**THE BEACON COMMUNITY CENTERS
MIDDLE SCHOOL INITIATIVE:
Final Report on Implementation and Youth Experience
in the Initiative**

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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, which are operated by community-based organizations, are located in selected public schools and serve youth and adults in the evenings, on weekends, over holidays, and during the summer. Cities throughout the country have replicated the Beacons model of youth and community development.

In September 2007, the New York City Department of Youth and Community Development (DYCD) launched the Beacon Middle School Initiative to increase Beacon services targeted to youth in grades 5-8. Through this initiative, DYCD charged the Beacon Centers with providing middle-grades youth with ongoing, structured programming in academics, life skills, career awareness, civic engagement, physical health, arts, and culture. This initiative represented a new emphasis for the 80 Beacon Community Centers, which had previously delivered mainly after-school activities for children and drop-in programming for older youth and adults. DYCD set an enrollment target of 200 middle-grades youth per Beacon, out of 1,200 total participants at the typical Beacon Center. DYCD asked Beacons to accommodate the Middle School Initiative within annual DYCD operating budgets that declined from $400,000 per Beacon Center in 2006-07 to $365,000 in 2010-11 because of city-wide fiscal stringencies.

The Middle School Initiative aligned with efforts of the New York City Department of Education (DOE) to improve educational services and outcomes for middle-grades youth, and was grounded in earlier research about the within-school and out-of-school time needs of these youth. In particular, a study examining adolescents' progress toward graduation had highlighted the fact that failure in high school can be predicted during middle school, a time when youth may become involved in risky, dangerous behaviors (Balfanz & Herzog, 2006). Other research had found that, as students in the middle grades forge their identity as adolescents, they need the support of community resources to engage in activities that encourage physical, intellectual, emotional, and social growth (Eccles & Gootman [eds.], 2002).

Recent research examining out-of-school time programs that serve older youth also highlights the importance of sustained participation in out-of-school time programs in order for adolescent youth to achieve positive outcomes (Deschenes, Arbreton, Little, Herrera, Grossman, Weiss, & Lee, 2010). This study identified youth-program characteristics associated with sustained participation by older youth, including opportunities for youth to develop relationships with peers and adults, have new experiences, and make positive, developmentally appropriate choices.

DYCD contracted with Policy Studies Associates, Inc. (PSA) to conduct a three-year evaluation of the Middle School Initiative. The evaluation was designed to inform DYCD about program-level implementation patterns, the characteristics of youth served by the initiative, their patterns of program participation, and relationships between Beacon Middle School program features and certain youth outcomes.

Who Participated in the Beacon Middle School Initiative?

Enrollment in the Beacon Middle School initiative increased slightly over the three years of the evaluation. The number of middle-grades youth participating in the initiative ranged from 20,269 in 2007 to 21,798 in 2009-10. During the 2009-10 program year (which includes summer 2009), about a third of the Centers' total enrollment (32 percent) were enrolled in the middle grades. During this period, the majority of Beacon Centers (64 of 80) met or exceeded the DYCD target of 200 enrolled middle-grades participants.

To help Beacons prioritize sustained youth participation (as recommended in Deschenes et al., 2010), DYCD established a program-level goal of providing 216 hours of programming to middle-grades participants during the 2009-10 school year. (This goal translates into 72 days of participation for an average of three hours per day.) Beacon middle-grades youth participated in an average of 189 hours of programming over the 12-month period. On average, 36 percent of a Center's middle-grades participants attended for 216 hours or more, compared to 34 percent of a Center's participants who met this participation level in 2008-09, the first year of the initiative. Among the participants who attended Beacon programming in 2009-10, 35 percent were returning participants who attended Beacon programming for at least one year prior to 2009-10. Twenty-three percent had attended for two previous programming years, and 12 percent had attended one previous year.

In general, demographics of Beacon participants reflected the larger New York City public middle school population. In 2009-10, the majority of youth participating in the Middle School Initiative were Latino(a) or African American (38 percent and 37 percent, respectively). However, a smaller proportion of Middle School Initiative youth performed at or above grade level on the 2009-10 citywide English Language Arts (ELA) assessment—meaning they scored at Level 3 or Level 4—when compared with the overall New York City middle school population (33 and 41 percent, respectively). A similar but slightly smaller proportion of Beacon middle-grades participants performed at or above grade level on the 2009-10 math assessment when compared with the total New York City middle school population (47 and 53 percent, respectively).

Who Staffs the Beacons?

Beacon Centers are managed by directors who oversee programming for both youth and adult participants. Beacon directors had extensive experience working in youth development, with the average Beacon director having worked more than 18 years in this field.

Under the supervision of the Beacon director, paid and volunteer program staff with varied backgrounds led activities for middle-grades youth. Beacons relied heavily on college students to staff middle-grades programming; nearly a third of middle-grades staff members in 2009-10 were college students, who worked an average of 16 hours per week at the Beacon. Specialists such as professional artists, dancers, and athletic instructors accounted for just more than a quarter of Middle School Initiative staff, and worked an average of 13 hours per week at the Beacon. Teens accounted for a similar proportion of program staff (25 percent) and also

worked an average of 13 hours each week. Beacons also employed certified teachers (14 percent of staff), who averaged 11 hours per week.

Directors were most likely to report that certified teachers were responsible for leading academic activities. However, among Beacons that employed certified teachers, fewer than half of directors reported that teachers served in leadership roles, such as master teacher, or took on supervisory roles that would enable them to share their instructional expertise with the larger Beacon staff.

How Did Beacons Support Participants' Social and Academic Development?

Beacon Centers were expected to provide structured middle-grades programming in six core activity areas: sports and recreation, academic enhancement, culture and arts, civic engagement, career awareness, and life skills. Beacons track participant activity attendance using DYCD's management information system, and evaluators used those records to analyze the types of activities in which middle-grades youth engaged at the Beacon Centers.

During both the 2009-10 summer and school-year programming periods, youth spent most of their time in recreational activities (45 and 43 percent of hours in the summer and school-year sessions, respectively), followed by academic enhancement activities (31 and 14 percent, respectively). This represents an increase in recreation and decrease in academic enhancement time during school year programming, compared to the 2008-09 school year (36 and 39 percent of hours, respectively). During the 2009-10 school year, youth spent less than one-quarter of their time in enrichment activities related to the arts, social development, civic engagement, and career awareness. All Beacon Centers offered at least some activities in each of the six core areas, with the exception of career awareness and civic engagement.

During spring 2010, evaluators visited 10 Beacon Centers and conducted structured observations of Middle School Initiative activities. Because the observation data are not representative of all Middle School Initiative activities, the results should be interpreted with caution. Research suggests that high-quality youth programs can encourage youth to master new skills through project-based learning that connects smaller learning goals to an end-product, (Grossman, Campbell, & Raley, 2007). In general, the observed activities effectively engaged youth and promoted positive relationships between staff and youth and among youth. Youth were typically on-task and engaged, and staff were warm and caring in their interactions with youth. However, program activities did not consistently promote skill development or mastery.

In order to support learning goals for youth, activities need to be clearly planned and delivered. One way that Beacon directors can help their staff to carry out structured activities is to require that staff submit lesson plans and to give staff critical feedback on those plans. On the Beacon director survey, however, only 17 percent of directors reported requiring at least some staff to submit lesson plans on a regular basis. The majority of Beacon directors reported that they regularly communicated with host school staff about issues related to using school space for programming (70 percent). Directors were less likely to report that they communicated with school staff about issues related to participants' academic performance. Fifty-five percent of

directors reported that they discussed homework with school personnel, and 45 percent discussed curricular concepts being taught in the school with school staff at least once a month.

How Do Local Councils Help Guide the Beacons?

At each Beacon, an Advisory Council made up of representatives from the Beacon and the surrounding community helps to guide the work of the Center. Most directors reported that parents of participants (as reported by 83 percent of directors) and Beacon staff members (83 percent of directors) served on their Advisory Councils. Most directors also reported that youth participants and Beacon staff were represented on the Advisory Councils (68 and 67 percent, respectively).

Overall, Beacon directors indicated that few external representatives served on Advisory Councils. Just more than half of directors said that a school principal or assistant principal served on their Council, and only a quarter of Beacon directors said that local business owners or government officials were involved in their Advisory Council.

We asked Beacon directors to identify the primary roles that their Advisory Councils played in guiding the work of the Centers. Directors were most likely to report that the Advisory Council provided: feedback and suggestions for Beacon programming (96 percent), a means of communication between the Beacon and the local community (84 percent), and suggestions for resources, such as businesses that could donate materials or services to support the work of the Beacon (77 percent).

In addition to the Beacon Advisory Council, Beacon Centers also convene Youth Councils that are designed to give youth direct input into the work of the Beacon. While Youth Councils tend to be comprised of older participants, 81 percent of Beacon directors reported that middle-grades youth served on their Beacon's Youth Council. Beacon directors were most likely to report that their Youth Council was responsible for planning community service projects (85 percent), identifying activities to be offered at the Beacon (79 percent), and planning community events and events for families (78 percent).

What Is the Youth Experience at the Beacon?

In general, in survey responses, middle-grades youth were positive about their experiences at the Beacon. More than two-thirds of all respondents, for example, agreed that Beacon activities were engaging and offered opportunities to try new things, helped them feel more confident playing sports, and helped them finish homework more often. Nearly all reported trying hard in school and paying attention in class. In interviews, one middle-grades participant explained that the Beacon Center helped with homework completion and school performance: "Since I started Beacon, I get better grades on my tests in reading. When we go in the classroom, it's a quiet place to work so I can finish my reading homework." Another participant explained that her Beacon provides a comfortable place to play sports: "There is good sportsmanship here, you don't yell at each other when you're playing."

The majority of participants also reported strong relationships with their peers at the Beacon and being treated with respect by the Beacon staff. One participant reflected on the positive and trusting relationship with staff members, explaining, "[The staff member] keeps secrets. If you have a problem, she will solve it for you and help you talk about it. When you have a problem with someone, she fixes it in the calm way."

As part of the Middle School Initiative, youth were expected to participate in structured activities focused on civic engagement. More than two-thirds of respondents agreed that they had gained awareness of the community and about how they can help others from their participation at the Beacon Center. For example, one middle-grades participant explained, "[the Beacon] helped me to be a good leader to younger people. We also did good things for our community and other people, we had a food drive to collect food for Haiti."

However, youth survey results also suggested areas for improvement. For instance, youth reported that the Beacon did not help them learn about jobs or careers, write better, make smart decisions about money, or use computers to do schoolwork better, highlighting possible areas for improvement. In addition, on questions about relationships, youth did not report that they had the opportunity to get to know other young people really well, indicating that the Beacons may further improve the experience of middle-grades participants by strengthening programming focused on inter-personal relationships, peer support, and team-building.

What Beacon Characteristics Are Most Closely Associated with Positive Outcomes?

Evaluators developed a series of statistical models to predict the effects of various Center characteristics on the enrollment, participation levels, and experiences of youth enrolled at that Center. From these analyses emerged the following important features of Beacon Centers:

- ■ The **number of middle school students who attended the host school** was a statistically significant predictor for the size of the middle school enrollment at each Beacon Center. Beacons that enrolled large numbers of middle-grades youth were more likely to be housed at middle schools, suggesting that Centers located in elementary or high schools may need to conduct additional outreach efforts to attract middle-grades youth.

- ■ Directors at the Beacons with the highest proportion of participants meeting the participation target **interacted more frequently each month with families** than did the directors at the Beacons with the lowest proportion of participants meeting the target. Although data are not available on the content of these interactions, the finding suggests that Beacons that are better connected to the families of participants have greater success in achieving regular attendance among participants.

- The directors of Beacons where participants reported more opportunities for new and interesting experiences **interacted more frequently with the staff at their host schools** than did the directors at the Beacons where participants responded less positively.

- In addition, the Beacons where youth gave high ratings to their opportunities to try new and interesting things were those Beacons where the director reported that the **Youth Council had more input**. This finding suggests that, when youth have an opportunity to help select program activities, they may provide suggestions that meet with the approval of their peers.

Recommendations for Program Improvement

Based on the findings presented in this report, the following recommendations are offered for strengthening the programming offered to middle-grades participants at the Beacon Centers:

- **Conduct targeted outreach efforts to recruit and engage middle-grades participants.** Beacons with the highest levels of middle-grades enrollment were, not surprisingly, located in middle schools. Beacon Centers located in schools serving other grade levels may need to more actively promote their programs through partnerships with surrounding middle schools to recruit these youth.

- **Strengthen connections with the families of participants.** The evaluation found that the Beacons with the greatest proportions of high-attending middle-grades participants interacted frequently with families. These regular interactions may help families view the Beacon as an important resource and support for youth during the out-of-school time hours.

- **Increase staff focus on participants' academic needs.** Based on evidence of participants' academic needs in English Language Arts and math, Beacon Centers may need to work more with participants' schools to ensure that Beacon staff are aware of participants' learning needs and provide programming that can address these needs.

- **Assign staff members who are certified teachers to serve as education specialists or master teachers.** The majority of Beacon Centers have certified teachers on staff, although few directors reported using these teachers to guide or design the academic activities offered at the Beacon or to supervise and train other staff on how to lead academic activities. Encouraging certified teachers to help guide academic programming at the Beacon could help connect Beacon activities to what participants are learning during the school day.

- **Support Beacons in learning how to work effectively with the host school.** Analyses showed that participants at those Beacons that had strong relationships with the host schools rated their Beacon experiences more highly. However,

many Beacon directors still communicate with school staff about only transactional issues, such as space and discipline, and only occasionally talk with school staff about alignment of learning goals or the progress of individual students. Evaluators recommend that DYCD help Beacons create deeper, more substantive relationships with schools in order to support the Beacons' work with youth.

■ **Encourage directors to require that staff submit structured lesson plans with clearly outlined activity plans and learning goals.** Observations revealed that many middle-grades activities had neither a clear learning structure nor a focus on engaging youth in active learning. While the study's observation data are not necessarily representative, they echo survey findings that the majority of Beacon directors do not require staff to submit lesson plans for Middle School Initiative activities. By requiring that staff create lesson plans for Beacon activities, and then reviewing those plans and providing feedback, Beacon directors would be better able to improve the quality of middle-grades activities.

■ **Provide additional guidance and support for Beacons' facilitation of their Advisory Councils and Youth Advisory Councils.** In light of findings that Beacons where youth gave high ratings to their exposure to new and interesting experiences at the Beacon were also more likely to have active Youth Councils, evaluators recommend that DYCD ramp up help to Beacons in developing and supporting their Youth Councils. Additionally, given the current budgetary challenges facing Beacons, Advisory Councils could play a larger role in helping Beacon Centers to develop their capacity to fundraise.

Overview of the 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, which are operated by community-based organizations, are located in selected public schools and serve youth and adults in the evenings, on weekends, over holidays, and during the summer. Cities throughout the country have replicated the Beacons model of youth and community development.

