

**THE BEACON COMMUNITY CENTERS  
MIDDLE SCHOOL INITIATIVE:**

**Report on Implementation and Youth Experience  
in the Initiative's Second Year**

Christina A. Russell  
Jennifer LaFleur  
Troy A. Scott  
Mark Low  
Andrea S. Palmiter  
Elizabeth R. Reisner

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Submitted by:  
Policy Studies Associates, Inc.  
1718 Connecticut Avenue, NW  
Suite 400  
Washington, DC 20009  
[www.policystudies.com](http://www.policystudies.com)

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## **Executive Summary**

The Beacon Community Centers were first developed in New York City in the early 1990s to serve as community resources in high-need neighborhoods. The Beacons are located in public schools and serve community members (both youth and adults) in the evenings, on weekends, over holidays, and throughout the summer. They are operated by community-based organizations.

In September 2007, the New York City Department of Youth and Community Development (DYCD) launched the Beacon Middle School Initiative to target more Beacon resources to meeting the needs of middle-grades youth. The initiative represented a new emphasis for the 80 Beacon Community Centers, which had previously delivered primarily after-school activities for children and drop-in programming for older youth and adults. Through this initiative, DYCD charged the Beacon Centers with providing middle-grades youth with regular, structured programming in academic enhancement, life skills, career awareness, civic engagement, recreation/health/fitness, and culture/art. DYCD set enrollment and attendance targets for the participation of middle-grades youth in the Beacon Middle School Initiative.

DYCD contracted with Policy Studies Associates, Inc. (PSA) to conduct a three-year evaluation of the Beacon Community Centers Middle School Initiative. At PSA, we designed the evaluation to inform DYCD about program-level implementation patterns, the characteristics of youth served by the initiative, their patterns of program participation, the extent to which the initiative's programming is meeting the needs of participating youth, the circumstances in which these services are most and least effective, and the relationship between the embedded middle-grades model and the Beacons' other programming. This report focuses on implementation and youth experiences in the second year of the Beacon Middle School Initiative.

### **Participant Engagement**

In the second year of the Middle School Initiative, DYCD expected each Beacon to enroll at least 200 middle-grades participants and provide those youth with 216 hours of structured programming. From July 2008 through June 2009, Beacons served a total of 21,000 middle-grades students. During the same period, Beacons provided services to an additional 20,000 students in grades K-4 and 9-12 and to 24,000 adults.

Beacon Centers varied in their capacity to recruit large numbers of middle-grades students. Enrolling 264 middle grades youth on average, 64 of the 80 Beacon Centers met or exceeded the 200-participant target for middle-grades youth. Of the 64, 46 Beacons achieved the target during their academic-year programming alone, and 18 Beacons met the 200-participant target through summer sessions and school-year sessions combined.

Overall, middle-grades Beacon participants averaged 182 hours of structured programming, lower than the initiative goal of 216 hours. Thirty-four percent of enrolled middle-grades participants met this participation target. The percent of enrolled Beacon

participants who met or exceeded 216 hours of participation ranged from 2 percent of participants in one Beacon at the low end of the continuum to 82 percent of enrolled participants in a Beacon at the high end.

## **Staffing Patterns**

Beacon Centers employed staff members with varied experiences and backgrounds to plan, design, and implement programming for middle-grades youth. We examined the relationship between staffing and the success of Beacons in recruiting and engaging these youth.

***Staff responsibilities.*** The design of middle-grades program activities was the responsibility of content-area specialists (e.g., artists, coaches, and dancers) and college students at two-thirds of the Beacons. A majority of the Beacons relied on college students and certified teachers to lead and assist with the implementation of academic activities. For non-academic activities, a majority of programs used specialists and college students serving as activity leaders. Teens provided assistance in non-academic activities for middle-grades youth in a majority of the Beacons.

***Education specialists.*** In addition to direct service staff, some Beacon Centers had a volunteer or paid staff member charged with overseeing academic activities and the educational programming offered at the Beacon as part of the Middle School Initiative (39 percent). The presence of an “education specialist” at a Beacon Center was associated with higher numbers of youth meeting the 216-hour attendance objective. When we compared the 20 Beacons in the top attendance quartile with the 20 Beacons in the bottom quartile in terms of the percent of participants meeting the 216-hour attendance objective, we found that more Beacon directors in the top-quartile Beacons reported having a master teacher or education specialist on staff than did the directors of the bottom-quartile Beacons. Specifically, 67 percent of top-quartile Beacons had master teachers or education specialists on staff, while only 19 percent of bottom-quartile Beacons did.

***Beacon director tenure.*** Using linear regression, we found that the Beacon director’s experience was associated with program enrollment in the Middle School Initiative. Beacon directors with more program experience had higher middle-grades enrollments at their Centers than did directors with less experience. Each additional year of Beacon director experience was associated with an additional four middle-grades youth enrolling in the program.

## **Program Supports**

***Resources.*** Through DYCD, each Beacon Center receives \$400,000 annually to provide all services, including programming for the Middle School Initiative. This fixed amount remained stable with the advent of the Middle School Initiative and its requirements to target resources to middle-grades students. In survey responses, Beacon directors indicated that funding levels had a substantial effect on their ability to hire and retain staff members. In particular, 91 percent of directors responded that it was a challenge to offer the competitive

salaries necessary to hire qualified staff, and 88 percent of directors reported that not being able to afford to offer potential staff members enough hours of paid employment was a challenge.

***Support from DYCD.*** DYCD provides supports to Beacon Centers by convening networking and informational meetings for directors, by offering opportunities for training and technical assistance, and by holding periodic individual meetings with Center directors. In the second year of the Middle School Initiative, 80 percent of directors reported that DYCD was providing needed technical assistance for program implementation, compared to 61 percent reporting such assistance in the first year. Directors at all Beacons reported that DYCD provided technical assistance in using DYCD Online, with 80 percent of directors responding that DYCD supported them with DYCD Online “to a great extent.” Fifty-four percent reported that DYCD helped them to identify opportunities for staff development and technical assistance “to a great extent.”

***Partnerships with schools.*** In the second year of the initiative, 61 percent of directors reported that their Beacon was establishing stronger linkages with nearby schools than existed before the initiative, a significant increase compared to the first year of the initiative (when 43 percent reported stronger linkages with schools). Based on survey data, we found that, while 83 percent of directors reported interacting with staff at their host school at least monthly, 5 percent of directors reported that they never interacted with staff at their host school. Directors most frequently interacted with school staff around issues related to sharing space and planning program content.

The frequency of communication between the Beacon director and the host school staff was also associated with participant engagement in the middle-grades program. We compared the 20 Beacons in the top attendance quartile with the 20 Beacons in the bottom quartile in terms of the percent of participants meeting the 216-hour attendance objective, and we found that directors in top-quartile Beacons reported communicating with their host school(s) almost twice as frequently as the directors in the bottom-quartile Beacons.

Beacon director reports of a supportive school administration were also associated with higher middle-grades enrollments. Using linear regression, we found that the Beacons with host schools that had supportive administrations enrolled 70 more participants than those whose administrations were not supportive.

***Coordination with other programs.*** More than two-thirds of Beacon directors reported that other after-school programs operated at their Beacon’s host school. Within this subset of Beacons, 89 percent of Beacon directors said that they coordinated with the other co-located after-school programs. Beacon directors were most likely to report that they collaborated with other after-school programs in order to assess the needs of participants at the school (89 percent) and to coordinate scheduling so that participants could move between the different after-school programs (87 percent).

***Family engagement.*** A trademark of Beacon Centers is a high level of engagement with families and communities: 91 percent of directors reported that they had some form of contact with parents or guardians at least once a month. Research on out-of-school time programs has

indicated that the presence of a parent liaison in the program is associated with high youth engagement and positive youth experiences in the program (Russell, Mielke & Reisner, 2008). However, fewer than half (40 percent) of the Beacons reported that their Center had a parent liaison on staff, working in either a paid or voluntary position.

***Community partnerships.*** Beacons used a series of formal and informal approaches to gain community input on how the Beacon could best serve the surrounding neighborhood. Each Center had a community-based Beacon Advisory Council to help steer the work of the Beacon. Many Beacon directors said that they also talk informally with individuals and organizations in the neighborhood to see what services are most urgently needed in the community.

## **Middle School Initiative Programming**

***Activity content.*** One of the goals of the Middle School Initiative is to deliver high-quality programming to participants through varied activities. The guiding principles of the initiative identify six core activity areas: (1) academic enhancement; (2) life skills; (3) career awareness; (4) civic engagement; (5) recreation, health, and fitness; and (6) arts and culture. Based on school-year participation data, youth spent the most time in academic enhancement (38 percent of all participation hours) and recreation activities (36 percent). During the summer session, youth accumulated the most hours of structured programming in recreation activities (44 percent). Youth participated in other activity areas for relatively few hours.

***Observations of program quality.*** In observations of middle-grades activities in 10 Beacon Centers, we rated activities in areas indicating that youth had the opportunity to: (1) follow a clear structure of tasks, (2) improve their skills, and (3) engage actively in the learning process. Each observation scale was constructed on a scale of one (not evident) to seven (highly evident). In general, we observed that programs successfully implemented activities that were task-oriented, with clear organization and goals (average rating of 5.03 out of 7). We also rated activities 3.46 out of 7 on our skill-building scale, suggesting that most observed activities were moderately focused on skill-building, allowing youth to develop and practice previously learned skills. We saw less evidence of activities that encouraged youth to apply skills through hands-on learning experiences, with activities averaging a rating of 1.75 out of 7.

***Youth contributions.*** We used survey and interview data to explore the extent to which youth ideas and opinions influenced the programming at the Beacon Centers. We asked directors about the membership and activities of their Youth Advisory Councils, which are intended to meet on a regular basis to provide feedback and advice to the director and other staff members on how the Centers can best serve participants. Eighty-four percent of Beacon directors reported that their Youth Advisory Council included at least some middle-grades youth.

Directors also reported that participants had opportunities to play leadership roles and affect programming at the Beacon Centers in ways other than serving on the Youth Advisory Council. For instance, 97 percent of directors reported that participants were encouraged to share their ideas about the Center or its activities, 80 percent of directors reported that students

helped to plan activities and events, and 54 percent of directors reported that youth had opportunities to lead activities.

## **Youth Experiences in the Beacon Middle School Initiative**

*Interactions between youth and staff.* We asked youth to rate their relationships with Beacon staff and found that, among the relationship features listed, students most often reported that the staff treated them with respect (87 percent). Youth also reported regular personal interactions with the staff members: 80 percent of youth reported that they talk with adults at the Center about school or school work on at least a monthly basis, 73 percent reported regularly talking with adults about their future goals and plans, and 62 percent reported monthly one-on-one conversations with staff about what was going on in their life.

*Interactions among youth.* We also asked middle-grades participants about the relationships that they had developed with their peers through participating in Beacon programming. We found that youth most frequently reported that they had a lot of friends (89 percent).

*Community awareness.* In the youth survey, we asked youth about their awareness and engagement with the community. Seventy-seven percent agreed that their actions help others, 76 percent believed that their Beacon participation taught them how to help others at the Beacon, and 75 percent said that they learned that it is important to be involved in their community.

*Academic benefits.* We asked middle-grades participants to report on the extent to which they believed the Beacon Center had helped them in various academic areas. Results indicate that 80 percent perceived that they finished their homework more often because of the Beacon, and 75 percent believed the Beacon helped them get better grades in school.

Youth experiences at the Beacon were positively associated with the opportunities programs offered them to take on responsibilities and leadership roles at the Beacon, such as leading activities and helping in the Beacon office. To explore this relationship, we divided Beacon Centers into quartiles based on their participants' responses to our youth-experiences survey scales. We compared the Beacon Centers in the top and bottom quartiles according to the percent of participants who rated the program above the median on these survey scales. Beacons in the top quartile of the following youth experience scales offered significantly more opportunities for participants to take on leadership roles, according to reports from the Beacon director, than did Beacons in the bottom quartile: relationships with staff in the program, relationships with peers in the program, sense of belonging at the Beacon, and exposure to new experiences.

## **Recommendations**

Based on findings from the second year of this evaluation, we offer the following recommendations to DYCD:

- **Continue to facilitate strong partnerships with the host schools.** Our analyses revealed that Beacon Centers that benefited from good relationships and communication with their host school achieved higher levels of enrollment and participation among Middle School Initiative participants.
- **Provide technical support to improve program content.** In the second year of the initiative, Beacon Centers offered relatively few activities in four of the core content areas identified for the initiative: life skills, career awareness, civic engagement, and arts/culture. Helping Beacon Centers identify curricula and resources in those areas could increase the breadth of content that participants receive. In addition, our observations suggested that professional development on methods for promoting active learning techniques could improve the quality of activities in the Middle Grades Initiative.
- **Develop additional opportunities for youth leadership.** We found that the extent to which middle-grades youth were offered leadership opportunities in the Beacon Center was positively associated with youth reports of their exposure to new experiences through Beacon activities, their sense of belonging at the Beacon Center, and their reports of their relationships with peers and with program staff.

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# 1. Overview of the Beacon Middle School Initiative and Evaluation

The Beacon Community Centers were first developed in New York City in the early 1990s to serve as community resources in high-need neighborhoods. The Beacons are located in public schools and serve community members, including both youth and adults, in the evenings, on weekends, over holidays, and throughout the summer. They are operated by community-based organizations. The success of the Beacons model in youth and community development has led to its replication in urban areas throughout the country.

In September 2007, the New York City Department of Youth and Community Development (DYCD) launched the Beacon Middle School Initiative to target more Beacon resources directly toward meeting the needs of middle-grades youth. The initiative represented a new emphasis for the 80 Beacon Community Centers, which had previously delivered primarily after-school activities for children and drop-in programming for older youth and adults. Several factors led DYCD to amend the mission of the Beacons to focus more on middle-grades youth: an organizational restructuring of the public schools presented an opportunity for an enhancement of school-community partnerships; an expansion of out-of-school time programs increased the amount of structured activities that were otherwise available to elementary school students in New York City; and school-failure rates of secondary-school students continued to trouble the public and city officials. In addition to these factors, administrators recognized that youth typically participated less frequently in after-school programs once they left elementary schools.

