QUANTUM OPPORTUNITIES PROGRAM

Principal Findings

The Eisenhower Foundation

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EXECUTIVE SUMMARY

Quantum is a comprehensive, long-term youth development model which offers entering high school freshmen from poor families comprehensive education, youth development, and service activities each year (year-round) for four years.

Quantum principles most closely resembles assumptions found in the Social Development Model (Catalano and Hawkins, 1996) and supported by the work of Foundation trustee Joy Dryfoss (1990, 1994, 1996). Four prerequisites are necessary for successful youth development: (1) ***perceived opportunities,*** (2) ***involvement***, ***(3) skills***, and (4) ***reinforcement.***

The Quantum Opportunities Program began in the summer of 1989 with the recruitment of disadvantaged students entering the ninth grade. There were initially five sites identified: (1) Philadelphia; (2) Oklahoma City; (3) San Antonio; (4) Saginaw; and (5)Milwaukee. Four years later the results from four of these sites (Milwaukee had failed) showed that the youth of the program had done significantly better than those in control groups. They had higher high school graduation rates, higher rates of advancement to post-secondary education, lower pregnancy rates and greater participation in service activities.

Following this success, the U.S. Department of Labor sponsored a demonstration project, with additional funds from the Ford Foundation. Four years later, the evaluation revealed that the Quantum approach had not been implemented properly and the programs failed to deliver significantly good outcomes.

Responding to this, the Eisenhower Foundation brought experts from around the country together to explore the apparent failure, the reasons and solutions. This was done at a time when the Foundation had implemented the program in four locations around the country, Dover NH, Herndon VA, Portland OR and Columbia SC. In 2006, the results from this cohort were in and with the exception of Columbia, which was a failed implementation, the benefits of the program at the other sites seemed to be better than for the pilot program.

The failure of the program in Columbia and problems at a separately funded program in Washington DC provide insights into what can happen, even with the best intentions. The lessons learned

from the successes and the non-successes are being used as the Foundation implements a new cohort of sites in seven locations around the country. With 30 Associates and 30 control youth at each site, the evaluation has the potential to allow for more detailed and informative conclusions.

The experience gleaned from this first Eisenhower Cohort provides a number of insights regarding barriers that will be faced by a new cohort of seven Quantum programs around the country. The most important lesson from the past is the need for a totally dedicated staff, that will help the Associates bond with the program; see to it that they get to the program; will advocate for them with the schools, police, employers and parents; be patient; recognize that other activities are important for developing teens; and help them as they struggle with issues of alcohol, tobacco and drug use. With these issues in mind, a clear focus on education and youth development, the Associates of the new cohort should succeed beyond those of the first Eisenhower cohort.

BACKGROUND

Quantum is a comprehensive, long-term youth development model which offers entering high school freshmen from poor families comprehensive education, youth development, and service activities each year (year-round) for four years. Quantum offers Associates an extended family whose sole purpose is to break barriers, empower and encourage young people to succeed. Its motto is "Once in Quantum, Always in Quantum", meaning that extra effort is taken to keep the Associates, as the participants are called, active in the program, regardless of what's happening in their lives. Stipends are paid and an accrual account is maintained for those who complete the program, graduate from high school and go on for advanced education or training.

Quantum is an evidence based program developed by Eisenhower Foundation Trustees Benjamin Lattimore and Robert Taggert, along with Gordon Berlin, then of the Ford Foundation. It was originally recognized as one of the *Blue Prints for Violence Prevention* by the Center for the Study and Prevention of Violence at the University of Colorado at Boulder.

Studies conducted over more than three decades had identified many factors in neighborhoods, families, schools, and peer groups as well as within the individual (Brewer, Hawkins, Catalano & Neckerman, 1995; Dryfoos, 1990; Hawkins, Catalano & Miller, 1992) that predicted problem behaviors. Exposure to increasing numbers of risk factors was found to increase the likelihood of a child's problem behaviors. Conversely, exposure to increasing numbers of protective factors was found to prevent problem behaviors in spite of risk exposure (Hawkins, Catalano & Miller, 1992; Pollard, Hawkins, & Arthur, 1998).

This research also showed that the same risk and protective factors predict diverse adolescent problems, including substance abuse, delinquency, violence, teenage pregnancy and school dropout (Dryfoos, 1990; Hawkins, Jenson, Catalano & Lishner, 1988; Howell, Krisberg, Hawkins & Wilson, 1995; Slavin, 1991), that problem behaviors are correlated with one another

(Elliott, Huizinga & Menard, 1989; Jessor & Jessor, 1977; Zabin, Hardy, Smith & Hirsch, 1986), and typically cluster within the same individuals and reinforce each other (Benson, 1990; Dryfoos, 1990; Jessor, Donovan & Costa, 1991). These findings suggested the need for more comprehensive approaches for preventing a broad range of youth problems (e.g., Catalano & Hawkins, 1996; Dryfoos, 1996, 1994, 1990; Hawkins, Catalano & Miller, 1992; The National Academy of Sciences, National Research Council, 1996, 1993).

Quantum had been designed to meet this challenge. Though not based on any particular theoretical model, the rationale underlying Quantum principles most closely resembles assumptions found in the Social Development Model (Catalano and Hawkins, 1996) and supported by the work of Foundation trustee Joy Dryfoss (1990, 1994, 1996). As described in Blueprints for Violence Prevention:

> "---this theory states that four prerequisites are necessary for successful youth development: (1) ***perceived opportunities*** for involvement in activities and interactions with others, (2) a degree of ***involvement*** and interaction, ***(3)*** the ***skills*** to participate in these involvements and interactions, and (4) the ***reinforcement*** they perceive as forthcoming from performance in activities and interactions. These four processes, when consistent, act to create a ***social bond*** between the individual and the socializing unit, which has the power to affect behavior independently of the four social learning processes. When a strong social bond develops, individuals develop a stake in conforming to the norms and values of the socializing unit. The social bond that develops consists of ***attachment*** and ***commitment*** to the socializing unit, and ***belief*** in its values.