In September 2007, the New York City Department of Youth and Community Development (DYCD) launched the Beacon Middle School Initiative to increase Beacon services targeted to middle-grades youth. The initiative represented a new emphasis for the 80 Beacon Community Centers, which had previously delivered mainly after-school activities for children and drop-in programming for older youth and adults. Beacon Centers were also expected to maintain services for participants in other age groups. Through the Middle School Initiative, from 2007-08 through 2009-10, each Beacon Center was expected to serve a total of 1,200 participants, including 200 youth in grades 5-8. DYCD asked Beacons to accommodate the Middle School Initiative within annual DYCD operating budgets that declined from $400,000 per Beacon Center in 2006-07 to $365,000 in 2010-11 because of city-wide fiscal stringencies.

The Middle School Initiative aligned with efforts of the New York City Department of Education (DOE) to improve educational services and outcomes for middle-grades youth, and was grounded in earlier research about the within-school and out-of-school time needs of these youth. In particular, a study examining adolescents' progress toward graduation had highlighted the fact that failure in high school can be predicted during middle school, a time when youth may become involved in risky, dangerous behaviors (Balfanz & Herzog, 2006). Other research had found that, as students in the middle grades forge their identity as adolescents, they need the support of community resources to engage in activities that encourage physical, intellectual, emotional, and social growth (Eccles & Gootman [eds.], 2002).

Recent research examining out-of-school time programs that serve older youth also highlights the importance of sustained participation in out-of-school time programs in order for adolescent youth to achieve positive outcomes (Deschenes, Arbreton, Little, Herrera, Grossman, Weiss, & Lee, 2010). This study identified youth-program characteristics associated with sustained participation by older youth, including opportunities for youth to develop relationships with peers and adults, have new experiences, and make positive, developmentally appropriate choices.

In 2007, DYCD contracted with Policy Studies Associates, Inc. (PSA) to conduct a three-year evaluation of the Beacon Community Centers Middle School Initiative. This report presents the findings from the final year of the evaluation, which we designed to inform DYCD about the characteristics of youth served by the initiative, their patterns of participation, and the Beacons' patterns of program implementation. The evaluation addresses the following questions:

■ What are the educational and other developmental characteristics of youth who participate in the Middle School Initiative? How do these youth compare to middle-grades youth enrolled in the city's public schools generally?

■ Does the Middle School Initiative programming administered by Beacons meet reasonable expectations for effective implementation, especially in the areas of youth attendance, connections to schools and communities, staffing, activity approach, and activity content?

■ What program features are associated with positive participant- and Beacon-level outcomes?

This report focuses primarily on the implementation of the Beacon Middle School Initiative in its third year (2009-10), and is based on data collected from the following sources:

■ **Survey of Beacon directors.** In spring 2010, we administered an online survey to all Beacon directors. Data reported are based on the 71 responses that were received from the 80 Beacon Centers, for a response rate of 89 percent.

■ **Survey of middle-grades participants.** In spring 2010, we administered a survey to a random sample of 2,039 Beacon middle-grades participants who attended summer or school-year programming in the 76 Beacon Centers in which we received research consent from the host school principals. We received a total of 831 completed surveys from participants in 72 Beacon Centers, for a program-level response rate of 90 percent and a youth-level response rate of 34 percent. Details about the random sampling approach and its impact on the response rate are included in the appendix of this report.

■ **DYCD Online.** We analyzed patterns of enrollment and participation in all Beacon middle-grades programs using data entered in DYCD Online, the agency's management information system. In 2009-10, this included data describing the number of hours of participation by program activity area for 21,798 middle-grades participants.

■ **DOE data.** We requested an extraction of DOE student-level demographic, school attendance, and educational performance data on the 7,109 randomly sampled participants who attended Beacon middle-grades programming in 2007-08 through 2009-10. We received data for 5,851 participants, representing a match rate of 82 percent.

■ **Site visits to 10 Beacon Centers.** Ten Beacon Centers were selected in consultation with DYCD to be visited in spring 2010 as part of the evaluation. 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 2010. Site visits included interviews with the Beacon director and other key staff, a group interview with middle-grades participants, and structured observation of activities.

Youth Characteristics and Participation

In this section we examine Beacon Center enrollment, the frequency of middle-grades participation in Beacon programming, and the characteristics of youth served through the Middle School Initiative.

Participants Served

The Beacon Centers served a total of 66,984 youth and adult participants during the summer of 2009 and the 2009-10 school year, as shown in Exhibit 1. These enrollment numbers reflect the expectation that Beacon Centers serve elementary-grades youth, high school youth, and adults, in addition to participants in the Middle School Initiative. Overall, Beacons served 21,798 middle-grades youth in the 2009-10 program year, representing about a third (32 percent) of total enrollment. Middle-grades enrollment increased slightly over the three years of the initiative: in 2007-08, 20,269 middle-grades participants enrolled in the Beacons, as did 21,000 in 2008-09.

Exhibit 1
Enrollment in Beacon Centers, by Grade *(n=80)*

	Summer 2009 (07/09-08/09)		2009-10 School Year (09/09-06/10)		2009-10 Unduplicated Total* (07/09-06/10)	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Kindergarten-Grade Four	6,391	34	8,705	15	12,407	26
Grade Five	2,666	14	3,476	6	4,918	7
Grade Six	2,634	14	5,170	9	6,558	10
Grade Seven	2,232	12	4,598	8	5,685	8
Grade Eight	1,556	8	3,802	7	4,637	7
Grade Nine-Grade Twelve	1,196	6	6,739	12	7,460	11
Adults	2,048	11	24,251	43	25,319	38
Total	18,723	100	56,741	100	66,984	100

Exhibit reads: During summer 2009, 6,391 youth in Kindergarten through fourth grade attended Beacon summer programming, representing 34 percent of the total summer enrollees.

*Totals do not equal summer and school-year columns added together because of youth who participated in both programming cycles.

DYCD's contractual enrollment expectations for the 2009-10 program year were that at least 200 youth in grades 5-8 participate in middle-grades programming at each Beacon. The majority of Beacon Centers (64 of 80) met or exceeded the 200-participant target for middle-grades youth; 43 of these Beacons achieved the target during their academic-year programming alone. Another 21 Beacons met the 200-participant target through summer sessions and school-year sessions combined.

During the 2009-10 school year each Beacon Center served an average of 213 middle-grades youth, similar to the 2008-09 average of 216 youth. When summer-only participants are included in the enrollment counts, the average number of middle-grades youth served by each Beacon increased to 272 in 2009-10, with middle-grades enrollment ranging from 130 youth to 551 youth (Exhibit 2).

Exhibit 2
Average 2009-10 Middle-Grades Enrollment in Beacon Centers (*n=80*)

Program Enrollment Size	Summer (07/09-08/09)	School Year (09/09-06/10)	2009-10 Total* (07/09-06/010)
Lowest	63	72	130
Highest	241	546	551
Average	117	213	272

Exhibit reads: The Beacon with the lowest middle-grades enrollment during the summer served 63 youth in grades 5-8.

*The information in the "2009-10 Total" column is not the sum of the "Summer" and "School Year" columns because some participants attended both sessions.

Frequency of Participation

Current research on older youth and after-school program participation suggests that, while consistent participation is essential to youth achieving desired social and academic outcomes, participation tends to diminish as youth move into adolescence (Deschenes et al, 2010). To help Beacons prioritize sustained youth participation, DYCD established a program-level goal of providing 216 hours of programming to middle-grades participants during the 2009-10 school year.

For evaluation purposes, we used data from DYCD Online, the agency's management information system, to determine the number of hours attended by individual participants during the 2009-10 school year. During that period, middle-grades participants averaged 189 hours of structured programming, below the goal of 216 hours. On average, 36 percent of a Center's enrolled middle-grades participants attended for 216 hours or more, compared to the average of 34 percent of participants meeting the targeted participation level in 2008-09. During 2009-10, the percent of students who met or exceeded this level of participation varied greatly from Beacon to Beacon, from a low of 2 percent of participants meeting this threshold at one Beacon to a high of 79 percent in another. As noted earlier, during the 2009-10 year,

Beacon Centers experienced a funding reduction, which brought their annual DYCD-funded budgets from $400,000 to $365,000 per Beacon and is likely to have reduced the capacity of some programs.

To help emphasize the importance of sustained youth participation, DYCD established a program-level goal of providing 216 hours of programming to middle-grades participants during the 2009-10 school year. Contractually, DYCD required each program to achieve a 75 percent participation rate (as measured against targeted enrollment) by providing a minimum of 32,400 hours of service to middle-grades students (216 hours x 200 participants x 75 percent minimum rate of participation).

Among Beacon middle-grades participants, the intensity of participation varied by grade level, with younger youth attending more frequently and the oldest youth attending less often, as displayed in Exhibit 3.

Exhibit 3
Average Hours Attended by Middle-Grades Participants
During the 2009-10 School Year, by Grade *(n=80)*

	Grade Five	Grade Six	Grade Seven	Grade Eight	All Grades 5-8
Average Hours Attended	198	208	186	157	189

Exhibit reads: Fifth-grade participants attended an average of 198 hours during the 2009-10 school year.

Participation Across Years

The longer youth remain involved in an after-school program, the greater the chance that they will achieve the program's intended outcomes (Deschenes et al, 2010). In order to determine if middle-grades participants were attending Beacon programming over multiple years, we analyzed multiple years of attendance data from DYCD Online.

Among the participants who attended Beacon programming in 2009-10, 35 percent were returning participants who had enrolled in Beacon programming for at least one year prior to 2009-10. Twenty-three percent had attended for two previous years, and 12 percent had attended only one previous programming year. These rates account for participants "aging out" of the Middle School Initiative, and also include Beacon participants who moved and enrolled in another Beacon program.

Demographic Characteristics of Youth Served

In general, youth participating in the Middle School Initiative in 2009-10 reflected the demographics of the larger New York City public middle school population. The majority of participants were Latino(a) or African American, as shown in Exhibit 4. While the overall New York City middle school population is evenly divided between male and female students, the Beacon Centers served a higher proportion of males than females (56 and 44 percent, respectively).

Exhibit 4
Demographic Characteristics of Beacon Middle-Grades Participants
and NYC Public Middle School Students in 2009-10, in Percents

Participant Characteristics	Beacon Participants Grades 5-8 *(n=17,046)*	NYC Public Middle School Students *(n=206,142)*
Race/Ethnicity		
Hispanic or Latino(a)	38	41
Black or African American	37	32
Asian, Native Hawaiian, Pacific Islander	9	14
White	8	13
Other	8	--
American Indian or Alaska Native	<1	<1
Gender		
Female	44	50
Male	56	50

Exhibit reads: Thirty-eight percent of Beacon middle-grades participants were Hispanic or Latino (a), compared to 41 percent of New York City middle school students.

Source: Data on Beacon participants are from DYCD Online, and data on NYC middle school students are from the DOE website (www.schools.nyc.gov).

Educational Characteristics of Youth Served

We analyzed 2009-10 English Language Arts (ELA) and mathematics assessment results for a random, representative sample of Beacon middle-grades participants to compare the proportions of Beacon middle-grades participants and all New York City middle school students who performed at or above grade level (Exhibit 5). On average, a smaller proportion of Middle School Initiative youth performed at or above grade level on the 2009-10 ELA assessment—

meaning they scored at Level 3 or Level 4—when compared with the overall New York City middle school population (33 and 41 percent, respectively). Overall, a similar, but slightly smaller proportion of Beacon middle-grades participants performed at or above grade level on the 2009-10 math assessment when compared with the total New York City middle school population (47 and 53 percent, respectively).

Exhibit 5
ELA and Math Proficiency Among Beacon Middle-Grades Participants
and New York City Public Middle School Students, in Percents

	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
Performance on the 2010 New York State English Language Arts/Reading Assessment				
Beacon Middle-grades Participants *(n=1,457)*	17	50	29	4
NYC Public Middle School Students *(n=274,582)*	15	44	34	7
Performance on the 2010 New York State Mathematics Assessment				
Beacon Middle-grades Participants *(n=1,474)*	11	42	30	17
NYC Public Middle School Students *(n=282,210)*	11	36	31	22

Exhibit reads: 17 percent of Beacon middle-grades participants performed at Level 1 on the 2009-10 New York State English language arts/reading assessment.

Source: Data on Beacon participants are from DOE student-level data for a representative, random sample of Beacon participants; data on NYC middle school students are from the DOE website (www.schools.nyc.gov).

These performance levels reflect the importance of the Middle School Initiative's goal to support youth who may be at risk for school failure or high school dropout, and indicate that the majority of Beacon middle-grades participants are not performing at grade level and are likely to need extra academic support.

Program Features

The Beacon Middle School Initiative aimed to provide youth in grades 5-8 with access to structured after-school programming in six content areas: academic enhancement, arts/culture, sports/recreation, life skills, career awareness, and civic engagement. This section examines the implementation of middle-grades programming, including: the staffing structures and supervision practices that supported Beacon middle-grades programming, activities in which youth participated, and the activity features observed during site visits to 10 Beacon Centers in spring 2010.

Staffing Structures

       The initiative aimed to staff programs with individuals who were culturally competent and fully trained. Beacon Centers are managed by directors who oversee programming for both youth and adult participants. As shown in Exhibit 6, Beacon directors, on average, had significant experience working in youth development. The average director had worked: in their current position for five years, at a Beacon Center in another capacity for three years, and in a youth development position in New York City for 10 years.

Exhibit 6
Beacon Directors' Years of Experience *(n=71)*

Beacon Director Tenure	Years as Beacon Director	Years Working at the Beacon in Another Capacity	Years Working in Other Organizations as a Youth Development Professional in NYC
Lowest	<1	<1	<1
Highest	17	17	35
Average	5	3	10

Exhibit reads: The Beacon director with the least amount of experience at his/her Beacon had worked there for less than a year in spring 2010.

       Under the supervision of the Beacon director, paid and volunteer program staff with varied backgrounds led activities for middle-grades youth, as reported by Beacon directors in survey responses. Exhibit 7 shows that Beacons relied heavily on college students to staff middle-grades programming; college students amounted to nearly a third of middle-grades staff members and worked an average of 16 hours a week at the Beacon. Specialists such as professional artists, dancers, and athletic instructors accounted for just more than a quarter (28 percent) of Middle School Initiative staff, and worked an average of 13 hours per week at the Beacon. Teens accounted for a similar proportion of programs staff (25 percent) and also worked an average of 13 hours each week. To a lesser extent, Beacons employed certified teachers, and when they did, they worked fewer hours, averaging 11 hours per week, perhaps reflecting the high hourly pay rate that is required to hire teachers.