The initiative coincided with efforts of the New York City Department of Education (DOE) to improve educational services and outcomes for middle-grades youth. Recent research shows that disadvantaged students run the risk of falling off track for academic success and healthy development as early as middle school. A study examining adolescents' progress toward graduation highlighted the fact that failure in high school is predictable during middle school, a time when disadvantaged youth can become involved in risky, dangerous behaviors (Balfanz & Herzog, 2006). As students in the middle grades seek to forge their identity as adolescents, they need the support of community resources that allow them to engage in activities that encourage physical, intellectual, emotional, and social growth.

Several studies demonstrate how after-school programs might stimulate positive youth outcomes among middle-grades students in particular. For example, a study of promising after-school programs found that middle-school youth who attended high-quality after-school programs reported more favorable change patterns regarding misconduct and substance use than did students with less exposure to structured, adult-supervised time after school (Vandell, Pierce, Brown, Lee, Bolt, Dadisman, Pechman, & Reisner, 2006). Evidence from research involving youth who participated in LA's BEST, a city-wide after-school program in Los Angeles, found that the short-term benefits of after-school participation were maintained into high school. In particular, students who had participated in LA's BEST posted higher academic achievement and lower engagement in crime, based on a two-part comparison design (Goldsmidt, Huang, & Chinen, 2007). An analysis of the high school achievement of former middle-grades participants

in programs sponsored by The After-School Corporation (TASC) in New York City also found positive outcomes in high school attendance and credit accumulation (Russell, Mielke, Miller, & Johnson, 2007).

To promote these types of outcomes, DYCD charged the Beacon Centers with providing middle-grades youth with regular and structured programming in six core areas: academic enhancement, life skills, career awareness, civic engagement, recreation/health and fitness, and culture/art. In addition, DYCD developed enrollment and participation targets for the Beacons, a policy that is consistent with research that indicates “frequent attendance can produce impressive gains among (after-school) participants” (Apsler, 2009, page 16).

DYCD contracted with Policy Studies Associates, Inc. (PSA) to conduct a three-year evaluation of the Beacon Community Centers Middle School Initiative. At PSA, we designed the evaluation to inform DYCD about program-level implementation patterns, the characteristics of youth served by the initiative, their patterns of program participation, the extent to which programming is meeting the needs of participating youth, the circumstances in which these services are most and least effective, and the relationship between the embedded middle-grades model and the Beacons’ other programming. The evaluation addresses the following questions:

- Does the Middle School Initiative programming administered by Beacons meet reasonable expectations for effective implementation, especially in the areas of youth outreach, youth attendance, staffing, activity approach and content, family engagement, and integration with the other work of the Beacons?
- What are the educational and other developmental needs of youth who participate in the Middle School Initiative? How do these youth compare to nonparticipating middle-grades youth enrolled in the host schools and in the city’s public schools generally?
- Does the Middle School Initiative promote participants’ healthy development and educational progress?
- What program features are associated with positive participant outcomes?
- Does the Middle School Initiative build on and enrich Beacons services for other age groups?

This report on the Beacon Middle School Initiative’s second year (2008-09) is based on data collected from the following sources:

- **Survey of Beacon directors.** In May 2009, we administered an online survey to all Beacon directors. Data reported are based on the 65 responses that were received from the 80 Beacon Centers, for a response rate of 81 percent.
- **Survey of middle-grades participants.** In February 2009, we administered a survey to Beacon middle-grades participants in 77 of the 80 Beacon Centers.

Three Centers were excluded from the survey because their rate of return for parents granting permission for their children to participate in the study was below 30 percent. We received 4,789 participant surveys from 70 Beacon Centers, representing surveys from 23 percent of middle-grades youth who were enrolled in a Beacon at any time during the year (and a program-level response rate of 88 percent). Due to the method and timing of survey administration, responding Beacon participants are not representative of the entire population of middle-grades Beacon participants. Youth who responded to the survey may be those who were more regular participants throughout the school year and hence possibly more engaged in the program.

- **DYCD Online.** We analyzed patterns of enrollment and participation in Beacon middle-grades programs, based on data collected from all Beacon Centers using DYCD Online, the agency's management information system. We also examined program-level data from DYCD Online describing the types of activities that Beacon Centers offered to middle-grades youth and the number of hours that participants attended each type of program activity.
- **Site visits to 10 Beacon Centers.** Ten Beacon Centers were selected in consultation with DYCD to be part of an in-depth sample for the evaluation of the Middle School Initiative. These Beacons were purposively chosen to reflect certain characteristics, including: (1) locations across boroughs; (2) locations in both middle schools and other schools; (3) management by provider organizations with a single Beacon Center and with multiple Beacons; (4) location in schools with and without DYCD Out-of-School Time (OST) programs; and (5) Beacons with and without Administration for Children's Services (ACS) foster care preventive programs on-site. One-day site visits were conducted at each of these 10 centers in spring of 2009, involving interviews with the Beacon director and other key staff, a group interview with middle-grades participants, and structured observations of activities.
- **Survey of parents.** In February 2009, we administered a survey to the parents of middle-grades youth attending programming at the 10 in-depth Beacon Centers. Overall, 333 parent surveys were received from 9 of the 10 Beacon Centers in the in-depth sample. Responses from these surveys are not representative of the perspectives of all Beacon parents, because surveys were received from only a small percentage of parents.
- **DOE data.** For participants in the 10 in-depth Beacon Centers, we obtained demographic, school attendance, and educational performance data from DOE's student records.

## 2. Implementation of the Middle School Initiative

Through the Middle School Initiative, Beacon Centers are charged with providing high-quality, structured programming in varied content areas to large numbers of middle-grades participants. In this section of the report, we present findings about the success of Beacon Centers in recruiting and enrolling middle-grades youth. We also discuss the staffing patterns, partnerships, and program strategies that the Beacons relied on to implement the initiative.

The Beacon Middle School Initiative is one of several initiatives for middle-grades students sponsored by DYCD.

### Participant Engagement

In the second year of the Middle School Initiative, DYCD expected each Beacon to enroll at least 200 middle-grades participants and provide those youth with 216 hours of structured programming. We examined data entered in DYCD Online to determine patterns of participation, and used survey and DOE student-level data to describe participant characteristics.

### Enrollment Strategies and Success

Administrators of Beacon Centers employed many tactics to recruit and retain middle-grades participants. For instance, many Beacon directors recruited youth by distributing flyers at local schools and community organizations. Directors also worked to build relationships with youth and their parents in order to attract participants to their Centers. Beacons relied on their reputations with families and communities to spread information about middle-grades programming with other families and potential participants; one director observed:

*We have parents who buy into the program and help us recruit. It started when one parent told her neighbor and that neighbor told her cousin and so on. That original parent is also the president of the PTA at her school, and she's been selling the program.*

In the second year of the Middle School Initiative (July 2008 through June 2009), Beacons served a total of 21,000 middle-grades students. During the same period, Beacons provided services to an additional 20,000 students in grades K-4 and 9-12 and 24,000 adults.

Beacon Centers varied in their capacity to recruit large numbers of middle-grades students. As shown in Exhibit 1, the average middle-grades enrollment was 264, although one Center enrolled as few as 95 youth and another as many as 638 youth. The majority (64 of 80) Beacon Centers met or exceeded the 200-participant target for middle-grades youth; 46 of these Beacons achieved the target during their academic-year programming alone. Another 18 Beacons met the 200-participant target through summer sessions and school-year sessions combined.

## Exhibit 1 Enrollment in the Beacon Centers

Program Enrollment Size	Participants in Grades 5-8			Participants in Grades K-4 and 9-12 plus Adults		
	Summer (07/08-08/08)	School Year (09/08-06/09)	2008-09 Total* (07/08-06/09)	Summer (07/08-08/08)	School Year (09/08-06/09)	2008-09 Total* (07/08-06/09)
Lowest	29	62	95	0	98	137
Highest	206	533	638	549	1,089	1,427
Average	93	216	264	116	476	548

Exhibit reads: The Beacon with the lowest middle-grades enrollment during the summer served 29 youth in grades 5-8.

\*The information in the “2008-09 Total” column is not the sum of the “Summer” and “School Year” columns because some participants attended both sessions.

During school year 2008-09, Beacon Centers served an average of 216 middle-grades youth. This enrollment was higher than the average enrollment of 179 middle-grades youth in the first academic year of the initiative by a statistically significant margin. Beacon Centers also achieved an average 28 percent retention rate among Middle School Initiative participants (3,022 of 10,780 participants from the 2007-08 school year also attended during the 2008-09 school year). This rate accounts for participants “aging out” of the Middle School Initiative but does not adjust for the high rate of student mobility within New York City schools. Other research has described this mobility in urban areas and the challenges it poses to educational success (Ingersoll, Scamman, & Eckerling, 1989; Nakagawa, Stafford, Fisher, & Matthews, 2002).

Parents reported enrolling their child in the Beacon program for many reasons, including convenience and the desire for academic support. For 75 percent of parents, important reasons for enrolling their child were that the program was free and they wanted their child to participate in new types of activities. In addition, 72 percent believed that the program would help their child do better in school, and 71 percent of parents wanted their child to get help with homework.

DYCD also expected each Beacon to continue to serve elementary and high school students, as well as adults through drop-in activities and community events. In the second year of the Middle School Initiative, the Beacon Center that served the fewest of these non-middle grade participants served 137 non-middle grades individuals; the Beacon with the largest number of these participants provided programming to 1,427 non-middle grades individuals. Across all of the Beacons, the median number of non-middle-grades participants served was 518.

DYCD established a program-level contractual goal of providing 216 hours of programming to an enrollment of at least 200 middle-grades participants per Beacon. For evaluation purposes, we examined the number of hours attended by individual participants. Middle-grades participants averaged 182 hours of structured programming. On average, 34 percent of a Center’s enrolled middle-grades participants attended for 216 hours or more; the percent of students who met or exceeded this level of participation ranged from 2 percent in one Beacon to 82 percent of participants in another.

## Participant Characteristics

*Demographic characteristics.* As shown in Exhibit 2, Beacon Centers served higher percentages of males and lower percentages of females than the city-wide averages would have predicted; this is true for both the middle-grades and all-grades participants. Beacon Centers also served much higher percentages of Hispanic youth than the city-wide averages. Lastly, Beacon Centers are located in schools that serve a higher percentage of poor students than the city-wide average (68 percent compared to 63 percent), suggesting that Beacons are meeting their goal of serving high-need populations.

**Exhibit 2**  
**Characteristics of Beacon Center Participants**  
**and NYC Public School Students, in Percents**

Participant Characteristics	Grades 5-8 (Middle School Initiative)		Grades K-12	
	Beacon Centers, 2008-09 (n=21,010)	NYC Public Schools, 2007-08 (n=307,213)	Beacon Centers, 2008-09 (n=41,301)	NYC Public Schools, 2007-08 (n=985,921)
<b>Gender</b>				
Female	44	48	44	49
Male	56	52	56	51
<b>Race/Ethnicity</b>				
American Indian or Alaska Native	<1	<1	<1	<1
Asian, Native Hawaiian, Pacific Islander	8	35	7	32
Black or African American	38	39	41	40
Hispanic or Latino(-a)	38	12	36	14
White	8	14	8	14
Other	7	-	7	-
<b>Special Subgroups*</b>				
ESL Services	-	-	11	10
Special Education Enrollment	-	-	15	15
Eligible for Subsidized Meals	-	-	68	63

Exhibit reads: Forty-four percent of Beacon Center middle-grades participants were female; 48 percent of public school students in New York City middle schools were female.

\* Percentages for Beacon Centers are based on whole-school averages as published by the NYC DOE in their "2008 School Enrollment and Demographics" publication; data are for the 2007-2008 academic year. For all students in all schools at Beacon Center locations, n=70,691.

**Educational characteristics.** We also examined 2008-09 educational data from the DOE for middle-grades participants in the 10 Beacon Centers in the evaluation’s in-depth sample. As shown in Exhibit 3, more than two-thirds of the participants at the in-depth Beacons met learning standard expectations on the state math and language arts assessments. Participants in grades 5-7 on average had a school attendance rate of 94 percent. Eighth-graders had an attendance rate of 93 percent.

**Exhibit 3**  
**Educational Performance of a Sample\* of Beacon Participants,**  
**in Percents (n=1,418)**

Grades	Below Grade Level		At or Above Grade Level	
	Level 1: Not Meeting Learning Standards	Level 2: Partially Meeting Learning Standards	Level 3: Meeting Learning Standards	Level 4: Meeting Learning Standards with Distinction
<b>Performance on the 2009 New York State English Language Arts (ELA)/Reading Assessment</b>				
Grade 5	<1	26	72	2
Grade 6	<1	24	74	2
Grade 7	1	25	72	1
Grade 8	4	31	61	3
<b>Performance on the 2009 New York State Mathematics Assessment</b>				
Grade 5	1	11	65	23
Grade 6	3	12	64	21
Grade 7	2	13	66	18
Grade 8	3	16	64	17

Exhibit reads: Less than 1 percent of Beacon participants in grade 5 performed at Level 1 on the 2009 ELA assessment.

\* The purposive sample consisted of the participants in the ten in-depth study sites.

In surveys, we also asked youth to report on the extent to which they were confident in their academic skills and motivated to succeed in school, as shown in Exhibit 4. We found that 93 percent of the middle-grades survey respondents reported that they tried hard in school, 91 percent said that they did well in school, and 75 percent said that they enjoyed school. As well, 90 percent of the participants reported that they paid attention in class, while 85 percent said that they always went to class prepared. With respect to their long-term educational aspirations, almost all of our middle-school respondents wanted to graduate from high school (98 percent), and most wanted to graduate from college (83 percent).

