I site visits included the following. In one site, a professional fashion designer met with an OST fashion club to explain fabric and the design process. Youth participants asked many questions, which the designer answered in a professional give-and-take discussion. In another program, youth in a media club learned how to

prepare a storyboard by developing one together after watching a short video. They each then developed their own storyboard for their own film-design project. In this instance also, the learning process involved extensive questioning and discussion.

Based on program directors' survey responses regarding the frequency and availability of activities related to different content areas in the first year of the initiative, evaluators analyzed associations between program retention and program-level content. This analysis produced findings similar to those found in the analyses of program objectives. Programs with a strong focus on academic activities, as measured based on program director reports of program activities, tended to have higher rates of program retention, on average (r=.21). This was especially significant for school-based programs (r=.24). In addition, a strong program focus on arts activities in 2005-06 was positively associated with program retention across Option I programs (r=.18), particularly in school-based OST programs (r=.25).

For the OST programs in the evaluation's in-depth sample, analyses were conducted to determine patterns of association between the breadth of activities to which a participant was exposed and his or her likelihood of continuing in the program for a second year, using activity-level participation data entered in OST Online during the 2005-06 school year. These analyses were limited to participants who attended their programs frequently (i.e., at least 60 percent of the days they were assigned to an activity) in order to control for the effect of attendance on retention. This limitation produced an analysis group of 717 participants.

Evaluators created an index for the number of different types of activities in which a youth participated, using a scale of 1 to 5. The activity types included: homework help, academic enrichment, arts, recreation, and life skills. Evaluators created these activity types by collapsing the 14 activity descriptors available in OST Online. Analyses examined whether youth who participated in a greater variety of activities were more likely to return to the OST program for a second year, excluding those who could not return based on their grade level. Across the 15 in-depth programs, participants who re-enrolled for a second year participated in significantly more types of activities in the first year than did students who did not continue (an average of 4.01 out of five activity types, compared with an average of 3.68 activity types).

Among participants in programs in the in-depth sample who attended the OST program at least 60 percent of the days that they were assigned to an activity, 50 percent who attended academic activities in 2005-06 returned to their OST program in 2006-07, compared with 32 percent of participants who did not attend any academic activities. Half of participants who attended arts activities in 2005-06 returned to their OST program in 2006-07, compared with 32 percent of participants who did not attend any arts activities. In addition, 48 percent of participants who attended recreational activities in 2005-06 returned to their OST program in 2006-07, compared with 37 percent of participants who did not attend any recreational activities.

Patterns of Association Linking Retention to Participant Attitudes and Behavior

Analyses of associations between program-level retention rates and program features suggest that certain types of program offerings may attract youth and encourage them to remain committed to OST participation over time. Among all Option I programs in which participant surveys were administered in Year 1, the average program retention rate was significantly correlated with the youth academic self-esteem scale ($r = .22$). This positive association mirrors the first-year evaluation finding that youth who reported higher academic self-esteem had a higher rate of program attendance, suggesting that youth with a stronger sense of self-efficacy in school were more likely to attend the program regularly and to continue their enrollment in OST programming from one year to the next. This pattern was especially pronounced for school-based Option I programs, again confirming the first-year finding that school-based programs may be more likely to appeal to youth who are comfortable in a school setting.

The program's average attendance rate in the first year of the initiative was one of the strongest predictors of retention. As one would expect, programs that succeeded in attracting participants on a regular basis during the 2005-06 school year were able to re-enroll these participants at high rates in the 2006-07 school year, as shown in Exhibit 14. An analysis of variance showed that programs with low retention rates had an average participant attendance rate of 45 percent in 2005-06, compared with a rate of 54 percent among programs with medium retention rates, and 63 percent among programs with high retention rates. This relationship between program attendance and retention was statistically significant for both school-based and center-based OST programs, as shown in Exhibit 15. Examined by grades served in the program, the association was significant for elementary-grades programs and high school programs, as shown in Exhibit 16, but not for middle-grades programs.

Exhibit 14
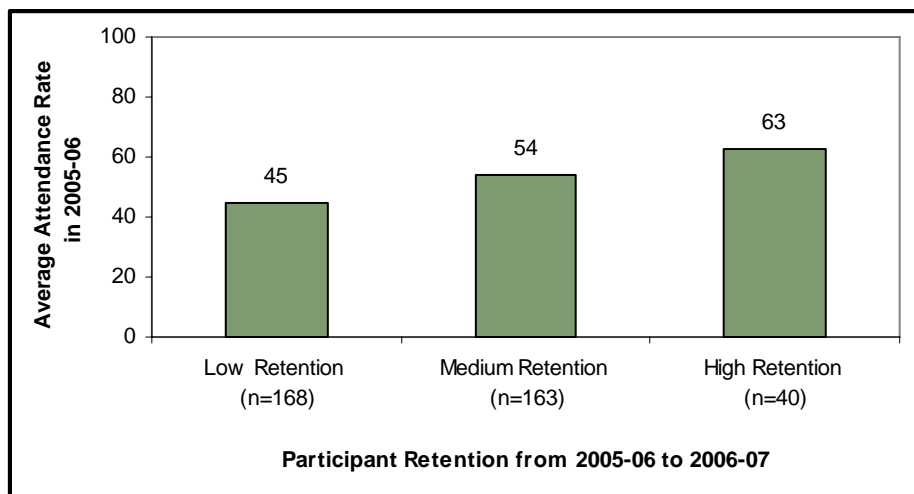**Average 2005-06 Attendance Rates in Option I Programs,**
by Participant Retention Rate