Exhibit 7
Staff and Volunteer Types and Hours Worked
in Beacon Middle-grades Programs *(n=71)*

Staff or Volunteer Categories	Number of Beacons That Employ Staff in This Category	Average Percent of Beacon Staff in This Category	Average Hours Worked per Week
College students	62	32	16
Specialists	62	28	13
Teens (e.g., high school students)	57	25	13
Certified teachers	51	14	11

Exhibit reads: On director surveys, directors of 62 Beacons reported employing college students; on average, 32 percent of Beacon staff and volunteers were college students; college student staff and volunteers typically worked 16 hours per week at the Beacon.

We asked Beacon directors to provide further detail about the roles and responsibilities of certified teachers on staff. As shown in Exhibit 8, directors were most likely to report that certified teachers were responsible for leading academic activities. In an interview, one director explained how using day-school teachers to work with students on identifying ideas and developing their science projects ensured that the projects were aligned with school expectations.

Exhibit 8
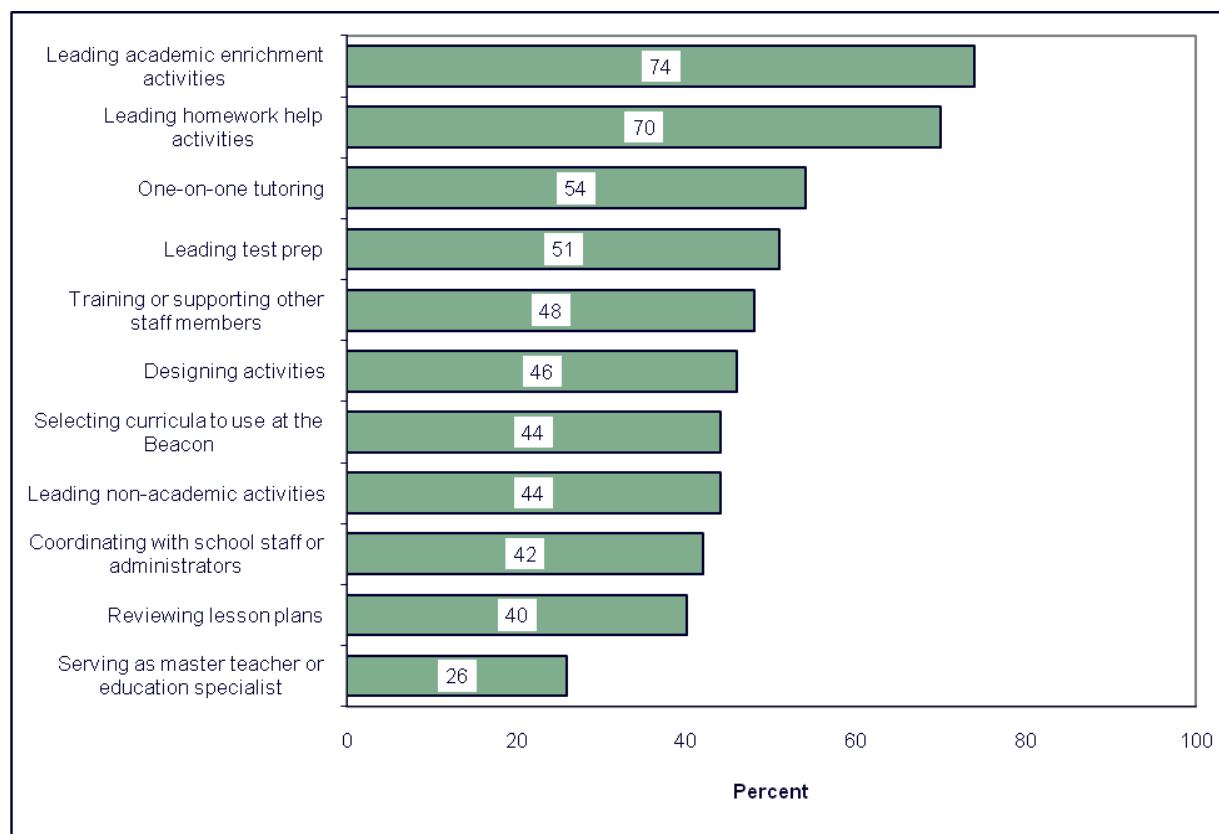**Roles Played by Certified Teachers, in Percents** *(n=50)*

Exhibit reads: Seventy-four percent of directors reported that certified teachers are responsible for leading academic enrichment activities.

Among Beacons that employed certified teachers, however, fewer than half of directors, reported that certified teachers served in leadership roles, such as master teacher or education specialist, or took on supervisory roles that would enable them to share their instructional expertise with the larger Beacon staff and contribute to the overall quality of the programming offered.

Activities

Beacon Centers track participants' engagement in particular activities, using DYCD's management information system, and we employed those records to analyze the types of activities in which middle-grades youth engaged at the Beacon Centers. As noted earlier, DYCD guidance stated that Beacon Centers were expected to provide structured programming in six areas: sports and recreation, academic enhancement, culture and arts, civic engagement, career awareness, and life skills.

During both the 2009-10 summer and school-year programming periods, youth spent most of their time in recreational activities (45 and 43 percent of hours in the summer and school-year sessions, respectively), followed by academic enhancement activities (31 and 14 percent, respectively). This represents an increase in recreation and decrease in academic enhancement time during school year programming, compared to the 2008-09 school year (36 and 39 percent of hours, respectively).

During the 2009-10 school year, youth spent less than one-quarter of their time in enrichment activities related to the arts, social development, civic engagement, and career awareness. All Beacon Centers offered at least some activities in each of the six core areas, with the exception of career awareness and civic engagement.

Exhibit 9
Middle-Grades Participants' Hours in Core Activity Areas, in Percents

Activity Type	Summer (07/09-08/09) (n=10,088)	School Year (09/09-06/10) (n=17,046)
Recreation	45	43
Academic enrichment	14	31
Culture and arts	18	12
Life skills	15	8
Civic engagement	6	3
Career awareness	1	2

Exhibit reads: During the 2009 summer program period, middle-grades youth spent an average of 45 percent of their time in recreation activities.

During site visits to 10 Beacons, directors often mentioned that the activities that touched on civic engagement, life skills, and career awareness tended to be "one-shot" activities where, for example, a speaker would come in and talk to youth on a specific topic, or Beacon

participants would spend a day cleaning up a local park. Directors rarely mentioned using curricula or planning structured activities in these areas.

Youth Experiences

During spring 2010, evaluators visited 10 Beacon Centers and conducted structured observations of activities for middle-grades participants. We observed a total of 51 activities in these 10 Beacons, as shown in Exhibit 10. The majority of activities observed were sports-related (15), followed by activities in the visual and performing arts (11), academic enrichment (11), and open/unstructured activities (8). This distribution largely reflects the activity areas in which youth spent the majority of their time during the 2009-10 academic year as reported in DYCD Online, although we observed a smaller proportion of academic enrichment activities than typically offered by programs.

Because the observation data collected are not representative of all Middle School Initiative activities, the results should be interpreted with caution. They do, however, offer insight into the features that may be typical of Beacon programming for middle-grades youth.

Exhibit 10
Content Areas of Observed Middle-grades Activities (*n=51*)

Activity type	Number of Observations
Sports (includes playing a physical game or learning a skill)	15
Visual and performing arts (e.g., visual arts, dance, music, drama and crafts)	11
Academic enrichment (e.g., story reading/listening, learning games, cultural projects)	11
Open/unstructured time	8
Homework help/tutoring (includes test prep)	6
Other (e.g., youth council, girls group)	2

Exhibit reads: During visits to Beacon Centers, evaluators observed 15 sports activities.

*Activities were recorded in one **or more** of the categories above, therefore the total count of activities in content areas exceeds the number of activities observed (51).

Using PSA's Out-of-School Time Observation Instrument, evaluators rated Beacon middle-grades activities on program-quality indicators that align with the features of successful programs according to current research on youth development programming. Prior research indicates that when youth in after-school programs are engaged in meaningful ways they are likely to learn more, experience better developmental outcomes, and participate for longer periods of time (Walker, Marczak, Blyth, & Borden, 2005). Therefore, understanding how to foster engagement is critical to program success. Evaluators looked for evidence of explicit learning goals, positive relationships, clearly sequenced lesson planning, and active opportunities for learning in the activities we visited, reflecting the features of promising programs identified by

Durlak and Weissberg (2007). The sections below present the observation indicators associated with each of these four areas, including the proportion of observed activities for which we determined that each the indicator was "moderately evident," or a 4 on a rating scale of 1 to 7.

Explicit learning goals. Consistent with the goals of the Beacon Middle School Initiative, current research suggests that youth development programs should be well organized, with activities that have specific and clear learning goals for youth (Eccles & Gootman, 2002; McLaughlin, 2000; Noam, 2008; Vandell et al., 2006). As displayed in Exhibit 11, in almost all of the activities we observed, youth were on-task and engaged. We also saw examples of staff clearly communicating the activity's goals and staff attentively listening to youth in more than three-quarters of the activities we observed. In most activities, youth were also generally attentive to each other and to staff (35 activities), and the activity was well-organized (35 activities).

Exhibit 11
Organization and Focus of Observed Activities (*n=51*)

Indicator	Number of Activities Where Indicator Was at Least Moderately Evident
Youth are on task	48
Staff communicate goals, purposes, expectations	39
Staff attentively listen to and/or observe youth	39
Youth listen actively and attentively to peers and staff	35
Activity is well organized	35

Exhibit reads: Evaluators observed at least moderate evidence of youth being on task in 48 of the 51 observed activities.

Development of positive interpersonal relationships. Out-of-school-time youth programs have the capacity to develop positive relationships among youth, and between youth and program staff (Eccles & Gootman [eds.], 2002). Evaluators rated activities on a series of indicators designed to show the extent to which activities focused on supporting personal and social skills and also fostered positive relationships among youth and with staff.

As shown in Exhibit 12, in more than three-quarters of the observations, we saw evidence that Beacon activities focused on developing positive relationships among youth and between youth and staff. In nearly every activity, youth were friendly with one another and staff, staff were warm and caring in their interactions with youth, and youth showed respect for their peers.

Exhibit 12
Relationship Development in Observed Activities (*n=51***)**

Indicator	Number of Activities Where Indicator Was at Least Moderately Evident
Youth are friendly and relaxed with one another	49
Youth show positive affect to staff	47
Staff show positive affect toward youth	47
Youth respect one another	46
Staff use positive behavior management techniques	43
Staff are equitable and inclusive	40
Staff engage personally with youth	12
Staff guide positive peer interactions	8

Exhibit reads: Evaluators observed at least moderate evidence of youth being friendly and relaxed with one another in 49 of the 51 observed activities.

In one activity, staff members talked with a group of youth about their performance during a recent marking period. While it was clear that many participants had received poor grades, the staff members used positive language and encouragement when they discussed how youth could improve their performance. In encouraging youth, staff said that they had high expectations for the group, and that they wanted the participants to talk to them any time they were struggling in school and felt that they needed help from an adult who cared about them.

Sequenced activities. Current research suggests that high-quality youth programs can encourage youth to master new skills through project-based learning that connects smaller learning goals to an end-product, (Grossman, Campbell, & Raley, 2007). For this domain, we rated the degree to which Beacon activities built on skills and content already learned in order to achieve new goals. As shown in Exhibit 13, among the 51 activities observed, the majority (36) involved staff members appropriately guiding youth learning without taking control of the youths' experience. We found that activity content challenged youth skills academically, artistically, or physically in just less than half of all activities (25 activities). In just over a third of activities, staff challenged youth to move beyond their current level of competency (20 activities), and just under a third of activities involved the practice or progression of skills (16 activities).

Exhibit 13
Sequenced Activities That Support Skill Development (*n=51*)

Indicator	Number of Activities Where Indicator Was at Least Moderately Evident
Staff assist youth without taking control	36
Activity challenges students intellectually, creatively, developmentally, and/or physically	25
Staff verbally recognize youths efforts and accomplishments	20
Staff challenge youth to move beyond their current level of competency	19
Activity involves the practice or a progression of skills	16
Activity requires analytic thinking	13
Staff employ varied teaching strategies	8

Exhibit reads: Evaluators saw at least moderate evidence of staff assisting youth without taking control in 36 of the 51 observed activities.

In some programs, we observed well-planned activities that focused on helping youth develop particular skills. During one such activity, a staff member led basketball drills designed to build participants' skills, and gave feedback to participants at each stage of the activity. The youth began the activity shooting free throws, and then the instructor gave youth increasingly complex drills to complete. By contrast, we also saw basketball activities in which staff did not appear to provide any structure for the activity, nor did they scaffold the activity by providing youth with feedback or guidance designed to help youth improve their skills.

Active learning. Successful after-school programs typically offer skill- and project-based activities that engage students in sustained, cooperative investigation (Bransford & Stein, 1993). These activities may address varied skills and content areas, providing youth the opportunity to learn a skill or complete a product that challenges them intellectually, creatively, developmentally, or physically. Active programming can be understood to involve youth engaging in activities by interacting with peers and staff and with the content of the activity. We observed examples of active learning in fewer than one-third of the Beacon activities in our observation sample. Among the indicators in the active learning domain, we were most likely to see examples of youth collaborating (17 activities) and staff arranging for youth to work together during the activity (14 activities), as shown in Exhibit 14.

Exhibit 14
Opportunities for Active Learning (*n=51*)

Indicator	Number of Activities where Indicator Was at Least Moderately Evident
Youth are collaborative	17
Staff plan for or ask youth to work together	14
Youth assist one another	9
Youth contribute opinions, ideas and/or concerns to discussions	8
Staff encourage youth to share their ideas, opinions and concerns	8
Staff ask youth to expand upon their answers and ideas	7
Youth have opportunities to make meaningful choices	5
Youth take leadership responsibilities/roles	5

Exhibit reads: Evaluators saw at least moderate evidence of youth collaborating in 17 of the 51 observed activities.

For example, we observed a step dance activity that was structured by staff to encourage all youth to participate in developing a dance for an upcoming performance. During the activity, youth nominated new sequences for the routine by demonstrating them for the larger group and then asking their peers for feedback. Youth in this activity were paying attention to the content and to one another, and they were responding to one another's ideas in a respectful and productive way.

In most of the activities we observed, however, we did not see youth contributing their thoughts and opinions to group discussions, nor did we see many examples of staff members encouraging them to do so. We rarely observed opportunities for youth to make meaningful choices (five activities) or take leadership roles (five activities).

In order to support the goal of the Beacon Middle School initiative to provide structured, focused programming for middle-grades youth, activities need to be clearly planned and delivered.   One way that Beacon directors can help their staff to carry out structured activities is to require that staff submit lesson plans, and to give staff critical feedback on those plans. On the Beacon director survey, however, only 17 percent of directors reported requiring at least some staff to submit lesson plans on a regular basis.