**Exhibit 4**  
**Academic Motivation of a Sample of Middle-Grades Participants,**  
**in Percents (n=4,762)**

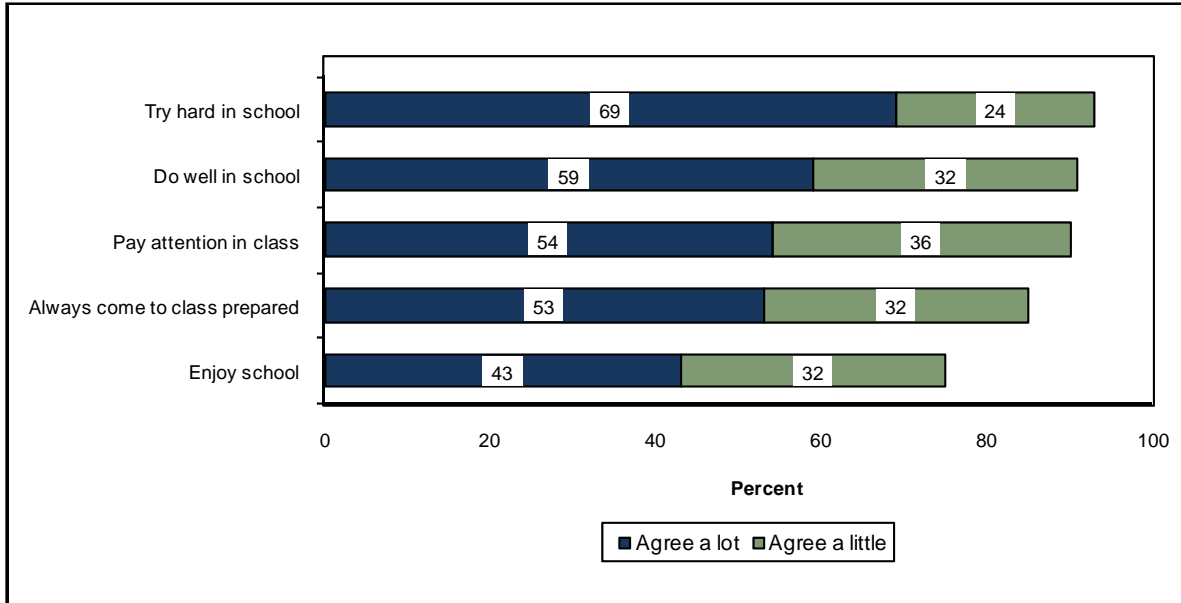


Exhibit reads: Sixty-nine percent of middle-grades participants “agreed a lot” with the statement, “In general, I try hard in school.”

## Staffing Patterns

The quality of implementation of Beacon activities depends on the capacity of each Center’s staff members to deliver engaging and content-rich programming to participants. In this section, we report on the characteristics of Beacon staff members working in the Middle School Initiative and on the training opportunities available to them.

### Staff Qualifications

We asked the Beacon directors to categorize the Center staff who worked in the Middle-School Initiative as either employees or volunteers and to categorize staff by educational or professional background. College students provided much of the staffing for Beacon Centers. As shown in Exhibit 5, about 7 college students (5 paid and 2 volunteer) provided staffing coverage at each Beacon Center for a total of 88 hours each week. Beacons supplemented this work with a variety of other staff members. On average, teenage staff (3 volunteers and 3 paid) worked a total of 55 hours per week in each Beacon Center, and 4 certified teachers worked a combined total of 30 hours in each Beacon.



**Exhibit 5**  
**Staff Types and Hours Worked**  
**in the Beacon Middle School Initiative (n=65)**

Staff Categories	Average Number of Paid Employees	Average Number of Volunteers	Total Work Hours per Week
College students	5	2	88
Other adults with a college degree	4	0	77
Teenagers (e.g., high school students)	3	3	55
Other adults without a college degree	4	0	53
Specialists	3	1	44
Certified teachers	4	0	30
Paraprofessionals or school aides	1	0	6

Exhibit reads: The average Beacon Center had 5 paid college students and 2 volunteer college students on the Middle School Initiative staff. College students worked a total of 88 hours per week, on average.

**Staff Roles**

The Beacon staff working in the Middle School Initiative played many roles, as shown in Exhibit 6. The design of program activities was the responsibility of content-area specialists (e.g., artists and coaches) and college students at two-thirds of the Beacons. A majority of Beacons relied on college students and certified teachers to lead and assist with the implementation of academic activities. For non-academic activities, a majority of programs had specialists and college students serving as activity leaders; teens provided assistance in non-academic activities in a majority of Beacons.

**Exhibit 6**  
**Percent of Beacons Using Staff in Various Roles**  
**in the Middle School Initiative (n=65)**

Staff Categories	Tutor Youth	Lead Academic Activities	Lead Other Types of Activities (Arts, Sports)	Assist with Academic Activities	Assist with Other Types of Activities	Design Program Activities
College students	75	71	74	75	74	62
Teenagers	59	29	37	49	59	26
Certified teachers	54	59	29	51	37	42
Specialists	23	22	89	29	66	69

Exhibit reads: College students tutored youth in the Middle School Initiative in 75 percent of the Beacon Centers and led academic activities in 71 percent of Centers.

## Supports and Training for Staff

Through their contracts with DYCD and other sources, Beacon Center staff members working in the Middle School Initiative were offered opportunities to participate in professional development. In interviews, Beacon directors typically said that getting staff members trained on pertinent topics was a priority, even though they believed there was often not enough time or money to send multiple staff members to trainings. In order to expose more staff members to new tactics and activity-delivery approaches, Beacon directors said that they often sent one staff member to trainings and then had that staff member return to the Beacon and share what they learned with other staff.

Exhibit 7 presents directors' survey responses as to whether any of their Middle School Initiative staff members received training or technical assistance on particular topics. The responses indicate that in general more Beacon staff members received training in 2008-09 than in 2007-08. These differences are statistically significant for two of the topics: professional development was received on academics, enrichment, and learning in 85 percent of Beacons in the second year (compared to 67 percent in the first year), and 85 percent of Centers offered training on maintaining healthy and safe environments (compared to 70 percent in the first year). In addition, training on behavior management and on practices that are developmentally appropriate was received by Middle School Initiative staff members in more than three-quarters of the Beacons.

**Exhibit 7**  
**Beacon Director Reports of Staff Training Opportunities, in Percents**

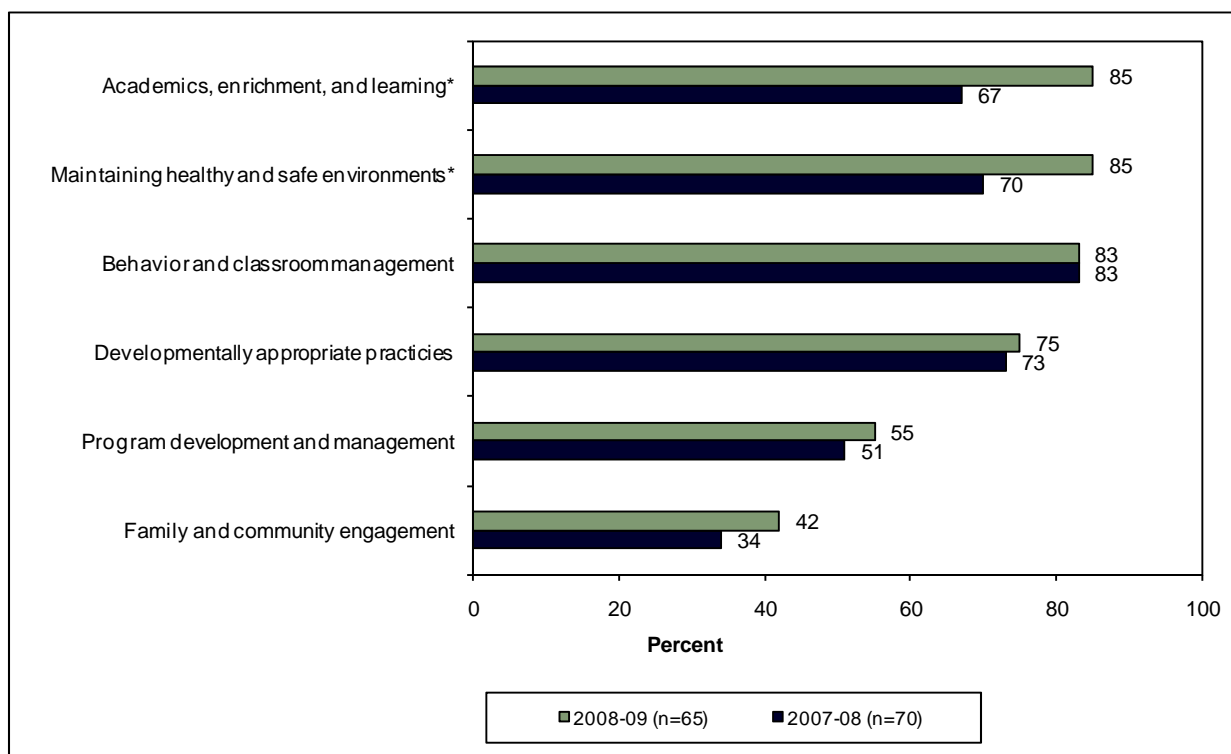


Exhibit reads: In 2008-09, 85 percent of Beacon directors reported that their Middle School Initiative staff received training or technical assistance in academics, enrichment, and learning, compared to 67 percent of directors in 2007-08.

\* Indicates the difference between years is significant at the  $p < 0.01$  level.

Survey and interview responses from directors indicated that they worked in many ways to monitor the quality of programming delivered to Beacon middle-grades participants. One director described the development of ideas for activities:

*Group leaders and counselors have monthly outlines, and they get weekly ideas, and they have their plans. We have biweekly meetings, and we look at the outline and then the next day we talk about the ideas that they come up with. I rarely shut it down, but I like to talk to them about what they have planned.*

Another director described his approach to monitoring the implementation of activities:

*I sit with the staff, and we discuss the curriculum. I don't like to tell them what they have to do, but I will look at their activity plans and see what they want to do for themselves. I give them their space and then I go around and make sure they are doing what we need them to do.*

A third director characterized himself as a rigorous inspector of the quality of his staff:

*I'm very demanding. I make sure everything is okay, make sure they are doing what they are supposed to be doing, and that they understand their role. I put everything in writing, and that goes in their file. They get evaluated every three months. They know their job is seasonal. They might not come back every cycle.*

Overall, 94 percent of Beacon directors reported that they reviewed activity plans for the Middle School Initiative on at least an occasional basis; 74 percent of directors said they reviewed the plans of most or all of their staff members on a regular basis. In addition, 33 percent of directors reported holding staff meetings on a weekly basis; 97 percent of directors reported meeting on at least a monthly basis.

## **Program Partnerships and Resources**

Since their inception, Beacon Centers have operated within a landscape that includes the host school, other schools in the area, businesses and agencies in the surrounding community, and the neighborhood residents who participate in Beacon programming. Beacon Centers operate in partnership with DYCD and their other funding agencies, which both dictate operational requirements and provide various supports for program implementation. This section describes these partnerships and resources in the context of Beacons' implementation of the Middle School Initiative.

### **Targeting Program Resources**

Through DYCD, each Beacon Center receives \$400,000 annually to provide all services, including programming for the Middle School Initiative. This fixed amount remained stable with the advent of the initiative and its requirements to target resources to middle-grades

students. Because no new funds were made available for the Middle School Initiative, all Beacon Centers reported that they had shifted their focus to emphasize programming for middle-grades youth. This shift was amplified in the second year of the initiative: 94 percent of directors reported that their Beacon was offering more programming for middle-grades participants than they had before the beginning of the initiative, compared to 81 percent in the first year. Directors also continued to provide programming within the Beacon as a whole that was more structured than before the initiative. In 2008-09, directors reported that they were tracking program attendance (83 percent), assigning youth to specific activities or groups (73 percent), and enforcing minimum attendance requirements (69 percent) to a greater extent than they had before the beginning of the initiative.

In survey responses, Beacon directors indicated that funding levels had a substantial impact on their ability to hire and retain staff members. More than 80 percent of directors reported that a lack of funding for staff salaries was a challenge to implementing high-quality programming. In particular, 91 percent of directors responded that it was a major or minor challenge to offer the competitive salaries necessary to hire qualified staff, and 88 percent of directors reported that not being able to afford to offer potential staff members enough hours of paid employment was a challenge.

In interviews, several Beacon directors expressed concerns about having sufficient resources to support programming for groups besides their middle-school participants. One director commented:

*Once they introduced the middle school group, it became a strain to focus on those programs that were well attended by the adults. There is a need in this community for adult programming as opposed to strictly targeting middle school youth.*

Another director spoke of the effects of the initiative on funding for high school students and enrollment for elementary students:

*I honestly don't have resources for my high school programs. The high school programs are from additional private funding or funding we went after. Funding is concentrated at middle school, and we make sure we meet the hours requirements. For our elementary school kids, we have to cap the number because we don't have enough staff. You try to meet what the community needs, but if you are mandated and they are tracking you, you start to get a little nervous.*

## **Support from DYCD**

DYCD provides supports to Beacon Centers through networking and informational meetings for directors, opportunities for training and technical assistance, and individual meetings with Center directors. During the second year of the Middle School Initiative, directors reported that they were better supported by DYCD than in the first year: 80 percent of Beacon directors reported DYCD was providing needed technical assistance in implementation of the Middle School Initiative, compared to 61 percent of directors in the first year.

Director survey responses indicated that DYCD offered Beacons support in various aspects of their Middle School Initiative programming. As shown in Exhibit 8, directors at all Beacons reported that DYCD provided technical assistance in using DYCD Online, with 80 percent of directors responding that DYCD supported them “to a great extent.” Fifty-four percent reported that DYCD helped “to a great extent” to identify opportunities for staff development and technical assistance.