Exhibit 15
Average 2005-06 Attendance Rates in
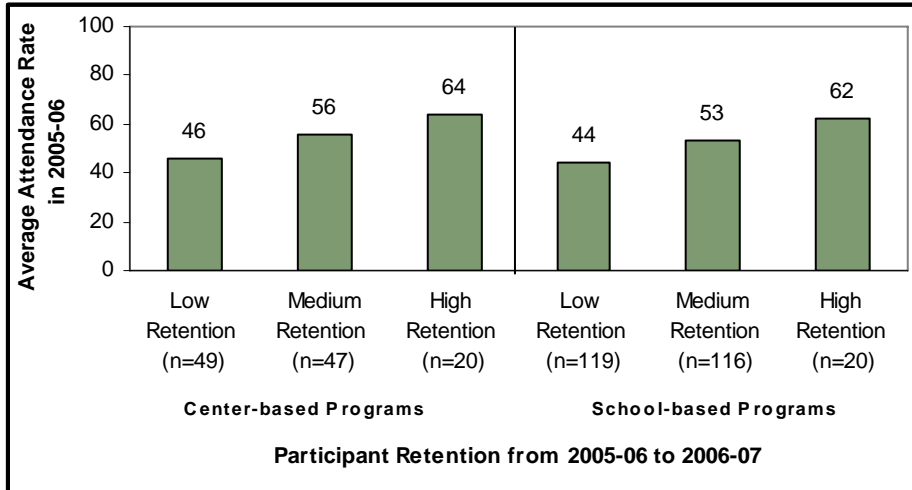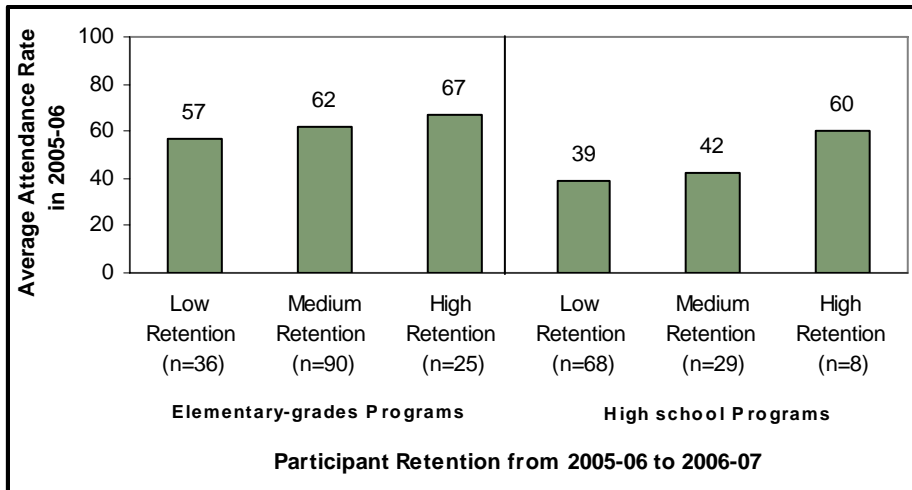**Option I Center- and School-Based Programs, by Participant Retention Rate**

Exhibit 16
Average 2005-06 Attendance Rates in Option I Elementary-Grades and
High School Programs, by Participant Retention Rate

The evaluation also looked at participant-level attendance rates in 2005-06 to identify the participation threshold at which youth tended to return to their Option I OST program for a second year. According to this analysis, more than half of the participants across all grades who attended a program at a rate of 66 percent or higher in 2005-06 returned to that program in 2006-07. The odds of returning for a second year among participants who attended less often than 66 percent in 2005-06 were less than 50 percent.

Conclusions

These evaluation findings describe program retention levels across different types of OST programs. They also present preliminary patterns of association between participant engagement, as measured by retention across two program years, and specific features of OST programs, including youth responses to their OST experience. The evaluation will continue to track these relationships as the OST initiative matures. Core conclusions from current analyses can be summarized as follows:

- Programs with high rates of program retention, particularly those serving high school youth, were managed by well-educated professionals who were relatively well compensated.

- Programs that re-enrolled participants at a high rate had a parent liaison on staff and, in particular, a volunteer parent liaison.

- Programs with high rates of retention worked to provide positive environments that fostered friendly relationships between youth and staff.

- High-retention OST programs offered enriching academic experiences that provided hands-on academic learning opportunities.

- Programs that successfully re-enrolled middle-grades youth exposed their participants to new experiences.

- Programs with high rates of retention, particularly those located in schools, tended to have a strong focus on academics or arts.

- Participants at programs in the in-depth sample who participated in a wide variety of activities were more likely than participants in other programs in the in-depth sample to re-enroll for a second year.

- Programs with high rates of retention served youth who attended regularly and who reported high academic self-esteem.

References

Chaput, S.S., Little, P.M., & Weiss, H. (2004). *Understanding and measuring attendance in out-of-school time programs*. Cambridge, MA: Harvard Family Research Project.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences,* 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates.

Huang, D., Gribbons, B., Kim, K.S., Lee, C., & Baker, E.L. (2000). *A decade of results: The impact of LA's Best after-school enrichment program on subsequent student achievement and performance*. Los Angeles: UCLA, Graduate School of Education and Information Studies.

Lipsey, M. (1990). *Design sensitivity: Statistical power for experimental research.* Newbury Park, CA: Sage.

Reisner, E.R., White, R.N., Russell, C.A., & Birmingham, J.E. (2004). *Building quality, scale, and effectiveness in after-school programs: Summary report of the TASC evaluation*. Washington, DC: Policy Studies Associates, Inc.

Russell, C.A., Reisner, E.R., Pearson, L.M., Afolabi, K.P., Miller, T.D., & Mielke, M.B. (2006). *Evaluation of DYCD's out-of-school time initiative: Report on the first year*. Washington, DC: Policy Studies Associates, Inc.