Connections to Schools and Communities

In this section we describe the connections that Beacons have established with the schools and communities surrounding the Centers. We also review the role that Beacon Advisory Councils and Youth Advisory Councils play in guiding the work of the Centers.

Connections to Schools

Current after-school research suggests that programs with strong connections to schools can support both academic and social outcomes for youth (Little, Wimer, & Weiss, 2008). Beacon Centers are located in New York City public schools and draw students from both their host school and schools in the surrounding community. In order to learn about the ways in which Beacon Centers engage with schools, we asked directors to report how frequently they communicate with school staff on certain topics.

As shown in Exhibit 15, Beacon directors were most likely to report that they communicated with school staff about issues related to using school space for programming (70 percent). Directors were less likely to report that they communicated at least once a month with school staff about issues that might affect youth experiences and learning at the Beacon. Only 55 percent of directors discussed homework assignments and 45 percent discussed curricular concepts being taught in the school with school staff at least once a month. In order for Beacon Centers to successfully partner with schools to support youth learning after school, Beacon directors need to collaborate with schools on issues related to school-day expectations for student learning.

Exhibit 15
Monthly Communication with Schools, in Percents *(n=71)*

Category	Percent
Issues related to classrooms/sharing space	70
Planning activity content	64
Student discipline policies	63
The needs or progress of individual students	59
Homework assignments	55
Curriculum concepts being taught at the school	45

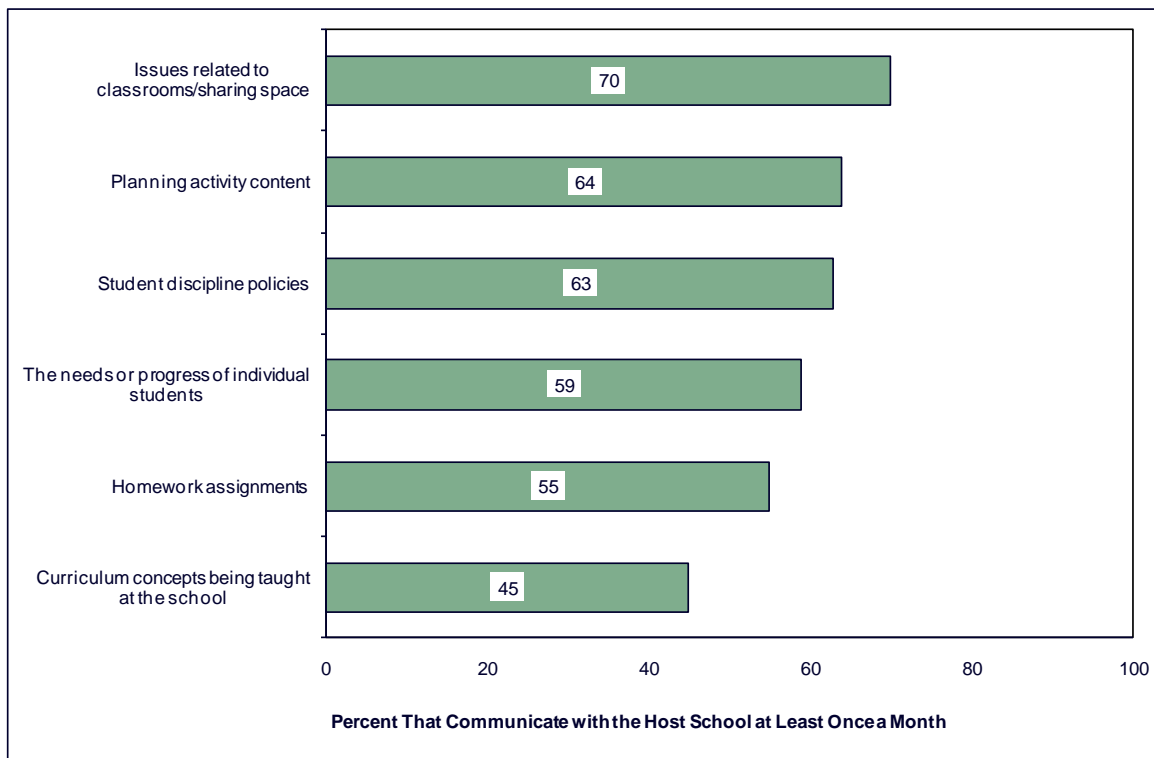Percent That Communicate with the Host School at Least Once a Month

Exhibit reads: Seventy percent of directors reported that they communicated with host school staff at least once a month about issues related to classrooms or sharing space.

Beacon Advisory Councils

At each Beacon, an Advisory Council made up of representatives from the Beacon and the surrounding community helps to guide the work of the Center. We asked Beacon directors to indicate the types of people that serve on their Centers' Advisory Councils, and their responses are displayed in Exhibit 16. Directors were most likely to report that parents of participants and Beacon staff members serve on their Advisory Councils (both were mentioned by 83 percent of directors). Youth participants and staff from the Beacon were also mentioned by a majority of directors (68 and 67 percent, respectively).

Beacon directors indicated that few individuals who were not already connected to the Beacon Centers served on Advisory Councils. Just more than half of directors said that a school principal or assistant principal served on their Council, and only a quarter of Beacon directors said that local business owners or government officials were involved in their Advisory Council.

Exhibit 16
Community Representation on Beacon Advisory Councils, in Percents *(n=70)*
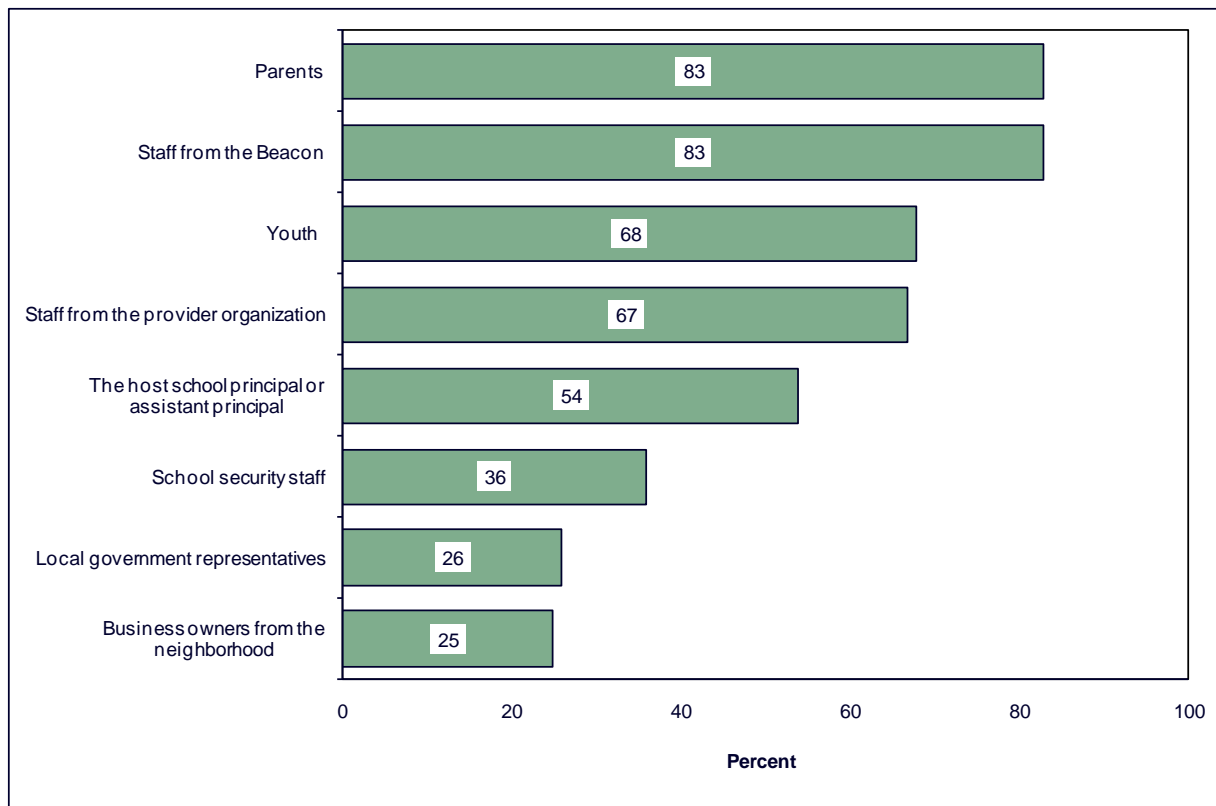

Exhibit reads: Eighty-three percent of Beacon directors reported that parents served on their Beacon's Advisory Council.

We asked Beacon directors to identify the primary roles that their Advisory Councils played in guiding the work of the Centers (Exhibit 17). Directors were most likely to report that

the Advisory Council provided: feedback and suggestions for Beacon programming (96 percent), a means of communication between the Beacon and the local community (84 percent), and suggestions for resources, such as businesses that could donate materials or services to support the work of the Beacon (77 percent). Directors were least likely to report that Advisory Councils helped with staff recruitment (9 percent), fundraising (34 percent), and recruiting youth (37 percent).

Exhibit 17
Beacon Advisory Council Roles and Responsibilities, in Percents *(n=70)*

Role	Percent
Providing guidance and feedback regarding Beacon programming	96
Communicating information between the Beacon and neighborhood residents, government, businesses or…	84
Identifying additional resources available to the Beacon	77
Recruiting participants	37
Fundraising	34
Recruiting and hiring staff	9
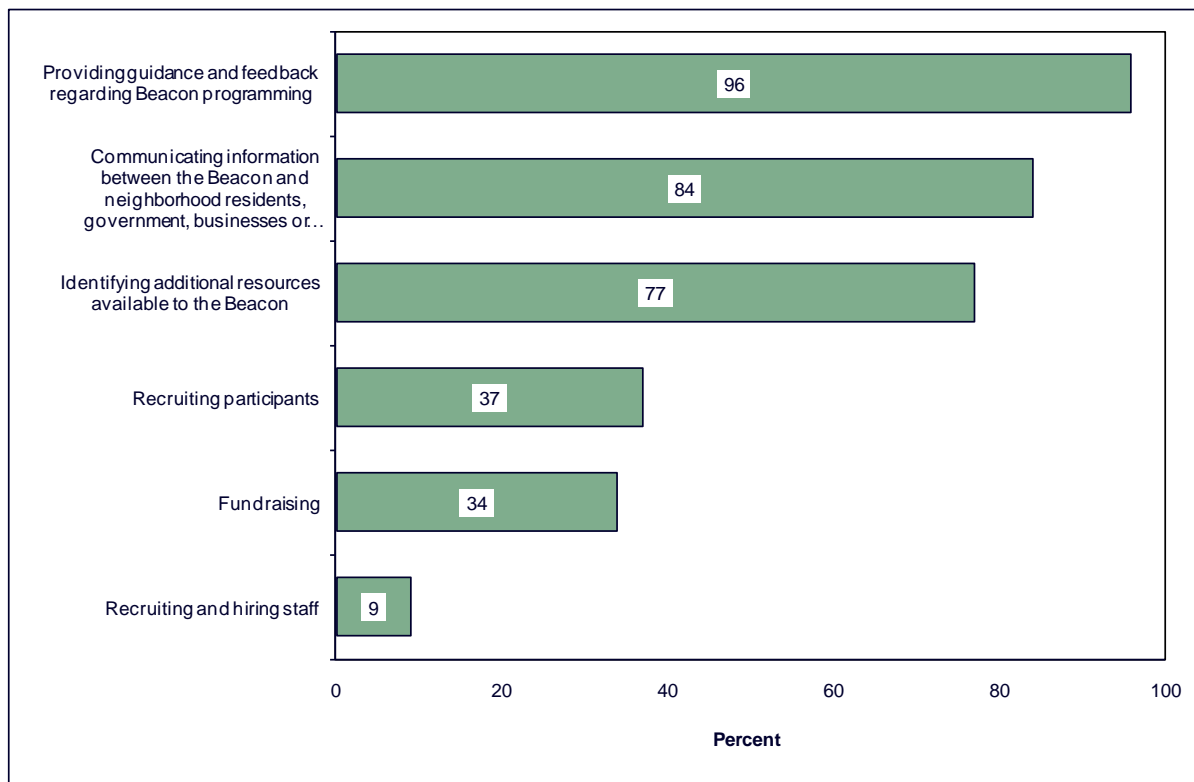
Exhibit reads: Ninety-six percent of Beacon directors reported that the Beacon Advisory Council provided guidance and feedback regarding Beacon programming.

On-site interviews with directors at the 10 Centers visited revealed differences in the ways that Beacons' Advisory Councils operate. At some Beacons, the directors said that the Advisory Council was less involved in guiding the work of the Center, and instead, in the words of one director, "serves more as extra sets of hands for community events." Other directors said that their Advisory Council was very involved in identifying and implementing new programming ideas. One director explained:

> *The Advisory Council talks about the Beacon's needs, what we should be doing and thinking about in the future. They brought up the idea of offering English as a second language classes, and so we decided to establish them on Saturday.*

Beacon Youth Councils

In addition to the Beacon Advisory Council, Beacon Centers also convene Youth Councils that are designed to give youth participants direct input into the work of the Beacon. While Youth Councils tend to be comprised of older participants, 81 percent of Beacon directors reported that middle-grades youth serve on their Youth Council. As shown in Exhibit 18, Beacon directors were most likely to report that their Youth Council was responsible for planning community service projects (85 percent), identifying activities to be offered at the Beacon (79 percent), and planning community events and events for families (78 percent).