**Exhibit 8**  
**Types of Support Provided by DYCD, in Percents (n=65)**

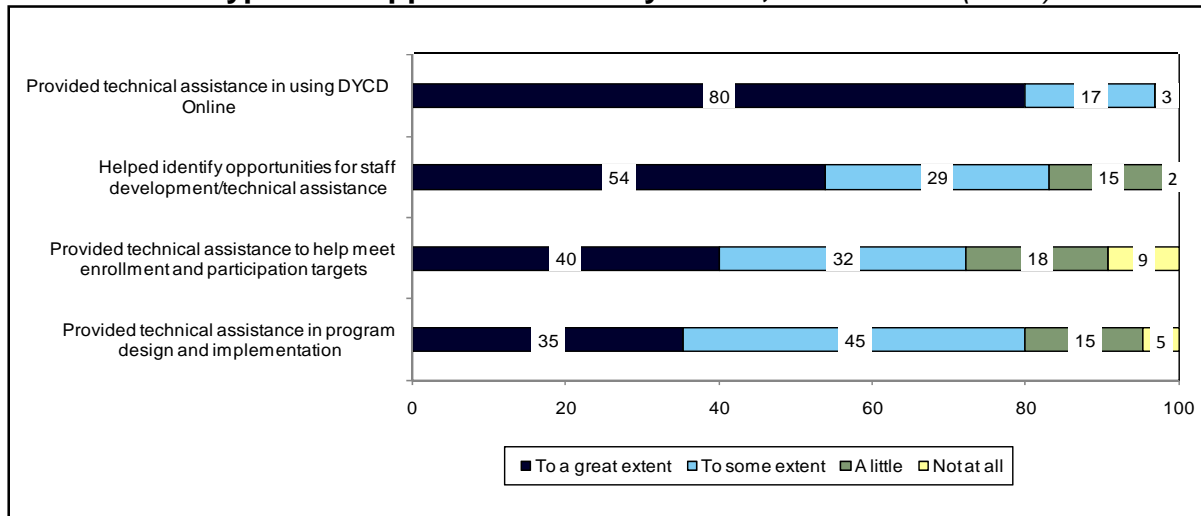


Exhibit reads: Eighty percent of Beacon directors reported that DYCD provided technical assistance in using DYCD Online for the Middle Grades Initiative “to a great extent.”

## Partnerships with Schools

The support of the host school and its administration is a critical component of a successful middle-grades program. In the first year of the Middle School Initiative, 43 percent of Beacon directors said that they believed their Beacon was establishing linkages with the surrounding schools to a greater degree than it had before the start of the initiative. By the second year of the initiative, 61 percent of directors reported greater linkages with local schools—a significant increase.

In surveys, 83 percent of directors reported interacting with the host school(s) at least monthly, while only 5 percent of directors reported that they never interacted with their host school(s). Exhibit 9 presents the percentage of directors who reported communicating with their host schools on various topics at least monthly.

### Exhibit 9 Communication with Schools, in Percents (n=65)

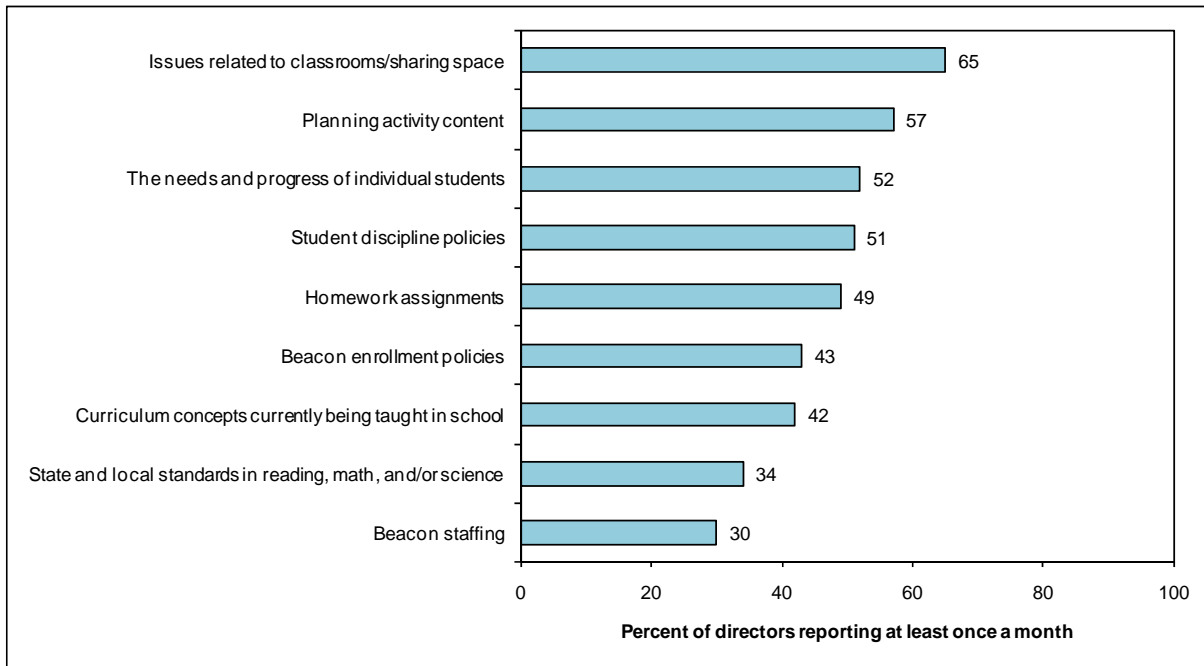


Exhibit reads: Sixty-five percent of Beacon directors reported discussing issues relating to classrooms and sharing space with principals, teachers, or other key school staff at least once a month,

Analysis of interview data indicated that Beacon directors valued the role that the host school administration could play in helping them achieve the goals of the Middle School Initiative. Beacon directors reported that school administrators played an important role in allocating space, discussing the needs of participants, and coordinating all of the host school’s after-school programs. In many cases, the directors reported having an excellent working relationship with the administrators at their host school. In these instances, directors reported that the school administration both engaged with Beacon staff members and supported the Beacon’s focus on serving middle-grades youth. One director stated:

*The school loves us. We have a great relationship. The principal is our biggest supporter. Our waiting list has grown tremendously since we got here. We’re serving the community, this school, and other schools and the principal supports that. She knows that this is one of the most dangerous neighborhoods in the city, near one of the biggest drug trafficking routes. The principal knows that we have worked with a group of students who were involved in those types of activities and now they are leaders in the program and are changing their paths.*

Directors who established a good rapport with the principal and the school faculty said that they were able to deal with logistical and programmatic challenges more effectively because of those partnerships. In several cases where the Beacon directors and school administrators had not established good working relationships, directors believed the lack of coordination was hurting their efforts to achieve the goals of the initiative. For instance, a few Beacon directors commented that their access to space in the school was limited to only the after-school hours or

to very small spaces within the school. Several directors of Beacons located in elementary or high schools commented that the school administration was not supportive of the Beacon's shift toward middle-grades youth. Some of the directors reported that elementary principals were hesitant to support the work of the Beacon because they found it problematic that elementary students from the host school were not included in the scope of the new initiative. For example, one director observed:

*In the beginning it was tough to convince the principal that we had to focus on middle school. We went out to try and capture our old elementary kids. They're a little grown, but they can come back. These kids are almost six feet tall. We try and accommodate to have the activities a little later, so that the little kids have gone home. The principal complained that the little ones had to leave and that the big ones were coming in and trampling them. We did always serve middle school but not to the extent we do now.*

*The administration doesn't want us in the building... Now you have adults, high school students, junior high kids coming to this building to attend Beacon activities, how does this benefit this elementary school? It doesn't help the school.*

## **Coordination with Other After-School Programs**

In addition to coordinating with the administrators of their host school, many Beacon directors communicated with the leaders of other after-school programs that operated at the school. More than two-thirds of Beacon directors reported that there were other after-school programs operating at their Beacon's host school; 89 percent of these directors said that they coordinated with those programs. Beacon directors were most likely to report that they collaborated with other after-school programs in order to assess the needs of participants at the school (89 percent) and to coordinate scheduling so that participants could move between the different after-school programs (87 percent). One director described the process of working with other programs in an interview:

*We have meetings with the principal where all the programs come together and talk about the issues, and we talk about how kids can move between programs. We figure out if the kids can come to our program on the days they are not doing another program or maybe after they get out of another program.*

In some instances, Beacon directors reported that there was only minimal coordination among programs, and they reported feeling as though the Beacon had to compete with other programs to attract youth instead of collaborating to provide complementary services. For instance, one director observed:

*The school is running after-school programming itself, but that's over at five o'clock. It siphons off some of our students. I don't know if the school requires it. We asked them to share information as far as the numbers of youth they plan to serve and the requirements, but we haven't gotten any information from them. [...] There are a lot of players in the*

*game and we don't always meet. They are nice and cordial, but they have their own requirements to fulfill so they don't want to work with us.*

## **Engagement with Families**

As noted earlier, although Beacon Centers focused increasingly on Middle School Initiative programming, they continued serving the surrounding neighborhood and participants of other ages. In interviews, directors emphasized their continuing efforts to serve the entire family, not just middle-grades youth. For example, one director said:

*Yes, it's the Middle School Initiative, but we still focus on the family. We try to help that parent learn English, so they can help their middle school kid. We want to help that whole family, not just the middle school student.*

A trademark of Beacon Centers is a high level of engagement with families and communities. Reflecting that tradition, 30 percent of responding parents reported that they had volunteered or would be willing to volunteer at the Beacon. Parents also stayed connected to the Beacon through materials sent home (79 percent of parents reported they read Beacon materials at least once a month), talking on the phone with a Beacon staff member (65 percent), and meeting one-on-one with Beacon staff (64 percent). Beacon Centers also offered activities to engage families. Fifty-nine percent of parents reported attending a community gathering or performance, and 56 percent took part in recreation activities at the Beacon.

Research on out-of-school time programs has indicated that the presence of a parent liaison in the program is associated with high youth engagement and positive youth experiences in the program (Russell, Mielke & Reisner, 2008). Less than half (40 percent) of Beacon directors reported that their Center had a parent liaison on staff, working in either a paid or voluntary position. However, most of the directors attempted to maintain some form of regular contact with families: 91 percent of directors reported that they had some form of contact with parents or guardians at least once a month. Exhibit 10 displays the proportion of directors who communicated with parents in various ways.

Families also reported feeling supported by the Beacon program in other ways. Fifty-one percent of parents gave the Beacon program an excellent rating overall, and another 33 percent of parents said that they would rate the program very good. In addition, the Beacon benefited parents themselves, with 56 percent reporting that the program hours fit their needs and 38 percent strongly agreeing that the program allowed them to work more hours. Seventy-nine percent of responding parents reported that they work at least 20 hours per week; 29 percent of parents themselves attend school at least part time.



**Exhibit 10**  
**Program Director Communication with Parents, in Percents (n=65)**

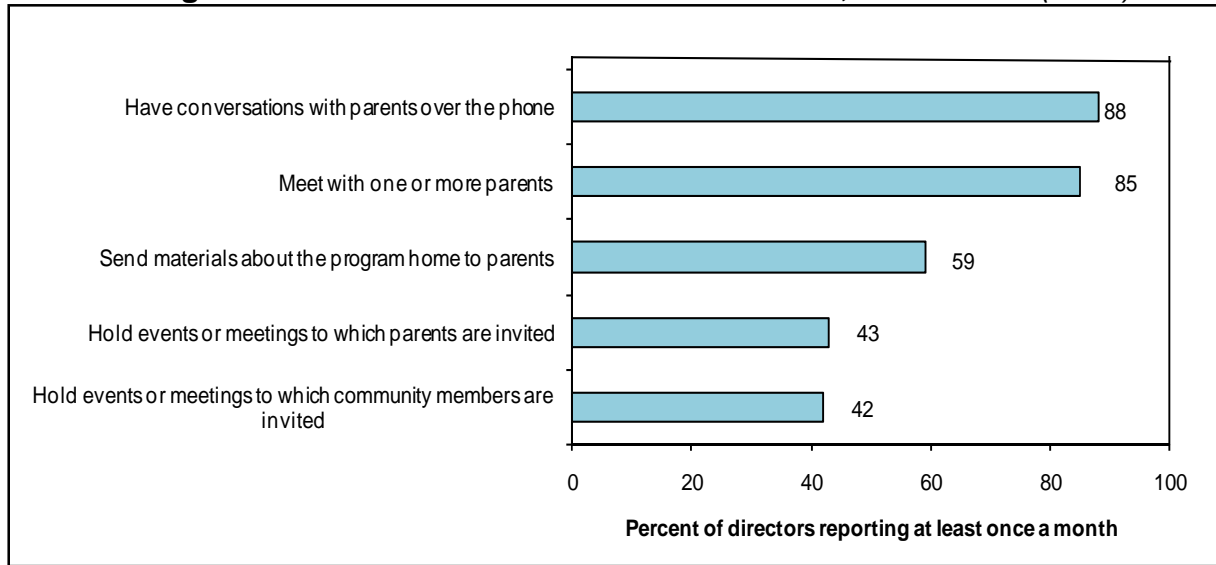


Exhibit reads: Eighty-eight percent of Beacon directors reported having conversations with parents over the phone at least once a month.