Exhibit 18
Youth Council Responsibilities *(n=71)*
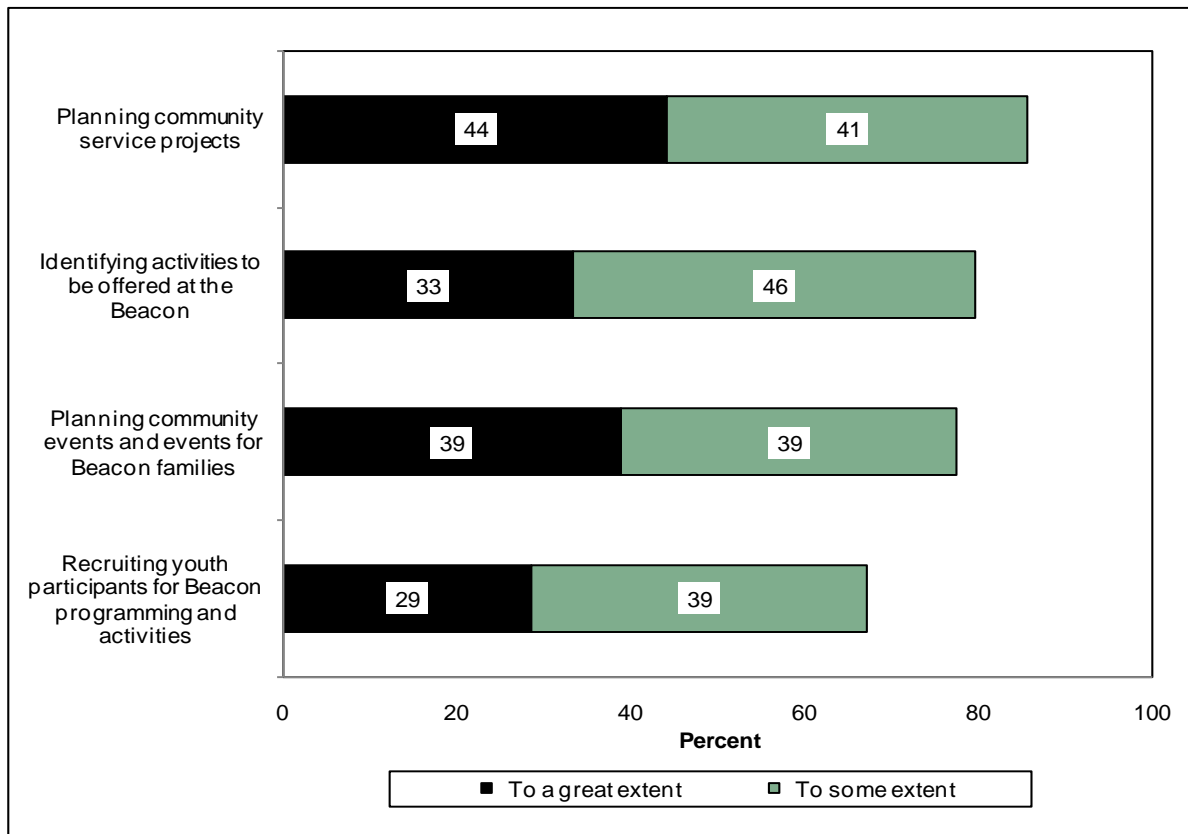
Exhibit reads: Forty-four percent of directors agreed that the Beacon Youth Council plans community service projects "to a great extent."

During site visits, we learned from Beacon directors about other differences in the Youth Councils. In one case, the director said that, because the host school had no student council, the Beacon Youth Council was the only opportunity that youth had to participate in a formalized leadership opportunity. Another director noted that their Youth Council had a degree of autonomy:

They meet every Thursday at six, and, to be honest with you, they are very organized. The president and vice president are very organized; they always come up with the agenda. They will come to us beforehand to see what we want them to focus on, but then they plan everything from there.

Some Beacons in the site-visit sample, however, had difficulty engaging middle-grades youth on the Youth Advisory Councils. One director explained that the middle-grades youth were intimidated by the high school participants on the Youth Council, and did not want to participate. At another Beacon, the director disbanded the Youth Council because of what she saw as a lack of youth interest.

Youth Reports of Experiences at the Beacon

In this section, we report the results of the Beacon middle-grades participant survey. In order to obtain representative youth perspectives on the Beacon Centers, we surveyed a random sample of youth participants. The random sample was selected from the population of middle-grades participants who attended the Beacon at any point during the year, including summer, regardless of frequency of participation. In total, we sent 2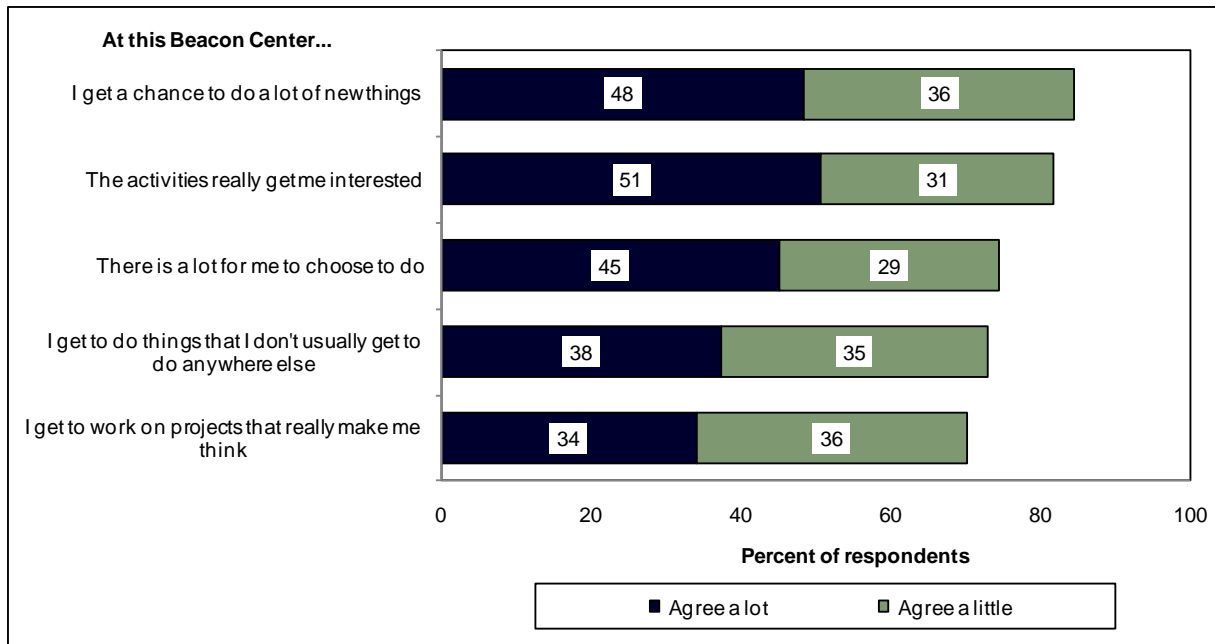,039 surveys to youth at the 76 Beacon Centers where the principal of the host school had given consent for participation in the evaluation. We received 878 completed participant surveys from 72 Beacon Centers. Although this method increased the challenge of achieving a high response rate, it also increased our ability to generalize findings to all Beacon middle-grades participants.

Among the participants in the random sample, those youth who completed a survey were similar to youth who did not return a survey on a series of measures related to academic performance. Survey completers had an average school attendance rate of 95 percent, compared to 93 percent for non-completers, and 35 percent performed or above grade level in ELA compared to 32 percent of non-completers. Not surprisingly, youth who completed a survey were more likely to be highly engaged in the Beacon program than were non-completers, averaging a far higher number of hours of Beacon participation (283 hours and 166 hours, respectively).

Program Opportunities

Overall, Beacon middle-grades participants gave favorable reports on the activities offered at the Beacon. As shown in Exhibit 19, more than two-thirds of all respondents agreed that Beacon activities were engaging and offered opportunities to try new things. Youth were least likely to agree with indicators measuring the ways in which activities were interesting and engaging, suggesting that, while youth were generally positive about their experiences, there was room for improvement.

Exhibit 19
Participant Reports of Opportunities at the Beacon, in Percents *(n=790)*

At this Beacon Center...

Statement	Agree a lot	Agree a little
I get a chance to do a lot of new things	48	36
The activities really get me interested	51	31
There is a lot for me to choose to do	45	29
I get to do things that I don't usually get to do anywhere else	38	35
I get to work on projects that really make me think	34	36

Percent of respondents

■ Agree a lot ■ Agree a little

Note: The response options also included "disagree a little" and "disagree a lot."

Exhibit reads: Forty-eight percent of program participants "agreed a lot" with the statement, "at this Beacon Center, I get a chance to do a lot of new things." An additional 36 percent of participants "agreed a little" with the statement.

Academic and Social Benefits

Overall, Middle School Initiative participants agreed that they gained both academically and socially from their experience attending Beacon programming, as shown in Exhibit 20. While most Beacon participants agreed that they had benefited from attending Beacon programming to a certain extent, youth were least likely to agree that the Beacon helped them learn about jobs or careers, to write better, to make smart decisions about money, or to use computers to do schoolwork better.

Exhibit 20
Participant Reports of Benefits of Participation, in Percents *(n=785)*

This Beacon Center has helped me...

Statement	Agree a lot	Agree a little
Feel more confident playing sports	54	29
Finish my homework more often	50	31
Feel better about my school work	40	38
Get better grades in school	41	37
Learn about the dangers of alcohol, drugs, and other risky activities	49	28
Learn to sing, dance, draw, or do some other type of art better	48	27
Read and understand better	41	32
Solve math problems better	38	33
Learn about jobs or careers that I might like to have when I am older	40	31
Write better	35	33
Learn to make smart decisions about saving and spending money	36	30
Use computers to do schoolwork better	32	27

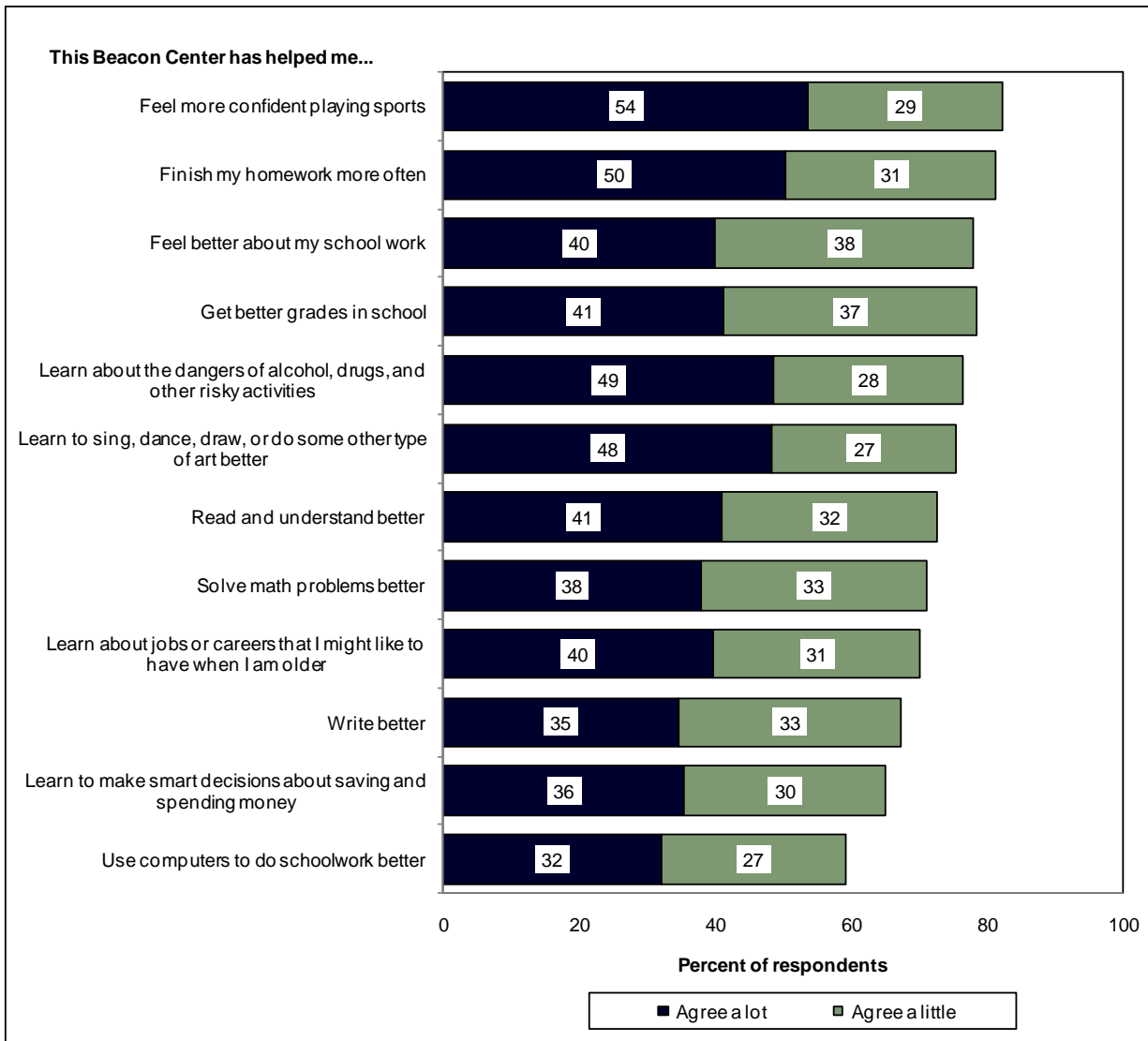**Percent of respondents**

■ Agree a lot   ▪ Agree a little

Note: The response options also included "disagree a little" and "disagree a lot."

Exhibit reads: Fifty-four percent of program participants "agreed a lot" with the statement, "this Beacon Center has helped me feel more confident playing sports." An additional 29 percent "agreed a little".

One participant explained that the Beacon Center helped with homework completion and school performance: "Since I started Beacon, I get better grades on my tests in reading. When we go in the classroom, it's a quiet place to work so I can finish my reading homework." Another participant explained that her Beacon provides a comfortable place to play sports: "There is good sportsmanship here, you don't yell at each other when you're playing."

Academic engagement. When we asked Beacon participants about school, participants gave generally positive reports on their attitudes toward their academics. As shown in Exhibit 21, respondents were most likely to report that they tried hard in school (95 percent agreed a lot or a little). They were slightly less likely to report that they enjoyed school or reading for pleasure (76 percent and 73 percent, respectively).