## Community Partnerships

Beacons used a series of formal and informal approaches to gaining community input on how the Beacon could best serve the needs of the surrounding neighborhood. Each Center has a Beacon Advisory Council, a group of advisers who are community members, to help steer the work of the Beacon. One director described how the Advisory Council provides input to the Beacon:

*We have a Beacon Advisory Council. It contains people from the neighborhood, religious figures, teens from the youth council, and staff. It looks at the needs of the community and compares them with what we need to provide. They meet quarterly. We have people approach us and say, “We think you need to offer X, Y, or Z.” They identify the need and we try to bring the resources to our program.*

Many Beacon directors also said that they also talk informally with individuals and organizations in the neighborhood to see what services are most urgently needed in the community, as one director described:

*Beacon programs have co-locators, other neighborhood organizations that we work with. That gives us wider range and further reach, and that might be our advantage in being a Beacon. Also, we are just well-known by people who live in the area. In the community, we can go anywhere and promote the Beacon and get a surge of people. [...] We develop relationships with families and kids, because of that we have a good sense of what is needed for people of all ages.*

*I often go out into the community and go into some of the stores and talk to the customers and the owners. I ask them what is missing from the community and how could the Beacon help the community. I also talk to the staff since many of them live in the community. I listen to the parents a lot and what they say would help.*

## **Middle School Initiative Programming**

One of the goals of the Middle School Initiative is to deliver quality programming to participants through the six core activity areas. According to Beacon program documents, *academic enhancement* refers to activities that promote the development of knowledge and skills in mathematics and language arts and increase the frequency of school attendance. *Life skills* are activities that foster positive social and emotional development and build respectful and tolerant attitudes towards other people. *Career awareness* activities provide exposure to businesses and industries and provide guidance on the transition from middle to high school. *Civic engagement* activities target the development of leadership skills, community building, and civic responsibility. *Recreation* consists of games and sports, in addition to *health and fitness activities*. *Cultural programming* includes activities focused on art, music, dance, and drama, as well as trips to museums and historical sites.

In this section, we present our findings about the implementation of these six core activity areas and our observations of the quality of implementation in the Beacon Centers.

### **Activity Content**

Beacon directors used DYCD Online to record the types of activities that their participants experienced. We used these records to examine the distribution of program content across the Beacons in the six core areas of the Middle School Initiative. Exhibit 11 presents the proportion of time that middle-grades youth spent in the various core-activity areas during both the summer session and school year of the second year of the initiative. In general, our findings indicate that Beacon Centers implemented some of the core activity areas, such as recreation and academic enhancement, much more frequently than others.

Youth accumulated the most hours of structured programming in academic enhancement (39 percent of all participation hours were in this area) and recreation activities (36 percent) during the academic year. During the summer session, youth spent the most time in recreation activities (44 percent). These patterns of activity participation during the school year are consistent with the first year of the initiative (2007-08). Youth devoted relatively few hours to the other activity areas.

The focus on academic enhancement activities was aligned with parents' rankings of the most important activities offered through the Middle School Initiative. Out of the six core areas, 27 percent of parents identified academic enhancement as the most important, followed by social development/life skills (17 percent) and recreation, health, and fitness (10 percent).

**Exhibit 11**  
**Middle-Grades Participants' Time in Various Activity Types,**  
**in Percents (*n*=21,010)**

Activity Type	Summer (07/08-08/08)	School Year (09/08-06/09)	2008-09 Total (07/08-06/09)
Recreation	44	36	39
Academic Enhancement	17	39	32
Culture	22	12	14
Life Skills	11	8	9
Civic Engagement	5	3	4
Career Awareness	2	2	2

Exhibit reads: During the summer of 2008, approximately 44 percent of middle-grades students' time in Beacon Centers was spent in recreation activities.

Although our findings suggest that the primary focus of Beacon activities is either academic enhancement or recreation, directors at many Beacon Centers expressed their belief that youth who attend programming at the Beacon should have some opportunity to participate in activities that expose them to new experiences and ideas.

*We're able to open up their minds to new things. [...] We do try to take them on trips, not only for fun, but to show them another world. They can go to learn how the animal keepers work in the aquarium and what not. We discuss the job with the person there and talk about how you would act if you were an employee. We ask questions of employees about the work they do when we go on the field trips.*

We asked middle-grades youth to respond to a set of survey questions about the extent to which Beacon Center programming exposed them to new experiences and attended to their interests. Exhibit 12 displays responses to these survey questions about exposure to new experiences and interesting programming. These responses indicated that in general youth responded positively to the programming offered at their Beacon.

### **Observed Activity Quality**

In observations of middle-grades activities in 10 Beacon Centers, we rated activities in four areas to collect evidence that youth had the opportunity to: (1) improve their skills, (2) engage actively in the learning process, and (3) follow a clear structure of tasks. Each observation scale was constructed on a scale of one (not evident) to seven (highly evident), and measures a research-based construct of quality in out-of-school time programming.

**Exhibit 12**  
**Beacon Middle-Grades Participant Reports of Exposure**  
**to New Experiences, in Percents (n=4,727)**

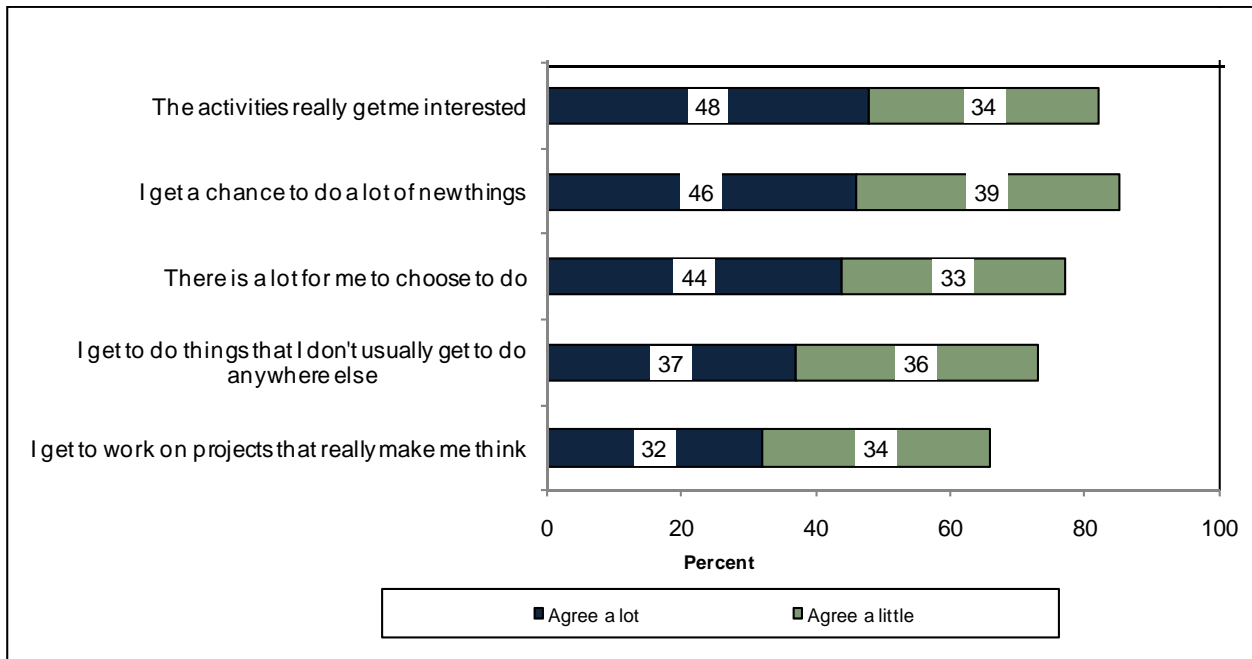


Exhibit reads: Forty-eight percent of Beacon middle-grades participants agreed “a lot” with the statement, “the activities really get me interested.”

***Skill-building.*** For this scale, we rated the degree to which Beacon activities built on skills and content to achieve goals based on the following items (Cronbach’s  $\alpha=0.84$ ):<sup>1</sup>

- Activity involves the practice or a progression of skills
- Staff challenge youth to move beyond their current level of competency
- Activity requires analytic thinking
- Staff employ varied teaching strategies
- Activity challenges students intellectually, creatively, developmentally, and/or physically
- Staff assist youth without taking control
- Staff verbally recognize youth efforts and accomplishments

On average, we rated activities 3.46 out of 7 on this scale, suggesting that of the observed activities, most were moderately focused on skill-building. Activities that rated high on the skill-building scale allowed students to build upon previously learned skills. As one observer noted during a French vocabulary activity that failed to build effectively on prior skills, “The vocabulary grew increasingly complex and teacher asked students to give answers beyond the examples she had printed on her lesson materials.” Activities that most successfully focused on

<sup>1</sup>Cronbach’s  $\alpha$  is a measure of the internal consistency of the scale, ranging from 0-1, with higher numbers indicating a greater cohesiveness of items

skill-building also involved the use of innovative teaching strategies. During interviews, some Beacon directors said that they encouraged staff members to use varied instructional strategies to keep middle-grades youth engaged and focused on developing skills. One director observed:

*As a rule kids don't want to read. I had to figure out a way to get kids reading, thinking, analyzing and not make it feel like school. What I would do is go online. I would go on the computer and find lyrics. I would make it a music activity. Sometimes the students wouldn't know the song they were reading, so it was fun to watch them.*

**Active learning.** Successful activities encourage youth to engage actively in learning in order to practice and expand their knowledge and skills. In observations, we examined the extent to which Beacon activities provided participants with the opportunity to apply skills and gain hands-on practice, using the following items (Cronbach's  $\alpha=0.61$ ):

- Staff plan for and ask youth to work together
- Youth are collaborative
- Youth take leadership responsibilities and roles
- Youth have opportunities to make meaningful choices
- Youth assist one another
- Youth contribute opinions, ideas and concerns to discussions
- Staff encourage youth to share their ideas, opinions, and concerns
- Staff ask youth to expand upon their answers and ideas

Overall, activities observed during our visits scored low on this scale, averaging 1.75 out of 7, suggesting that, in general, Beacon middle-grades activities did not provide youth with many opportunities to be active participants in learning and that Beacons may benefit from additional guidance on implementing project-based learning. Directors of the Centers visited who did provide programming that encouraged youth to take a hands-on approach to learning noted that these activities were among the Center's most successful offerings:

*We try to cover all the subjects that they were doing in the daytime school for the academic core area. But, for example, when they do science, they might be doing the Science Explorers curriculum. They do hands-on activities, because we know that when we open up a book, they say, "Aw, this is what we did in school!"*

Directors of programs with project-based learning activities also said that they were able to generate youth interest by structuring activities in ways that challenge youth to build on previously acquired skills to develop a final project.

*I'm big on structure. I need to see that in class. There has to be something going on. There is always a presentation or project they are working on, they present it at the end of three months in all of the activities that the kids do. They have to do that even if it's something small.*

*This year I was able to make some changes to the programs by using project-based work. That was successful and the kids responded. I would like to implement more project-based work next year with the curricula.*

**Task-oriented.** We also observed activities to determine the extent to which they targeted clear and explicit learning goals, based on the following items (Cronbach's  $\alpha=0.74$ ):

- Activity is well organized
- Youth are on task
- Staff communicate goals, purposes, and expectations
- Youth listen actively and attentively to peers and staff
- Staff attentively listen to and/or observes youth

Activities received an average score of 5.03 out of 7 on this scale. The high average scores of these items suggest that youth often participated in activities that were well-organized and kept them on-task.

## **Youth Contributions**

We used survey and interview data to explore the extent to which youth ideas and opinions influenced the programming at the Beacon Centers. We measured youth contributions, in part, by asking directors about the membership and activities of their Youth Advisory Councils. These Councils meet on a regular basis to provide feedback and advice to the director and other staff members on how the Centers can best serve participants. Eighty-four percent of Beacon directors reported that their Youth Advisory Council included at least some middle-grades youth. In Exhibit 13, we display the ways in which council members participated in Beacon planning and programming.

Directors reported that participants had opportunities to play leadership roles and affect programming at the Beacon Centers in ways other than serving on the Youth Advisory Council. For instance, 97 percent of directors reported that participants were encouraged to share their ideas about the Center or its activities, 80 percent of directors reported that students helped to plan activities and events, and 54 percent of directors reported that youth had opportunities to lead activities. In short, our data indicate that directors worked with youth to develop programming. One director reported:

*Basically we give them choice, we give them a variety things to do, give them a voice to improve the program. We actually try out their ideas and give them opportunity to tell us what they want to do as far as trips. We actually go over the schedule with them, and they can build their own schedule.*

*Youth input is a really important thing, we ask them what they want to do, we ask them if it is boring, the Youth Council plays a big role, they talk to two kids from each group and then they talk to us and we try to create the activities for the kids based on what they said.*

**Exhibit 13**  
**Beacon Director Reports of Youth Council Activities, in Percents (n=65)**

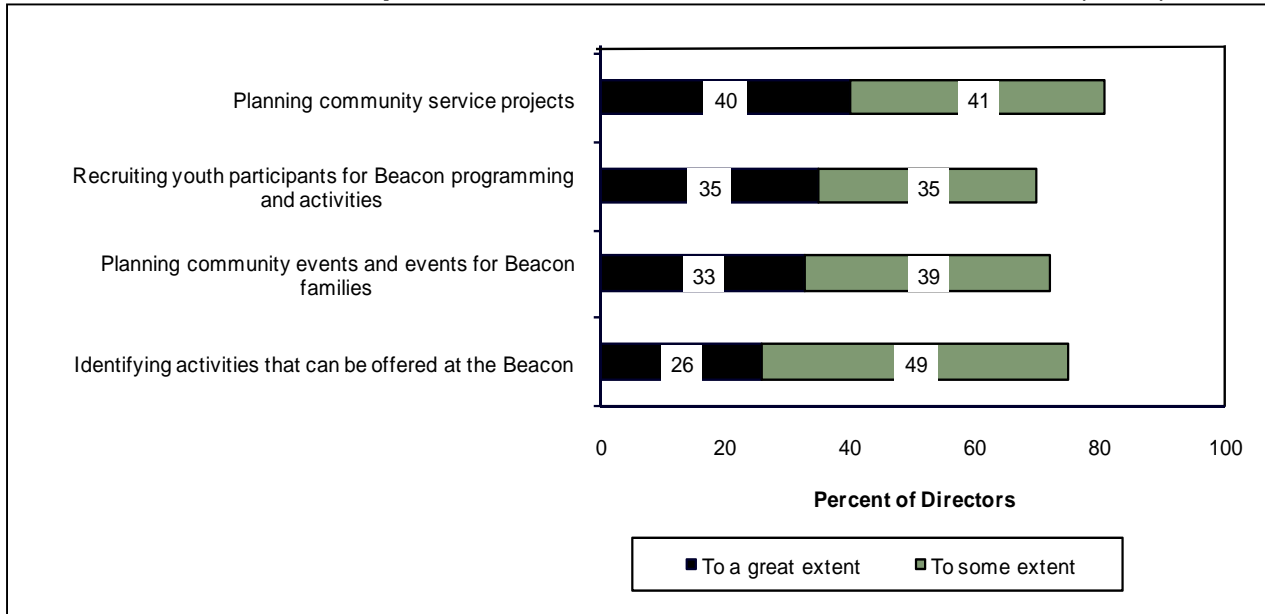


Exhibit reads: In 2008-09, 40 percent of Beacon directors reported that members of the Beacon Youth Council helped plan community service projects to a great extent, 41 percent reported that youth council members help plan community service projects to some extent.

### 3. Youth Experiences at the Beacon

Beacon Centers intend to foster both educational and social development among middle-grades participants. In general, parents of Middle School Initiative participants felt that the Beacon program was a positive environment for their children. More than half of responding parents strongly agreed that their child spends time with caring, responsible adults at the Beacon (58 percent), that their child is safe in the out-of-school time hours (55 percent), and that their child is able to join activities that she or he would not be able to join outside of the program (53 percent).

We also asked youth to assess their interactions with their peers and with the program staff, their sense of belonging at the Beacon, and to report on the perceived influence of their participation in the Beacon Center on their connections to their communities and their academic success. We report our findings on these questions in this section.<sup>2</sup>

## Social Development

### Interactions between Youth and Staff

We asked youth to rate their relationships with Beacon staff on the youth survey and the majority of youth indicated that, in general, the Beacon Center is a place where they feel they have positive and meaningful interactions with adults. We found that youth most often reported that the staff treated them with respect (87 percent). Exhibit 14 presents participants' responses across nine areas of interaction. While responses were positive overall, only about half of youth "agreed a lot" with these statements about their relationships with staff, suggesting that Beacons could continue to improve staff interactions with youth.

Our youth surveys included questions on the frequency with which youth had one-on-one conversations with adult members of the Beacon staffs. We found that 80 percent of youth spoke with adults about "school or schoolwork" on at least a monthly basis; 40 percent reported doing the same on "an almost daily" basis. In addition, 73 percent of youth spoke with adults about their "future goals and plans" on at least a monthly basis; 29 percent reported doing the same on an almost daily basis. Lastly, 62 percent of youth spoke with adults about "what was going on in their life" on at least a monthly basis; 23 percent reported doing the same on an almost daily basis.

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<sup>2</sup> We collected data from Beacon youth participants and their parents for the first time in 2008-09. Therefore, no comparisons are possible between the 2007-08 and 2008-09 years.



**Exhibit 14**  
**Participant Reports of Interactions with Staff, in Percents (n=4,671)**

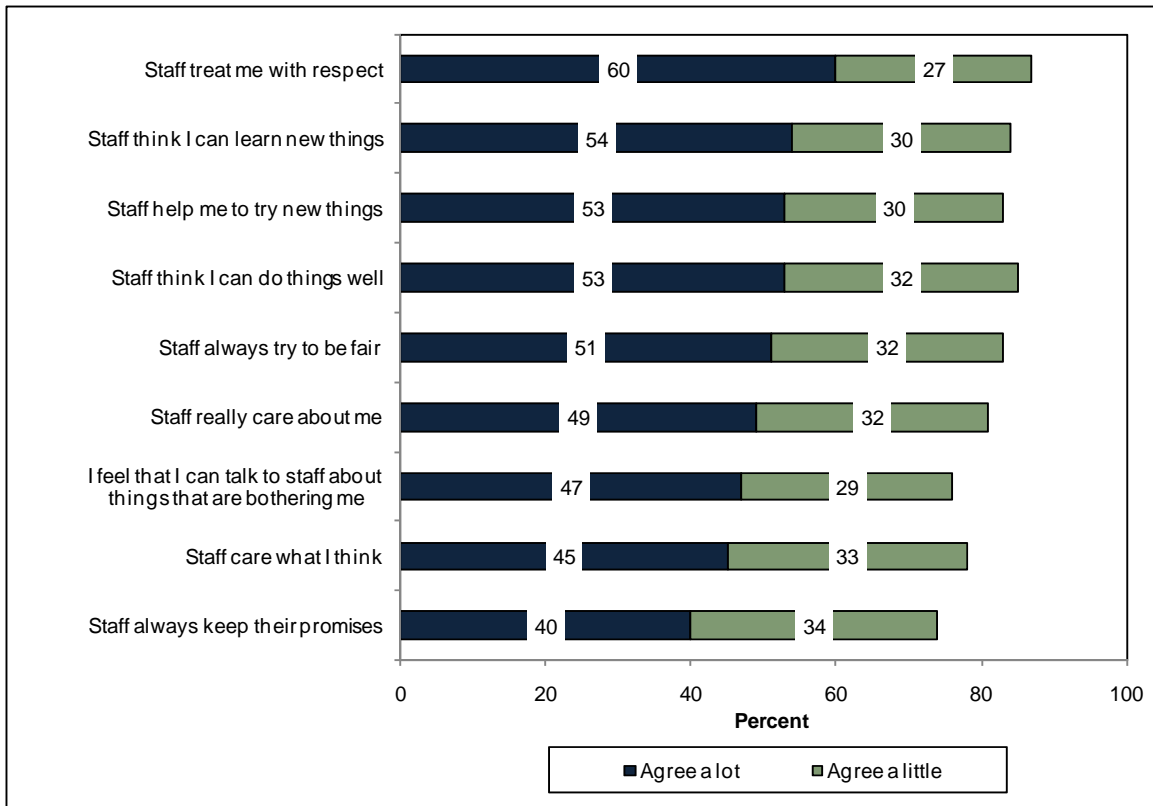


Exhibit reads: Sixty percent of Beacon middle-grades participants “agreed a lot” with the statement, “staff treat me with respect.” Another 27 percent “agreed a little.”

### Interactions among Youth

We also asked middle-grades participants about the relationships that they had developed with their peers through participating in Beacon programming. We found that youth most frequently reported that they had a lot of friends (89 percent). We present youths’ responses to questions about their relationships with their peers in Exhibit 15. Again, about half of youth “agreed a lot” to most of these statements, indicating that Beacons could increase their focus on intentional development of positive interpersonal relationships among youth.

In interviews, some youth also described how participation in the Beacon Center helped them improve their attitude through relationships with others. For example, one youth described how his experience in a Beacon activity encouraged him to change his behavior:

*At first I used to think that the Beacon was whack and boring and then my friends told me about the football team, and I went there and I realized it was really fun. Any time you curse, you have to do 10 pushups, so I realized that you have to do the right thing, but I didn’t want to do the right thing, at first. I kept telling them, I don’t care. But then one of the fifth-graders came up to me and told me I was doing stupid things—and I felt ashamed of myself because I knew they were supposed to be looking up to me because I am older. The staff kept*

*telling me that I had to do things better, and I went from an F to a B in my grades and I now work really hard. Now we are like family, and I am one of the team captains.*

**Exhibit 15**  
**Participants Reports of their Relationships with Peers, in Percents (n=4,680)**

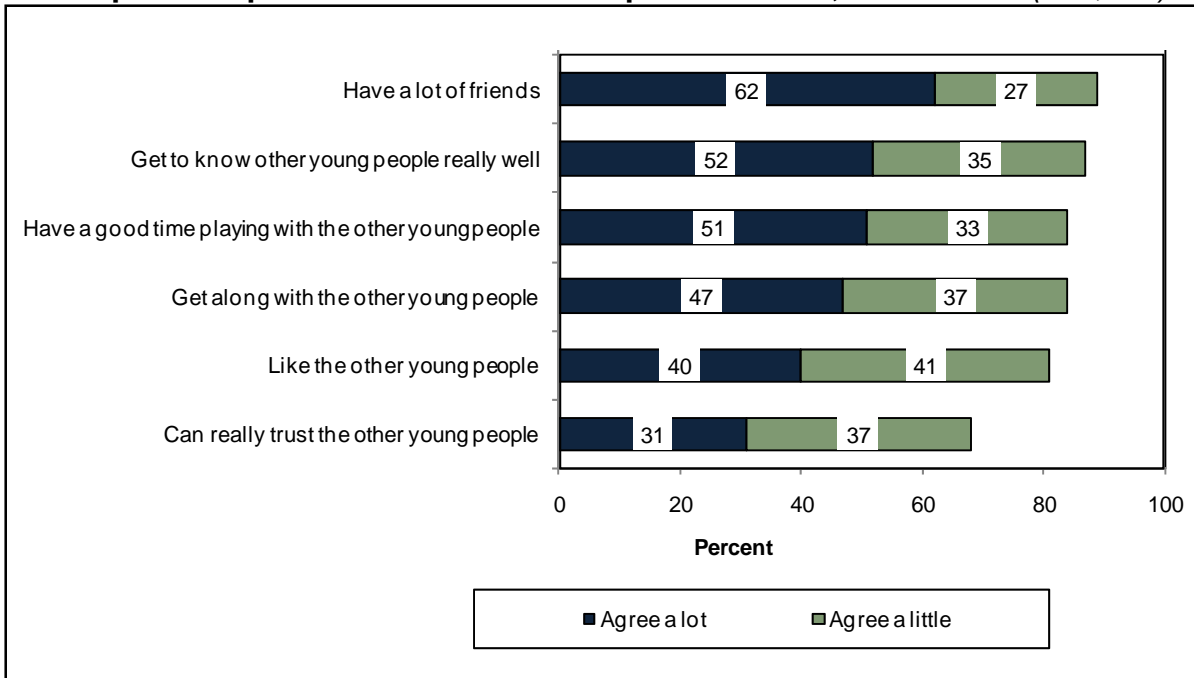


Exhibit reads: Sixty-two percent of middle-grades participants reported that they “agree a lot” with the statement, “I have a lot of friends.”

### Observed Quality of Relationships

We rated the extent to which activities observed in the 10 visited Beacon Centers provided an atmosphere conducive to positive relationships and social skills using the following items related to interactions among youth and between youth and staff (Cronbach’s  $\alpha=0.58$ ):

- Youth show positive affect to staff
- Youth are friendly and relaxed with one another
- Youth respect one another
- Staff show positive affect toward youth
- Staff engage personally with youth
- Staff guide for positive peer interactions
- Staff use positive behavior management techniques
- Staff are equitable and inclusive

Observed Beacon middle-grades activities averaged 4.27 out of 7 on the relationship-focused scale, signifying that activities often had a strong relationship-building component, helping foster positive relationships between youth and among youth and staff. One Beacon director described the need for staff to be attentive to the particular developmental needs of middle-grades youth:

*The challenge is more trying to get staff to think like the students think if we are going to have a program that's successful. Staff don't always get that. The staff needs to learn to speak to middle school kids. They aren't elementary students and they aren't high school students. You have to approach them differently. You can't make them do anything. The staff needs to think, how did I think at that age?*

Middle-grades participants also described the relationships they developed at the Beacon:

*You have your own relationships with each one of them. You can trust them to not tell anybody. They give you advice; you can't really choose your favorite because they are all nice.*

*A lot of people make close friends here... If you live far and you don't have time to hang out with your friends you can do it here. You can say hi to more people during the day. And you don't walk around the halls like you don't know anyone.*

## Sense of Belonging

We measured the extent to which youth felt that they belonged at their Beacon Center by asking them to agree or disagree with a set of statements; we display youth responses in Exhibit 16. We found that 87 percent of youth believed they were safe at the Beacon; 86 percent felt that they belonged and that they were successful; 84 percent thought the Beacon was a good place to hang out; 82 percent felt like they mattered; and 77 percent believed that their ideas counted at the Center.

**Exhibit 16**  
**Youths' Perceived Sense of Belonging, in Percents (n=4,762)**

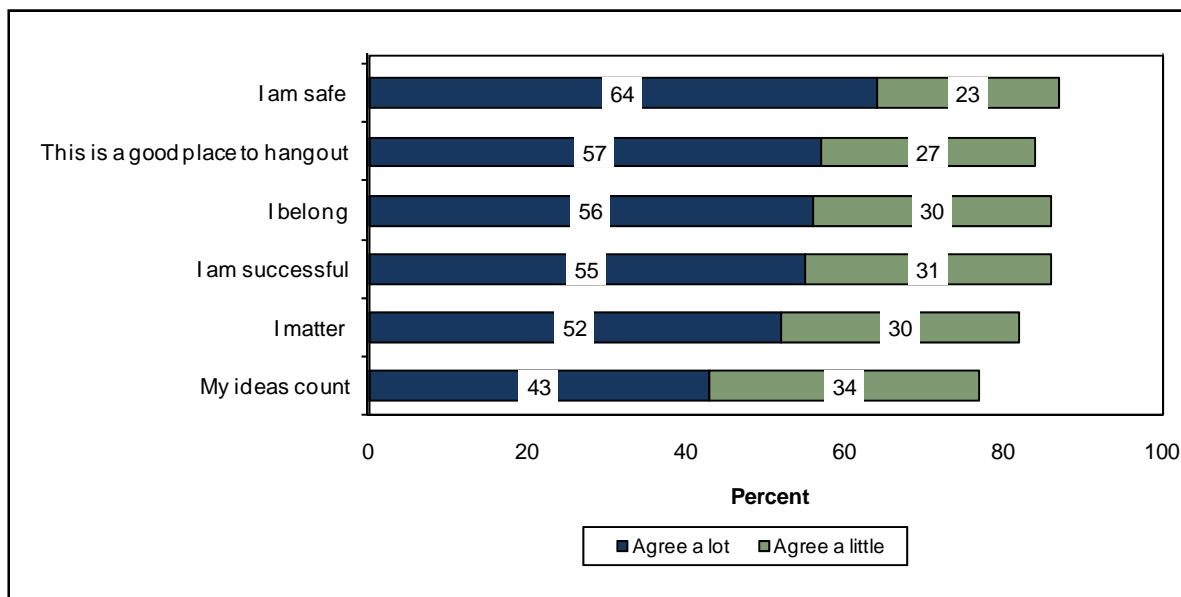


Exhibit reads: Sixty-four percent of middle-grades participants “agreed a lot” with the statement, “In this Beacon Center, I feel like I am safe.” Another 23 percent “agreed a little.”