Exhibit 21
Participant Reports of Academic Engagement, in Percents *(n=771)*

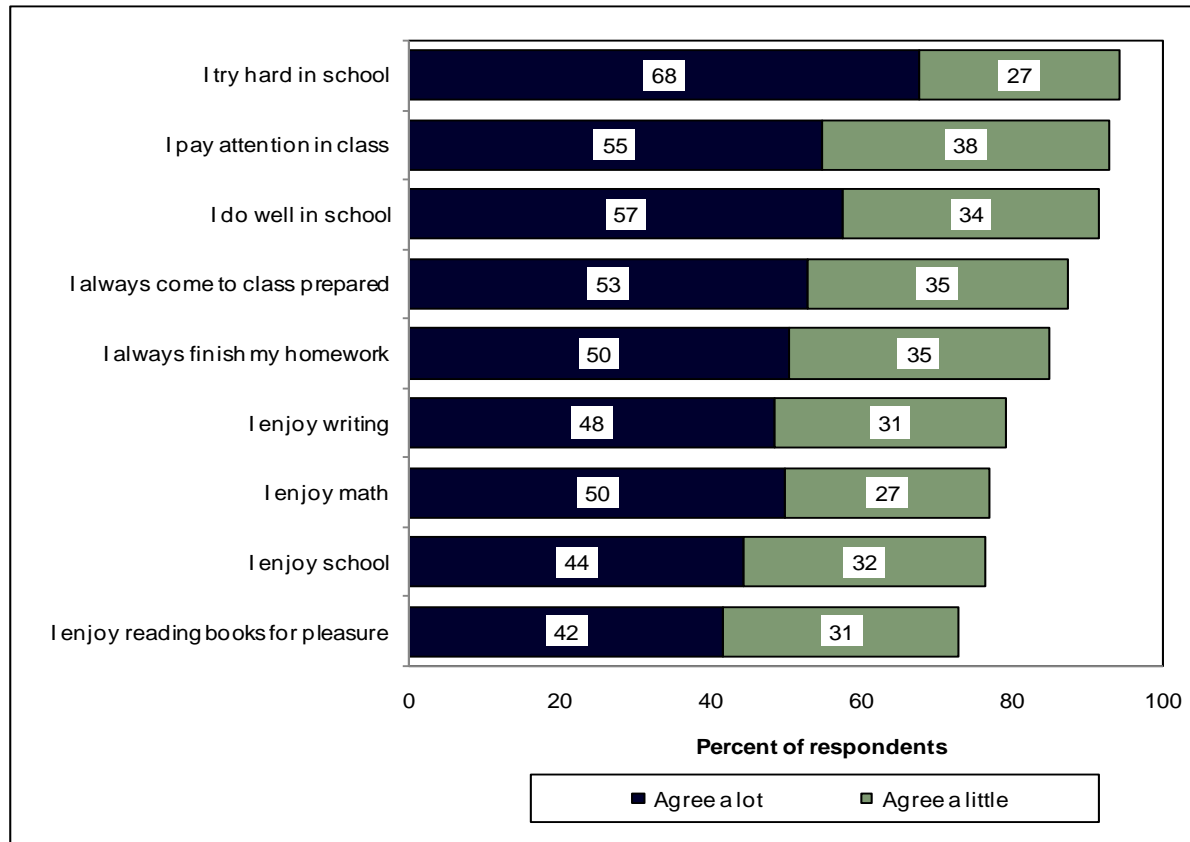| Statement	Agree a lot	Agree a little
I try hard in school	68	27
I pay attention in class	55	38
I do well in school	57	34
I always come to class prepared	53	35
I always finish my homework	50	35
I enjoy writing	48	31
I enjoy math	50	27
I enjoy school	44	32
I enjoy reading books for pleasure	42	31

Percent of respondents

Note: The response options also included "disagree a little" and "disagree a lot."

Exhibit reads: Sixty-eight percent of program participants "agreed a lot" with the statement, "I try hard in school." An additional 27 percent "agreed a little."

When we asked Beacon survey respondents to indicate how far they thought they would go in school, almost all respondents said they believed that they would complete high school. Forty-four percent of program participants reported wanting to finish college, and an additional 36 percent reported that they wanted to get more education after college.

Social development. In order to describe the social climate among middle-grades Beacon participants, we asked youth to report whether they had participated in a series of particular activities during the month prior to taking the survey. Overall, Beacon participants reported engaging on a regular basis in behaviors associated with positive social development,

as displayed in Exhibit 22. More than half of participants reported that they cooperated with others to complete a task, gave someone a compliment, or helped someone solve a problem at least three times in the past 30 days.

Exhibit 22
Participant Reports of Positive Behaviors in Last 30 Days, in Percents *(n=768)*
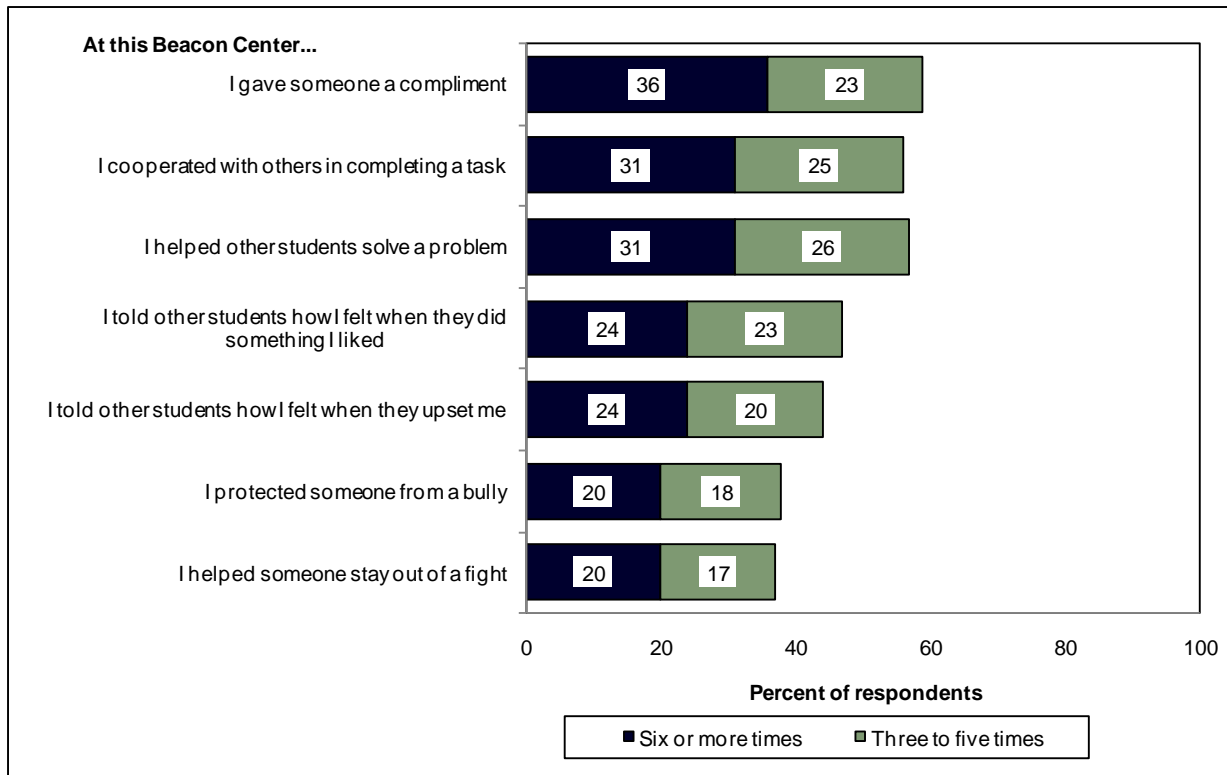
Exhibit reads: Thirty-six percent of program participants reported that they gave someone a compliment six or more times in the 30 days prior to completing the survey.   An additional 23 percent did so three to five times.

We also asked youth to report whether they had participated in any negative behaviors in the past 30 days, as shown in Exhibit 23. Nearly half of participants reported that they got into a fight at school or that their parents had to come to school because of problem in the last month (47 percent); 38 percent reported taking something from "another person on purpose that did not belong to me." These findings suggest that Beacons are serving youth who can benefit from structured opportunities to engage in positive interactions with peers and their community.

Exhibit 23
Participant Reports of Negative Behaviors in the Last 30 Days,
in Percents *(n=768)*

Behavior	At least once (%)
I had to have my parents come to school about a problem	47
I got into a fight at school	47
I took something from another person on purpose that did not belong to me	38
I broke something on purpose	37
I took something from a store without paying for it	29

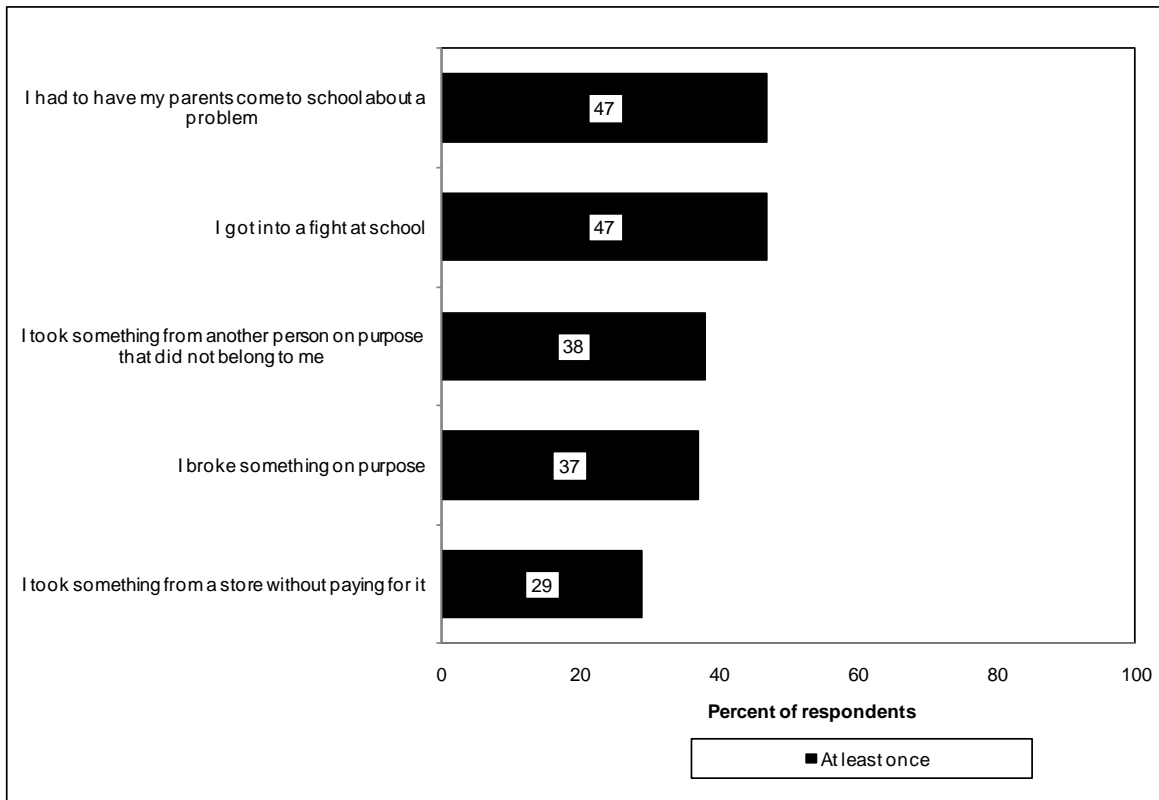Percent of respondents

■ At least once

Exhibit reads: Forty-seven percent of respondents said that their parents had come to the school about a problem at least once in the 30 days prior to completing the survey.

Leadership and community service opportunities. As part of the Middle School Initiative, youth are expected to participate in structured activities focused on civic engagement. As displayed in Exhibit 24, on all measures of community awareness and contributions, more than two-thirds of respondents agreed that they had gained from their participation at the Beacon Center. For example, during a youth interview at one Beacon, a middle-grades participant explained, "[the Beacon] helped me to be a good leader to younger people. We also did good things for our community and other people, we had a food drive to collect food for Haiti."

Exhibit 24
Participant Reports of Civic Engagement through the Beacon, in Percents *(n=779)*
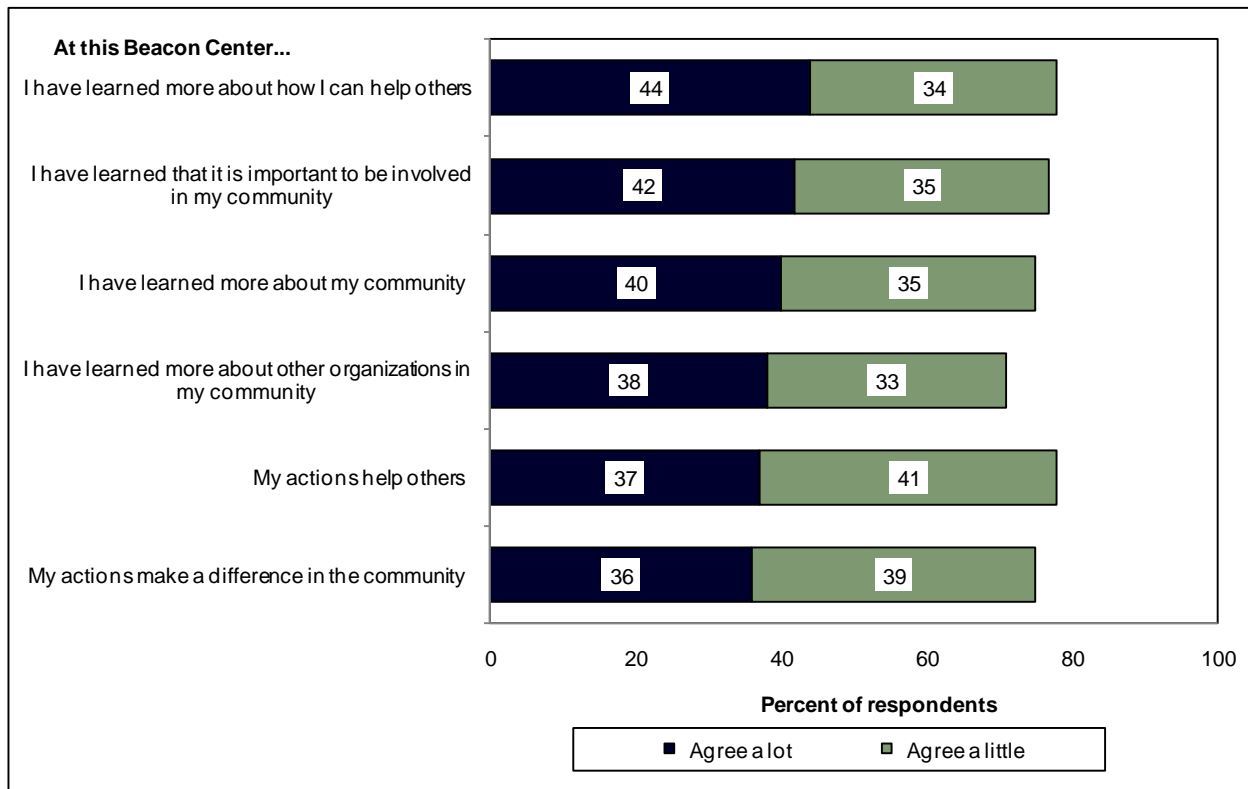
At this Beacon Center...

Statement	Agree a lot	Agree a little
I have learned more about how I can help others	44	34
I have learned that it is important to be involved in my community	42	35
I have learned more about my community	40	35
I have learned more about other organizations in my community	38	33
My actions help others	37	41
My actions make a difference in the community	36	39

Percent of respondents

■ Agree a lot   ■ Agree a little

Note: The response options also included "disagree a little" and "disagree a lot."

Exhibit reads: Forty-four percent of program participants "agreed a lot" with the statement, "At this Beacon Center, I have learned a more about how I can help others." An additional 34 percent "agreed a little."

As shown in Exhibit 25, the most commonly reported leadership activities were helping with meetings for parents or community members (72 percent) and participating on a Youth Council (66 percent). The least frequently reported leadership activities were leading an activity (39 percent) and being asked by staff about ideas for the Beacon or activities (44 percent).

Exhibit 25
Participant Reports of Leadership Activities, in Percents (*n=788*)

| Activities	Percent
Helped with meetings for parents or community members	72
Participated on Beacon Youth Council	66
Helped in the office	64
Helped plan an activity or event	52
Asked by staff about ideas for Beacon or activity	44
Led an activity	39

Exhibit reads: Seventy-two percent of participants reported having helped with meetings for parents or community members.