## Community Awareness

We asked youth on surveys about how their awareness and engagement with the community have developed through participation in the Beacon Center, as shown in Exhibit 17. Seventy-seven percent of participants reported that their actions help others, 76 percent agreed that they have learned to help others at the Beacon, and 75 percent reported that they learned that it is important to be involved in their community.

**Exhibit 17**  
**Community Awareness Among Middle-Grades Participants, in Percents** (*n=5,166*)

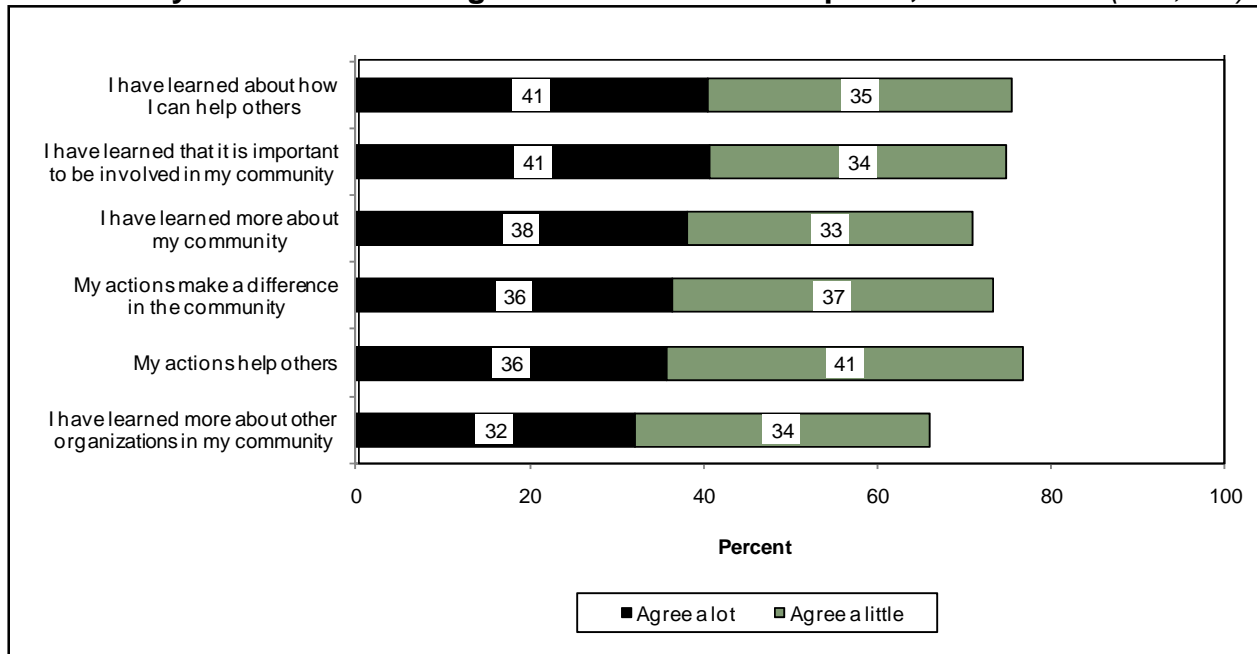


Exhibit reads: Forty-one percent of youth “agreed a lot” that they have learned how they can help others at their Beacon Center. Another 35 percent “agreed a little.”

## Educational Development

As shown in Exhibit 3, analyses of DOE data for middle-grades participants from the 10 Beacons in the in-depth sample suggest that the majority of these youth are meeting New York State’s academic benchmarks in English language arts and mathematics. When asked if they believed the Beacon Center had helped them to improve in various academic areas, youth largely agreed that Beacon activities supported their academic success. Results, displayed in Exhibit 18, indicate that 80 percent perceived that they finished their homework more often because of the Beacon, and 76 percent believed the Beacon helped them get better grades in school; 74 percent perceived the Beacon helped them feel better about their schoolwork.

**Exhibit 18**  
**Youth Perception of Educational Benefit, in Percent (n=5,166)**

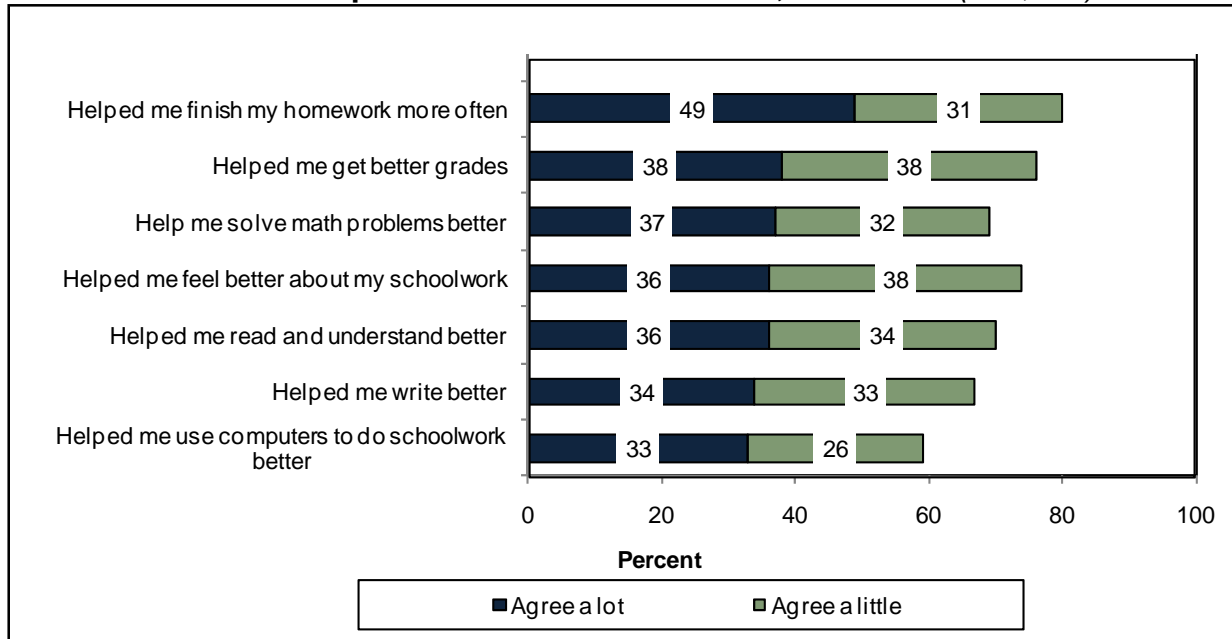


Exhibit reads: Forty-nine percent of youth “agreed a lot” that attending their Beacon Center has helped them finish their homework more often. Another 31 percent “agreed a little.”

## 4. Factors Associated with High Implementation

In the previous sections of this report, we presented descriptive findings from survey responses, interviews, administrative datasets, and observations. In this section, we present inferential findings based on combinations of variables from different data sources, in response to our study objective of identifying circumstances in which programming is most effective. While these findings do not represent causal claims, they do have the advantage of including statistical controls. So while we cannot report that program characteristic X caused program outcome Y, we can report that program characteristic X is associated with program outcome Y, even after we take into account and control for student characteristics A, B, and C. These types of findings can be valuable to policymakers because they indicate which characteristics of programs are important to consider in anticipating program outcomes, and they indicate whether the associations among program characteristics and outcomes are important in their own right or whether they are simply by-products of other program or participant characteristics.

### Associations with Enrollment and Participation

We used DYCD Online data and Beacon directors' survey responses to identify factors that affected the enrollment and participation levels of middle-grades youth at the Beacon Centers. We constructed linear regression equations using enrollment and participation as outcome variables and program and participant characteristics as predictor variables.

#### Enrollment in the Middle School Initiative

Our analyses point to three variables that are significant predictors of the number of middle-grades youth who received service at Beacon Centers: (1) the number of middle-grades students in the school that hosted the Beacon; (2) whether the administration of the host school was supportive of the Beacon (as reported by the director of the Beacon); and (3) the number of years of experience that the director had with the Beacon. Details of these analyses are presented in the appendix.

Specifically, our analyses indicate that:

- **Larger middle-grades enrollments at the host school corresponded with larger middle-grades enrollments at the Beacon Center.** Every 13 additional middle-grades students enrolled at the host school was associated with one more middle-grades youth enrolled in the Beacon.
- **Beacon director reports of a supportive school administration were associated with higher middle-grades enrollments.** Having a supportive administration at the host school was associated with enrollment of an additional 70 middle-grades participants in the Beacon.

- **Beacon directors with more program experience had higher middle-grades enrollments at their Centers than directors with less experience.** Each additional year of Beacon director experience was associated with an additional four middle-grades youth enrolling in the Beacon.

In these analyses, we controlled for other variables such as race, gender, whether another after-school program was co-located at the site, youth leadership opportunities, and the level of support the Beacon received from DYCD and host school staff. None of these control variables was statistically significant in its association with Beacon enrollment.

## Youth Participation

We explored factors distinguishing Beacons with high attendance, as compared to Beacons with low attendance. To conduct this analysis, we compared the 20 Beacons in the top quartile with the 20 Beacons in the bottom quartile in terms of the percent of participants meeting the 216-hour target. We found that bottom-quartile Beacons differed from top-quartile Beacons in two statistically significant ways (details of the analyses are in the appendix):

- The directors in top-quartile Beacons reported **communicating with their host school(s) more frequently** than did the directors of the bottom-quartile Beacons. Directors in the top-quartile Beacons reported communicating with their host school(s) almost twice as frequently as the directors in the bottom-quartile Beacons.
- The directors in the top-quartile Beacons more frequently reported having a **master teacher or education specialist** on staff than did the directors of the bottom-quartile Beacons. Sixty-seven percent of top-quartile Beacons had master teachers or education specialists on staff, while only 19 percent of bottom-quartile Beacons did.

Factors that did not differ in statistically significant ways included: directors' reports of the amount of support they received from their host schools' staffs and administrations; the amount of communication the directors had with families; whether the Beacon had a parent liaison on staff; whether the Beacon was located at a site where other DYCD after-school programs operated; and the years of experience of the Beacon director. In addition, we did not find the demographic characteristics of the host school(s) to be significantly related to the percent of Beacon participants who met the 216-hour target.

## Associations with Youth Experiences

We explored Beacon program features that distinguished Beacons with the most positive youth reports of their experiences in the Beacon, as compared to Beacons with the least positive youth reports. We found that the extent to which youth were offered **leadership opportunities** in the Beacon Center (according to directors) was positively associated with youth experiences in

the Beacons.<sup>3</sup> To conduct this analysis, we compared the Beacon Centers in the top and bottom quartiles according to the percent of participants who rated the program above the median on several survey scales. Beacons in the top quartile of the following youth experience scales offered statistically significantly more opportunities for participants to take on leadership roles, according to reports from the Beacon director than did Beacons in the bottom quartile:

- Youth reports of their **relationships with staff** in the program
- Youth reports of their **relationships with peers** in the program
- Youth reports of their **sense of belonging** at the Beacon
- Youth reports of their **exposure to new experiences**

In addition, we analyzed the relationships among participant scores on state reading and math tests, school attendance rates, student demographic factors, and participants' responses to survey questions about their experiences at their Beacon Centers. To assess these relationships, we constructed linear and logistic regression equations in which we used test scores, school attendance rates, and student demographic information as predictor variables; we used survey responses as outcome variables. The results of these analyses indicated that the predictor variables explained little of the variation in the outcome variables (the R-squared values were below 0.05).

## Recommendations

In the second year of implementation of the Middle School Initiative, Beacon Centers reached large numbers of middle-grades students while continuing to serve youth and adults of all ages, although some Beacons struggled with reaching high levels of participation. Beacon Centers offered a range of programming activities to engage youth, focusing especially on academic support and recreational activities. Based on findings presented in this report from the second year of evaluation of the initiative, we offer the following recommendations for DYCD:

- **Provide technical support to improve program content.** In the second year of the initiative, Beacon Centers offered relatively few activities in four of the core content areas identified for the initiative: life skills, career awareness, civic engagement, and culture. Helping Beacon Centers identify curricula or resources in those areas could increase the breadth of content that participants receive. In addition, our observations suggested that professional development that focuses on methods for promoting active learning techniques could improve the quality of activities in the Beacon Centers.

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<sup>3</sup> Directors reported the extent to which middle-grades youth at their Beacon: led activities, helped out in the office, helped plan Beacon activities or events, helped with meetings for parents or community members, and were encouraged to share their ideas about the Beacon Center or an activity.



- **Continue to facilitate strong partnerships with the host schools.** Our analyses revealed that Beacon Centers that benefited from good relationships and communication with their host school achieved higher levels of enrollment and participation among Middle School Initiative participants.
- **Develop additional opportunities for youth leadership.** We found that the extent to which youth were offered leadership opportunities in the Beacon Center was positively associated with youth reports of their exposure to new experiences through Beacon activities, their sense of belonging at the Beacon Center, and their reports of their relationships with peers and with program staff.

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## Appendix Technical Details of Analyses

### Exhibit A1 Associations with Beacons' Middle-Grades Enrollment

Coefficient	Beta	Standard Error of Beta	Standardized Beta	t
Constant	-45.76	245.62		-.19
Middle grades (5-8) enrollment of the host school	.08	.02	.39	3.04*
Is another afterschool program co-located at the site?	-4.91	24.90	-.03	-.20
Was lack of response from school staff to coordinate services or resources a major challenge?	36.02	41.49	.12	.87
Was lack of support from the school administration a major challenge?	-70.53	31.02	-.32	-2.27*
Were insufficient funds to provide high quality programming a major challenge?	-11.40	27.47	-.06	-.42
Was insufficient feedback or support from DYCD a major challenge?	33.40	54.96	.08	.61
Extent to which youth council contributes to Beacon	-2.98	4.76	-.10	-.63
Extent to which participants were able to take on leadership roles in the Beacon	4.23	9.91	.07	.43
Did the Beacon have a parent liaison?	12.53	24.58	.07	.51
Did the Beacon have a master teacher or education specialist?	-2.59	23.82	-.01	-.11
Frequency of communication with families	-.74	1.69	-.06	-.44
Frequency of communication with host schools	.96	1.37	.10	.70
Total years program director has worked at the Beacon in any capacity	3.84	1.84	.27	2.08*
Percentage of students at host school who are white	.83	.75	.14	1.12
Percentage of students at host school who are female	3.82	4.80	.12	.80

\* The standardized Beta is statistically significant at  $p < 0.05$ .  
R-squared=.38,  $F(15, 48)=1.97$ ,  $p=0.039$ .

**Exhibit A2**  
**Analysis of Variance for Percent of Participants Achieving**  
**the 216-Hour Participation Target**

	<b>Bottom Quartile Mean (n=18)</b>	<b>Top Quartile Mean (n=18)</b>	<b>F-statistic</b>	<b>p of F</b>
Frequency of director's communication with host school (times per year)	13.09	21.50	8.187	.008
Frequency of director's communication with participants' families (times per month)	9.27	13.19	2.093	.158
Director's experience (years)	7.25	8.81	.528	.473
Percent of students at host school who are white	7.06	9.82	.360	.552
Percent of students at host school who are female	47.89	47.43	.210	.649
Number of students enrolled in grades five through eight at host school(s)	655.70	619.95	.082	.776
Youth Advisory Council's contribution (scale score)	2.26	2.70	.176	.678
Middle-grades participants' contributions (scale score)	.37	.78	.659	.423
Number of middle-grades participants at Beacon Center	225.45	220.70	.022	.882

Exhibit reads: Directors in Beacon programs in the bottom quartile of percent of participants who met the 216 hour target communicated with their host schools an average of 13.09 times per year; directors in the top quartile of the scale communicated with their host schools an average of 21.50 times per year; the difference between the quartiles is statistically significant at the p=0.01 level.

**Exhibit A3**  
**Mann-Whitney Test for Percent of Participants Achieving**  
**the 216-Hour Participation Target**

	<b>Bottom Quartile Mean (n=13)</b>	<b>Top Quartile Mean (n=10)</b>	<b>U-statistic</b>	<b>p of U</b>
Percent of directors reporting lack of response from school staff to coordinate services or resources was a major challenge	18.75	12.50	120.00	.632
Percent of directors reporting lack of support from the school administration was a major challenge	37.50	12.50	96.00	.108
Percent of directors reporting insufficient funds to provide high quality programming was a major challenge	37.50	25.00	112.00	.453
Percent of directors reporting insufficient feedback or support from DYCD was a major challenge	12.50	0	112.00	.151
Percent of Beacons with a parent liaison or parent outreach coordinator	38.00	56.00	104.00	.296
Percent of Beacons with a master teacher or education specialist	19.00	67.00	62.50	.008

Exhibit reads: Nineteen percent of directors in Beacon programs in the bottom quartile of percent of participants who met the 216 hour target reported that the lack of response from school staff to coordinate services or resources was a major challenge, and 13 percent of Beacon directors in the top quartile reported this as a challenge; the difference between the quartiles is not statistically significant at the  $p=0.10$  level.

**Exhibit A4**  
**Analysis of Variance for Exposure to New Experiences**

	<b>Bottom Quartile Mean (n=16)</b>	<b>Top Quartile Mean (n=17)</b>	<b>F-statistic</b>	<b>p of F</b>
Frequency of director's communication with host school (times per year)	15.69	16.53	.051	0.823
Frequency of director's communication with participants' families (times per month)	8.76	11.84	1.186	0.286
Director's experience (years)	6.30	8.56	1.108	0.302
Percent of students at host school who are white	9.86	10.39	0.008	0.929
Percent of students at host school who are female	48.65	49.09	0.204	0.655
Number of students enrolled in grades five through eight at host school(s)	580.47	424.41	1.023	0.319
Youth Advisory Council's contribution (scale score)	0.62	2.32	2.654	0.115
Middle-grades participants' contributions (scale score)	-0.75	0.75	13.496	0.001
Percent of middle-grades participants who achieved the 216-hour target	34.00	31.00	0.370	0.547
Number of middle-grades participants at Beacon Center	207.65	212.35	0.016	0.899

Exhibit reads: Directors in Beacon programs in the bottom quartile of participants' "exposure to new experiences" scale communicated with their host schools an average of 15.69 times per year; directors in the top quartile of the scale communicated with their host schools an average of 16.53 times per year; the difference between the quartiles is not statistically significant at the p=0.10 level.

**Exhibit A5**  
**Mann-Whitney Test for Exposure to New Experiences**

	<b>Bottom Quartile Median (n=13)</b>	<b>Top Quartile Median (n=16)</b>	<b>U-statistic</b>	<b>p of U</b>
Percent of Directors Reporting Lack of response from school staff to coordinate services or resources was a major challenge	23	6	86.5	0.199
Percent of Directors Reporting Lack of support from the school administration was a major challenge	15	19	100.5	0.815
Percent of Directors Reporting Insufficient funds to provide high quality programming was a major challenge	15	44	74.5	0.107
Percent of Directors Reporting Insufficient feedback or support from DYCD was a major challenge	8	6	102.5	0.881
Percent of Beacons with a parent liaison or parent outreach coordinator	38	44	98.5	0.778
Percent of Beacons with a master teacher or education specialist	25	31	90.0	0.722

Exhibit reads: Twenty-three percent of directors in Beacon programs in the bottom quartile of participants' "exposure to new experiences" scale reported that the lack of response from school staff to coordinate services or resources was a major challenge, and six percent of Beacon directors in the top quartile reported this as a challenge; the difference between the quartiles is not statistically significant at the  $p=0.10$  level.

**Exhibit A6**  
**Analysis of Variance for Relationships with Peers**

	<b>Bottom Quartile Mean (n=17)</b>	<b>Top Quartile Mean (n=17)</b>	<b>F-statistic</b>	<b>p of F</b>
Frequency of director's communication with host school (times per year)	14.28	17.16	0.768	0.388
Frequency of director's communication with participants' families (times per month)	11.81	11.49	0.013	0.911
Director's experience (years)	8.00	8.88	0.156	0.695
Percent of students at host school who are white	6.85	8.33	0.079	0.781
Percent of students at host school who are female	48.20	48.52	0.099	0.755
Number of students enrolled in grades five through eight at host school(s)	523.35	448.67	0.285	0.597
Youth Advisory Council's contribution (scale score)	0.76	2.91	3.790	0.061
Middle-grades participants' contributions (scale score)	-0.37	1.01	10.952	0.002
Percent of middle-grades participants who achieved the 216-hour target	0.35	0.32	0.185	0.670
Number of middle-grades participants at Beacon Center	209.18	211.56	0.005	0.947

Exhibit reads: Directors in Beacon programs in the bottom quartile of participants' "relationships with peers" scale communicated with their host schools an average of 14.28 times per year; directors in the top quartile of the scale communicated with their host schools an average of 17.16 times per year; the difference between the quartiles is not statistically significant at the p=0.10 level.

**Exhibit A7**  
**Mann-Whitney Test for Relationships with Peers**

	<b>Bottom Quartile Median (n=16)</b>	<b>Top Quartile Median (n=16)</b>	<b>U-statistic</b>	<b>p of U</b>
Percent of Directors Reporting Lack of response from school staff to coordinate services or resources was a major challenge	13	6	120.00	0.551
Percent of Directors Reporting Lack of support from the school administration was a major challenge	13	13	128.00	1.00
Percent of Directors Reporting Insufficient funds to provide high quality programming was a major challenge	31	44	112.00	0.472
Percent of Directors Reporting Insufficient feedback or support from DYCD was a major challenge	6	6	128.00	1.00
Percent of Beacons with a parent liaison or parent outreach coordinator	44	38	120.00	0.723
Percent of Beacons with a master teacher or education specialist	27	38	107.00	0.526

Exhibit reads: Thirteen percent of directors in Beacon programs in the bottom quartile of participants' "relationships with peers" scale reported that the lack of response from school staff to coordinate services or resources was a major challenge, and six percent of Beacon directors in the top quartile of the scale reported this as a challenge; the difference between the quartiles is not statistically significant at the  $p=0.10$  level.



**Exhibit A8**  
**Analysis of Variance for Relationships with Staff**

	<b>Bottom Quartile Mean (n=18)</b>	<b>Top Quartile Mean (n=17)</b>	<b>F-statistic</b>	<b>p of F</b>
Frequency of director's communication with host school (times per year)	16.38	15.59	.058	.811
Frequency of director's communication with participants' families (times per month)	10.51	9.27	.202	.656
Director's experience (years)	7.53	7.25	.015	.903
Percent of students at host school who are white	7.79	13.16	.793	.379
Percent of students at host school who are female	48.55	47.72	.680	.415
Number of students enrolled in grades five through eight at host school(s)	675.26	519.29	.857	.361
Youth Advisory Council's contribution (scale score)	0.40	2.10	2.829	.103
Middle-grades participants' contributions (scale score)	-0.07	1.08	4.332	.046
Percent of middle-grades participants who achieved the 216-hour target	36.00	32.00	.485	.491
Number of middle-grades participants at Beacon Center	216.05	236.94	.362	.551

Exhibit reads: Directors in Beacon programs in the bottom quartile of participants' "relationships with staff" scale communicated with their host schools an average of 16.38 times per year; directors in the top quartile of the scale communicated with their host schools an average of 15.59 times per year; the difference between the quartiles is not statistically significant at the p=0.10 level.

**Exhibit A9**  
**Mann-Whitney Test for Relationships with Staff**

	<b>Bottom Quartile Median (n=17)</b>	<b>Top Quartile Median (n=16)</b>	<b>U-statistic</b>	<b>p of U</b>
Percent of Directors Reporting Lack of response from school staff to coordinate services or resources was a major challenge	6	6	135.50	0.965
Percent of Directors Reporting Lack of support from the school administration was a major challenge	12	13	135.00	0.949
Percent of Directors Reporting Insufficient funds to provide high quality programming was a major challenge	24	31	125.50	0.624
Percent of Directors Reporting Insufficient feedback or support from DYCD was a major challenge	6	6	135.50	0.965
Percent of Beacons with a parent liaison or parent outreach coordinator	4	50	116.00	0.400
Percent of Beacons with a master teacher or education specialist	3	50	108.00	0.234

Exhibit reads: Six percent of directors in Beacon programs in the bottom quartile of participants' "relationships with staff" scale reported that the lack of response from school staff to coordinate services or resources was a major challenge, and six percent of Beacon directors in the top quartile of the scale reported this as a challenge; the difference between the quartiles is not statistically significant at the  $p=0.10$  level.

**Exhibit A10**  
**Analysis of Variance for Sense of Belonging**

	<b>Bottom Quartile Mean (n=17)</b>	<b>Top Quartile Mean (n=19)</b>	<b>F-statistic</b>	<b>p of F</b>
Frequency of director's communication with host school (times per year)	16.04	16.6	.022	.883
Frequency of director's communication with participants' families (times per month)	11.30	11.51	.004	.947
Director's experience (years)	7.77	5.93	.701	.410
Percent of students at host school who are white	12.64	10.54	.118	.733
Percent of students at host school who are female	48.59	47.80	.666	.421
Number of students enrolled in grades five through eight at host school(s)	571.94	421.88	1.339	.256
Youth Advisory Council's contribution (scale score)	-0.35	1.47	2.872	.102
Middle-grades participants' contributions (scale score)	-0.74	0.92	13.185	.001
Percent of middle-grades participants who achieved the 216-hour target	40.00	35.00	.702	.408
Number of middle-grades participants at Beacon Center	216.88	213.88	.043	.838

Exhibit reads: Directors in Beacon programs in the bottom quartile of participants' "sense of belonging" scale communicated with their host schools an average of 15.69 times per year; directors in the top quartile of the scale communicated with their host schools an average of 16.53 times per year; the difference between the quartiles is not statistically significant at the p=0.10 level.

**Exhibit A11**  
**Mann-Whitney Test for Sense of Belonging**

	<b>Bottom Quartile Median (n=13)</b>	<b>Top Quartile Median (n=15)</b>	<b>U-statistic</b>	<b>p of U</b>
Percent of Directors Reporting Lack of response from school staff to coordinate services or resources was a major challenge	15	13	95.50	0.879
Percent of Directors Reporting Lack of support from the school administration was a major challenge	31	20	87.00	0.519
Percent of Directors Reporting Insufficient funds to provide high quality programming was a major challenge	15	3	86.50	0.476
Percent of Directors Reporting Insufficient feedback or support from DYCD was a major challenge	8	7	96.50	0.918
Percent of Beacons with a parent liaison or parent outreach coordinator	5	40	91.50	0.747
Percent of Beacons with a master teacher or education specialist	3	27	93.50	0.814

Exhibit reads: Fifteen percent of directors in Beacon programs in the bottom quartile of participants' "sense of belonging" scale reported that the lack of response from school staff to coordinate services or resources was a major challenge, and 13 percent of Beacon directors in the top quartile of the scale reported this as a challenge; the difference between the quartiles is not statistically significant at the  $p=0.10$  level.