Relationships with Peers and Staff

Relationships with peers. In general, Middle School Initiative participants agreed that they had positive interactions with their peers at the Beacon. As displayed in Exhibit 26, youth were most likely to agree that they had a good time playing with other young people in the program (86 percent), that they got along with the other young people in the program (84 percent), and that they had a lot of friends (84 percent). Youth were least likely to agree that they had the opportunity to get to know other young people really well (69 percent), indicating that the Beacons may further improve the experience of middle-grades participants by strengthening programming that explicitly focuses on interpersonal relationships, peer support, and team-building.

Exhibit 26
Participant Reports of Relationships with Peers, in Percents *(n=791)*
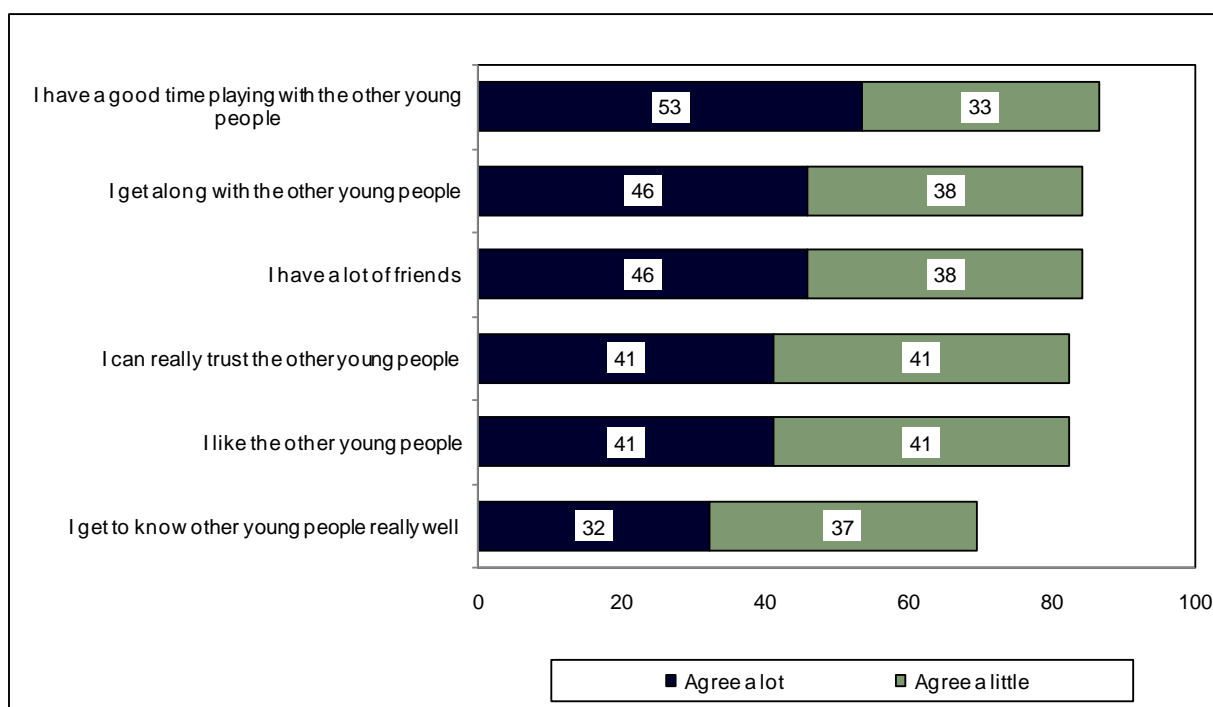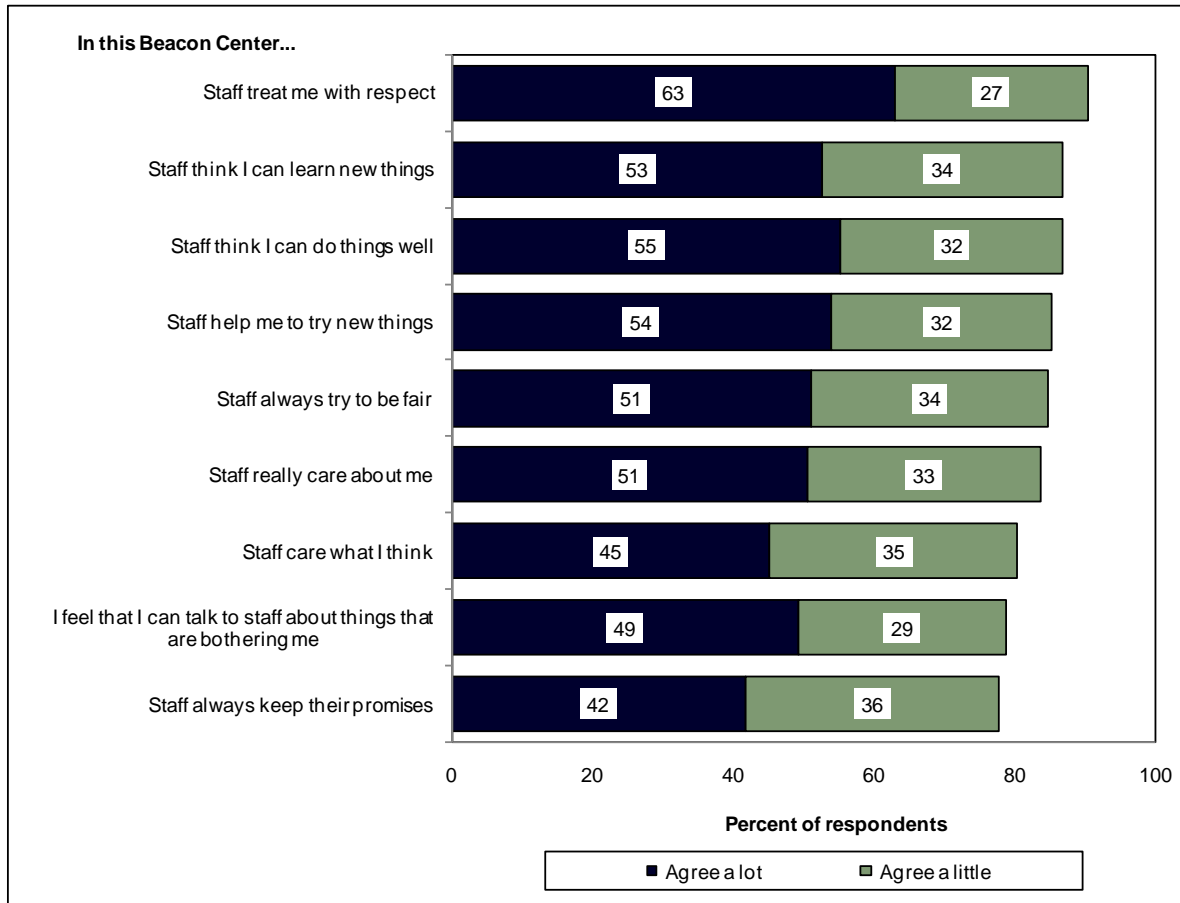

Note: The response options also included "disagree a little" and "disagree a lot."

Exhibit reads: Fifty-three percent of program participants "agreed a lot" with the statement, "in this Beacon Center, I have a good time playing with the other young people." An additional 33 percent "agreed a little."

Relationships with adults. Overall, Beacon middle-grades participants responded very positively about their relationships with staff members at their Beacon. Generally speaking, youth were more likely to agree a lot that they had positive relationships with staff members, compared to their relationships with their peers. Ninety percent agreed a lot or a little that staff treat them with respect at the Beacon, as displayed in Exhibit 27.

Exhibit 27
Participant Reports of Relationships with Staff, in Percents *(n=779)*

In this Beacon Center...

Statement	Agree a lot	Agree a little
Staff treat me with respect	63	27
Staff think I can learn new things	53	34
Staff think I can do things well	55	32
Staff help me to try new things	54	32
Staff always try to be fair	51	34
Staff really care about me	51	33
Staff care what I think	45	35
I feel that I can talk to staff about things that are bothering me	49	29
Staff always keep their promises	42	36

Percent of respondents

■ Agree a lot ▪ Agree a little

Note: The response options also included "disagree a little" and "disagree a lot."

Exhibit reads: Sixty-three percent of program participants "agreed a lot" with the statement, "in this Beacon Center, staff treat me with respect." An additional 27 percent agreed a little.

We also asked program participants about the opportunities they had to talk one-on-one with Beacon staff about personal topics. On each of the topics listed in the survey, the majority of youth reported having one-on-one conversations with Beacon staff at least once per month (Exhibit 28). Participants were most likely to discuss academic topics with Beacon Center staff, such as their school work (84 percent), and less likely to report one-on-one discussions about personal issues (57 percent).

Exhibit 28
Participant Reports of One-on-one Discussions with Beacon Staff,
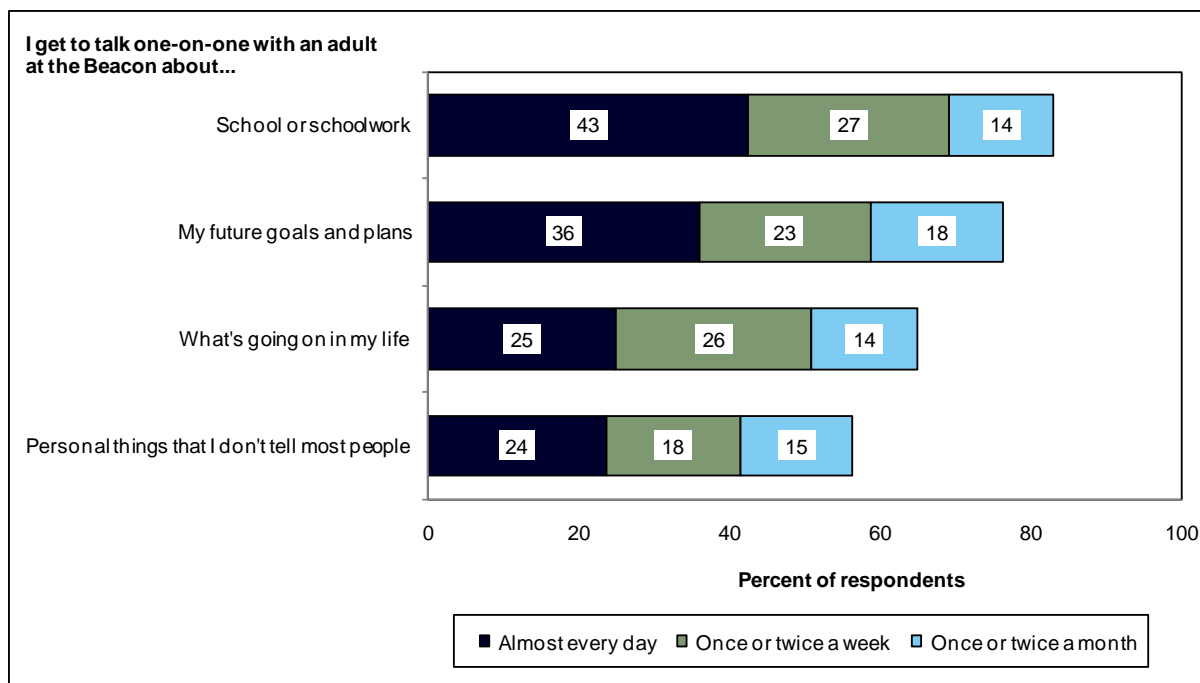**in Percents** *(n=774)*

Exhibit reads: Forty-three percent of program participants reported that they talk to an adult in their Beacon Center about school or school work almost every day; 27 percent do so once or twice a week; and 14 percent do so once or twice a month.

One participant reflected on the positive and trusting relationship with staff members, explaining, "[The staff member] keeps secrets. If you have a problem, she will solve it for you and help you talk about it. When you have a problem with someone, she fixes it in the calm way."

Relationships between Program Characteristics and Youth Outcomes

In this section, we present the results of statistical models we developed to predict the relationship between various characteristics of the Beacon Centers and both program- and youth-level outcomes. The models used the information we collected about the Beacon Centers through DYCD Online, the Beacon director survey, and the middle-grades participant survey, to identify statistically significant associations between particular Beacon features and youth outcomes. For example, we examined whether having a parent liaison on staff, a director who collaborated with other directors on curricula or activity planning, or a Youth Council that was responsible for guiding activity offerings were characteristics associated with a Beacon having more of its middle-grades youth meet high participation threshold (216 hours) established for the evaluation. While the results presented below represent statistically significant associations, they do not suggest causal relationships between the predictor variables and outcome variables.

A complete list of the models run and the variables included in the models are presented in the appendix.

Characteristics Associated with Middle-Grades Enrollment

We developed a series of statistical models to predict the effects of various characteristics of Beacon Centers on the number of middle school students who enrolled in a Center. We found that the number of middle school students who attended the host school was the only statistically significant predictor for the size of the middle school enrollment at each Beacon Center. After examining enrollment data, we found that the overwhelming majority of Beacon Centers with high middle-grades enrollment were housed at middle schools, and not elementary or high schools.

Predictors such as whether the Beacon staff included a parent liaison or certified teacher, the frequency with which the directors communicated with the host school or families, the experience of the director, and the extent to which the youth council contributes to the Beacon Center did not attain statistical significance in our models predicting program enrollment.

Characteristics Associated with Middle-Grades Attendance

We assessed whether differences in Beacon characteristics were associated with differences in youth attendance levels. Our statistical model compared the characteristics of the 20 Beacon Centers with the highest proportion of participants who met the evaluation's 216-hour attendance target to the characteristics of the 20 Beacons with the lowest proportions of participants meeting the 216-hour target. We found that the directors of the Beacons with the highest proportion of participants meeting the target interacted more frequently with families than did the directors of the Beacons with the lowest proportion of participants meeting the target. While we do not know the content of these interactions with families, the finding suggests that Beacons that are better connected to the families of participants have greater success achieving regular attendance among participants.

We found no differences between Beacons with the highest and lowest proportions of participants meeting the 216-hour target on characteristics such as the extent to which the directors collaborated with other directors, whether parent liaisons or school teachers worked at the Centers, and whether middle school students participated in the Beacon Youth Councils.

Characteristics Associated with Participant Experiences

We compared the characteristics of the quartile of Beacon Centers in which participants gave the highest average ratings on survey items about opportunities to do new and interesting things at the Beacon to the characteristics of the quartile of Beacons with the lowest average participants ratings on these items. We found that the directors at the Beacons where participants reported more opportunities for new and interesting experiences interacted more frequently with

the staff at their host schools than did the directors at the Beacons where participants responded less positively. We also found that the Beacons where youth gave high ratings to their opportunities to try new and interesting things were those Beacons where the director reported that the Youth Council had more input. This finding suggests that, when youth have an opportunity to help guide and select program activities, they may provide suggestions that meet with the approval of their peers.

We found no differences on this outcome measure between the two groups of Beacons based on characteristics such as the extent to which the directors collaborated with other Beacon directors, whether parent liaisons or school teachers worked at the Centers, and whether middle school students participated in the Beacon Youth Councils.

Recommendations

Based on the findings presented in this report, we present the following recommendations for engaging and strengthening the programming offered to middle-grades participants at the Beacon Centers:

- **Conduct targeted outreach efforts to recruit and engage middle-grades participants.** Beacons with the highest levels of middle-grades enrollment were, not surprisingly, located in middle schools. Beacon Centers located in schools serving other grade levels may need to more actively promote their programs through partnerships with surrounding middle schools to recruit these youth.

- **Strengthen connections with the families of participants.** The evaluation found that the Beacons with the greatest proportions of high-attending middle-grades participants interacted frequently with families. These regular interactions may help families view the Beacon as an important resource and support for youth during the out-of-school time hours.

- **Increase staff focus on participants' academic needs.** Based on evidence of participants' academic needs in English Language Arts and math, Beacon Centers may need to work more with participants' schools to ensure that Beacon staff are aware of participants' learning needs and provide programming that can address these needs.

- **Assign staff members who are certified teachers to serve as education specialists or master teachers.** The majority of Beacon Centers have certified teachers on staff, although few directors reported using these teachers to guide or design the academic activities offered at the Beacon or to supervise and train other staff on how to lead academic activities. Encouraging certified teachers to help guide academic programming at the Beacon could help connect Beacon activities to what participants are learning during the school day.

- **Support Beacons in learning how to work effectively with the host school.** Analyses showed that participants at those Beacons that had strong relationships with the host schools rated their Beacon experiences more highly. However, many Beacon directors still communicate with school staff about only transactional issues, such as space and discipline, and only occasionally talk with school staff about alignment of learning goals or the progress of individual students. Evaluators recommend that DYCD help Beacons create deeper, more substantive relationships with schools in order to support the Beacons' work with youth.

- **Encourage directors to require that staff submit structured lesson plans with clearly outlined activity plans and learning goals.** Observations revealed that many middle-grades activities had neither a clear learning structure nor a focus on engaging youth in active learning. While the study's observation data are not necessarily representative, they echo survey findings that the majority of Beacon directors do not require staff to submit lesson plans for Middle School Initiative activities. By requiring that staff create lesson plans for Beacon activities, and then reviewing those plans and providing feedback, Beacon directors would be better able to improve the quality of middle-grades activities.

  Provide additional guidance and support for Beacons' facilitation of their Advisory Councils and Youth Advisory Councils. In light of findings that Beacons where youth gave high ratings to their exposure to new and interesting experiences at the Beacon were also more likely to have active Youth Councils, evaluators recommend that DYCD ramp up help to Beacons in developing and supporting their Youth Councils. Additionally, given the current budgetary challenges facing Beacons, Advisory Councils could play a larger role in helping Beacon Centers to develop their capacity to fundraise.

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Appendix
Technical Details of Analyses

Sampling Approach for Youth Survey

A concern with survey research is the extent to which the views of the individuals who respond to a survey represent the views of all of the individuals who could possibly have responded to the survey. In the case of the evaluation of the Beacon Middle School Initiative, that concern translates into questions about the extent to which the students who completed the survey in the spring represented the views of all of the students who were served by Beacon Centers throughout the year.

The one method for satisfactorily addressing the concern about representativeness is the use of a random sample. Random selection of survey participants accounts for all of the observable and unobservable characteristics of individuals that might affect the ways in which individuals respond to survey questions. This accounting allows a level of confidence in the representativeness of survey findings that is not attainable in other respondent-selection methods.

Considered another way, there is error in all methods of data collection. Using a random sample allows for error to be calculated, whereas other methods result in the error remaining unknown. Unknown error technically translates into zero confidence in the representativeness of the findings.

When we drew the youth-survey sample in February 2010, we used DYCD Online to determine that there were 20,230 middle-grades participants who had been enrolled in at least one Beacon Center at some point in the year. We also used DYCD Online to determine that, of those 20,230 participants, only 10,515 of them had attended a Beacon activity in January 2010. Because we were interested in having survey responses represent all of the participants throughout the 2009-2010 year, we used the 20,230 figure to select the random sample. We knew that this process would likely result in a lower survey response rate than if we used the 10,515 figure to select the random sample. But if we used the 10,515 figure, then we would have only been able to generalize our survey findings to January participants, rather than all participants. In sum, we decided to accept a lower survey response rate in exchange for obtaining survey responses that represented all of the Beacon middle-grades participants in 2009-10. In the end, we randomly selected 2,451 participants, stratified across the 80 Beacon Centers, to be included in our survey sample. Surveys were then administered to the 2,039 randomly selected participants in the 76 Beacons for which the host school principal provided research approval.

Analyses of Association

Exhibit A1
Associations with Beacons Middle-Grades Enrollment *(n=60)*

Coefficient	Beta	Standard Error of Beta	Standardized Beta	t
Constant	148.62	40.66		3.66*
Middle grades (5-8) enrollment of the host school	.09	.02	.45	3.70*
Director's experience (years)	6.17	2.70	.27	2.29*
Proportion of staff who are certified teachers	93.85	66.69	.17	1.41
Extent to which youth council contributes to Beacon	-5.48	6.19	-.12	-.89
Frequency of communication with staff at the host school	1.60	1.94	.11	.83
Did the Beacon have a parent liaison on staff?	13.34	21.10	.08	.63
Frequency of communication with families	1.76	3.15	.07	.56
Is another afterschool program co-located at the site?	9.36	35.29	.03	.27

* The standardized Beta is statistically significant at $p<0.05$.
Adjusted R-squared=0.228, $F_{(8, 51)}$=3.178, p=0.005.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.

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

	Bottom Quartile Mean	Top Quartile Mean	F-statistic	p of F
Frequency of director's communication with host school (times per year)	8.19	11.56	2.83	.103
Frequency of director's communication with participants' families (times per month)	5.17	7.40	4.30	.046
Director's experience (years)	20.25	20.72	.01	.910
Percent of students at host school who are white	6.09	10.24	.81	.375
Percent of students at host school who are female	46.65	48.27	.36	.554
Number of students enrolled in grades 5-8 at host school(s)	557.05	460.40	.51	.480
Extent to which youth council contributes to Beacon	1.92	1.14	1.60	.216
Number of middle-grades participants at Beacon Center	299.40	250.25	2.81	.102

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 8.19 times per year; directors in the top quartile communicated with their host schools an average of 11.56 times per year; the difference between the quartiles is not statistically significant at the p<0.05 level.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.

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

	Bottom Quartile	Top Quartile	U-statistic	p of U
Percent of Beacons with a parent liaison or parent outreach coordinator	31	53	106.50	.215
Percent of Beacons with a certified teacher on staff	63	83	114.00	.176
Percent of Beacons with a certified teacher serving as a master teacher or education specialist	30	27	72.50	.859
Percent of Beacons where the Youth Council is responsible for guiding activity offerings	100	100	144.00	1.00
Percent of Beacons where the Advisory Council provides guidance and feedback regarding programming	94	88	128.50	.588
Percent of Beacons where the director requires all staff complete lesson plans	88	89	142.00	.902
Percent of Beacons where the director collaborated on recruiting youth with at least one other director	20	35	170.00	.294
Percent of Beacons where the director collaborated on curriculum planning with at least one other director	30	40	180.00	.513
Percent of Beacons where the director collaborated on youth leadership with at least one other director	20	40	160.00	.173
Percent of Beacons where the director collaborated on family engagement with at least one other director	35	55	160.00	.209
Percent of Beacons where the director collaborated on recruiting youth with at least one person at another organization	45	25	35.00	.374
Percent of Beacons where the director collaborated on curriculum with at least one person at another organization	36	75	27.00	.105
Percent of Beacons where the director collaborated on youth leadership with at least one person at another organization	45	50	42.00	.849
Percent of Beacons where the director collaborated on engaging families with at least one person at another organization	63	63	43.50	.961
Percent of Beacons where the director reported that the Beacon received in-kind support	40	31	109.50	.617
Percent of Beacons where the director reported that the Beacon received financial support	44	25	104.00	.272
Percent of Beacons where middle-grades youth serve on the Beacon Youth Council	81	82	134.50	.936

Exhibit reads: 31 percent of directors in Beacon programs in the bottom quartile of percent of participants who met the 216 hour target reported that the Beacon employed a parent liaison, compared with 53 percent of Beacon directors in the top quartile; the difference between the quartiles is not statistically significant at the p<0.05 level.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.

Exhibit A4
Analysis of Variance for Exposure to New Experiences

	Bottom Quartile Mean	Top Quartile Mean	F-statistic	p of F
Frequency of director's communication with host school (times per year)	6.75	11.24	5.425	.027
Frequency of director's communication with participants' families (times per month)	6.28	7.23	.554	.462
Director's experience (years)	15.08	22.33	2.946	.100
Percent of students at host school who are white	.09	.16	.943	.338
Percent of students at host school who are female	.48	.45	1.144	.292
Number of students enrolled in grades five through eight at host school(s)	468.06	632.50	.997	.325
Extent to which youth council contributes to Beacon	.83	2.27	5.759	.023
Number of middle-grades participants at Beacon Center	236.17	286.78	4.082	.051

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 6.75 times per year; directors in the top quartile communicated with their host schools an average of 11.24 times per year; the difference between the quartiles is statistically significant at the $p<0.05$ level.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.

Exhibit A5
Mann-Whitney Test for Exposure to New Experiences

	Bottom Quartile	Top Quartile	U-statistic	p of U
Percent of Beacons with a parent liaison or parent outreach coordinator	40	40	112.50	1.000
Percent of Beacons with a certified teacher on staff	80	56	91.50	.164
Percent of Beacons with a certified teacher serving as a master teacher or education specialist	15	56	35.00	.052
Percent of Beacons where the Youth Council is responsible for guiding activity offerings	88	100	112.00	.151
Percent of Beacons where the Advisory Council provides guidance and feedback regarding programming	87	94	120.00	.551
Percent of Beacons where the director requires all staff complete lesson plans	94	94	128.00	1.000
Percent of Beacons where the director collaborated on recruiting youth with at least one other director	44	50	153.00	.742
Percent of Beacons where the director collaborated on curriculum planning with at least one other director	56	56	162.00	1.000
Percent of Beacons where the director collaborated on youth leadership with at least one other director	56	44	144.00	.511
Percent of Beacons where the director collaborated on family engagement with at least one other director	61	61	162.00	1.000
Percent of Beacons where the director collaborated on recruiting youth with at least one person at another organization	50	27	34.00	.324
Percent of Beacons where the director collaborated on curriculum with at least one person at another organization	50	55	42.00	.849
Percent of Beacons where the director collaborated on youth leadership with at least one person at another organization	75	45	31.00	.210
Percent of Beacons where the director collaborated on engaging families with at least one person at another organization	62	55	40.50	.736
Percent of Beacons where the director reported that the Beacon received in-kind support	40	40	112.50	1.000
Percent of Beacons where the director reported that the Beacon received financial support	7	27	90.00	.148
Percent of Beacons where middle-grades youth serve on the Beacon Youth Council	87	69	98.50	.241

Exhibit reads: 40 percent of directors in Beacon programs in the bottom quartile of participants' "exposure to new experiences" scale reported that the Beacon employed a parent liaison, as did 40 percent of Beacon directors in the top quartile; there is no difference between the quartiles.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.

Exhibit A6
Analysis of Variance for Sense of Belonging

	Bottom Quartile Mean	Top Quartile Mean	F-statistic	p of F
Frequency of director's communication with host school (times per year)	8.28	9.46	.390	.537
Frequency of director's communication with participants' families (times per month)	7.45	6.87	.240	.627
Director's experience (years)	16.46	18.58	.323	.575
Percent of students at host school who are white	.08	.14	1.052	.312
Percent of students at host school who are female	.49	.47	3.600	.066
Number of students enrolled in grades five through eight at host school(s)	684.72	596.56	.300	.587
Extent to which youth council contributes to Beacon	1.28	2.07	1.546	.223
Number of middle-grades participants at Beacon Center	258.00	268.39	.163	.689

Exhibit reads: Directors in Beacon programs in the bottom quartile of participants' "sense of belonging" scale communicated with their host schools an average of 8.28 times per year; directors in the top quartile communicated with their host schools an average of 9.46 times per year; the difference between the quartiles is not statistically significant at the $p < 0.05$ level.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.

Exhibit A7
Mann-Whitney Test for Sense of Belonging

	Bottom Quartile	Top Quartile	U-statistic	p of U
Percent of Beacons with a parent liaison or parent outreach coordinator	43	44	111.00	.961
Percent of Beacons with a certified teacher on staff	80	65	108.00	.345
Percent of Beacons with a certified teacher serving as a master teacher or education specialist	15	36	56.50	.247
Percent of Beacons where the Youth Council is responsible for guiding activity offerings	94	100	127.50	.303
Percent of Beacons where the Advisory Council provides guidance and feedback regarding programming	87	94	120.00	.551
Percent of Beacons where the director requires all staff complete lesson plans	100	94	128.00	.332
Percent of Beacons where the director collaborated on recruiting youth with at least one other director	39	44	153.00	.739
Percent of Beacons where the director collaborated on curriculum planning with at least one other director	39	61	126.00	.189
Percent of Beacons where the director collaborated on youth leadership with at least one other director	44	50	153.00	.742
Percent of Beacons where the director collaborated on family engagement with at least one other director	44	61	135.00	.323
Percent of Beacons where the director collaborated on recruiting youth with at least one person at another organization	50	11	27.50	.076
Percent of Beacons where the director collaborated on curriculum with at least one person at another organization	70	67	43.50	.879
Percent of Beacons where the director collaborated on youth leadership with at least one person at another organization	60	44	38.00	.509
Percent of Beacons where the director collaborated on engaging families with at least one person at another organization	60	67	42.00	.770
Percent of Beacons where the director reported that the Beacon received in-kind support	33	38	115.00	.812
Percent of Beacons where the director reported that the Beacon received financial support	13	31	98.50	.241
Percent of Beacons where middle-grades youth serve on the Beacon Youth Council	93	76	106.00	.197

Exhibit reads: 43 percent of directors in Beacon programs in the bottom quartile of participants' "sense of belonging" scale reported that the Beacon employed a parent liaison, compared with 44 percent of Beacon directors in the top quartile; the difference between the quartiles is not statistically significant at the p<0.05 level.

Note: Each quartile represents information from up to 20 Beacon Centers. However, we did not receive information for every variable for every Beacon and so some cells represent fewer than 20 Beacons.