Utilizing the four processes described above, the Quantum framework

strives to compensate for some of the deficits found in poverty areas, by:

- compensating for both the perceived and real lack of ***opportunities,*** which are characteristic of disadvantaged neighborhoods (e.g., Quantum instills the belief that success and upward mobility is attainable; it helps youth to overcome the negative and formulate goals and work toward their achievement);
- providing interactions and ***involvement*** with persons who hold prosocial values and beliefs (e.g., Quantum strives for a caring and enduring relationship between each Associate and Coordinator; the Coordinator becomes surrogate parent, role model, advisor, and disciplinarian);
- enhancing the ***skill*** levels (academic and functional) of Associates to equip them for success (e.g., Quantum provides *250* hours of education, *250* hours of development activities, and *250* hours of service activities annually);
- ***reinforcing*** positive achievements and actions (e.g., instructors, instructional approaches and instructional materials provide frequent feedback and positive reinforcement which recognize both individual effort and achievement)."

Associates become part of a caring and supportive environment that provides many of the things which are lacking in their own personal environments, opportunities, involvement, skills, and rewards. A social bond to the "Quantum family" is nurtured throughout the four years of high school. It is this bond which appears to make the largest difference in student motivation, persistence, and success.

CHAPTER 1

THE QUANTUM PILOT PROGRAM

The Quantum Opportunities Program began in the summer of 1989 with the recruitment of disadvantaged students entering the ninth grade. There were initially five sites identified: (1) Philadelphia; (2) Oklahoma City; (3) San Antonio; (4) Saginaw; and *(5)*Milwaukee. Twenty-five students from each site were randomly assigned to an experimental and control group (a total of 50 students in each site). Sites were urged to retain contact with both experimental and control group members so that their progress could be compared.

All students were randomly selected from lists of eighth grade students from families receiving public assistance. Quantum directors were not allowed to recruit students who had pre-screened themselves into the population. Instead, Quantum directors were given a paper list of 25 youth to be potential Quantum youth, and were asked to see how many of the 25 youth assigned to the experimental group could be encouraged to join the promised program of services and incentives. The knowledge development goal was to learn about "take-up," that is, a community-based group's ability to serve and sustain young people from very poor backgrounds in a structured program of services over a relatively long period. Randomly selected replacements were allowed in the original lists supplied to the Quantum sites up to a deadline date of November, as some youth listed were deceased or had moved.

At the beginning of the program in September 1989, experimental and control group members were asked to fill out a questionnaire that included questions about demographic characteristics, work experience, school experiences, health knowledge, and personal attitudes and opinions. In addition, Associates were asked to take tests assessing their academic skill levels (ie., Test of Adult Basic Education (TABE)) and functional skill. These tests and similar questionnaires were given to the same experimental and control group members in the fall of 1990 and 1991. In the fall of 1992, similar questionnaires (with the addition of some questions

on future plans) were administered. However, academic and functional skill testing was postponed until the spring of 1993 in order to capture skill levels at a time when most sample members were preparing to leave high school. In addition, a different type of questionnaire, one that focused on future plans, was given to experimental and control group members in the spring of 1993.

The goals were to compare the experimental and control group members along a number of dimensions as experimental group members accrued more time in Quantum activities, and also to gauge the amount of positive change that experimental group members may have experienced over time.

In the late fall of 1993, a follow-up questionnaire was administered to experimental and control group members. The primary purposes of this questionnaire were to find out what members were doing several months after their "scheduled" departure from high school and to examine experimental group attitudes toward Quantum.

Sample Attrition

Table 1. Sample Attrition

	1989		1993	
	Associates	Controls	Associates	Controls
Philadelphia	25	25	25	25
Oklahoma. City	25	25	24	23
San Antonio	25	25	14	10
Saginaw	25	25	20	18
Milwaukee	25	25	5	6
Total	125	125	88	82
Total, Minus Milwaukee	100	100	83	76

The five sites had varying success in maintaining contact with their experimental and control group members (see Table 1). With the exception of Milwaukee, sample attrition was not of sufficient magnitude to cause analysis problems, and where attrition had occurred, those who

left were not systematically different from those who remained in contact with the researchers. After four years, across the four main sites (i.e., excluding Milwaukee), interviewers reached 88 out of 100 Associates for follow-up interviews. and 82 of the original 100 control group members.

Findings During the High School Years

After one year, there was no evidence to support a hypothesis of positive influence on the experimental group. In particular, tests of academic and functional skill levels declined for both the experimental and control groups, and for a number of dimensions, the experimental group decline was greater.

After the second year in high school, there was evidence for a positive effect of Quantum. Experimental group average scores for all academic and functional skills were higher than control group scores, and five were statistically significant, ($p < .10$).

Skills. By the time most of the sample were leaving high school in the spring of 1993, average academic skill levels had increased more than three grade levels for 27 percent of the experimental group, compared to 14 percent of the control group. Similarly, average functional skill levels had increased by 20 percent or more for 38 percent of the experimental group compared to 16 percent of the control group.

Expectations. There were also differences between the experimental and control groups with regard to their orientation toward and expectations for post-secondary education. After one year, there were no statistically significant differences between the two groups. After two years, however, experimental group education expectations were much higher than control group expectations, and this difference was statistically significant. Interestingly, the divergence in the two groups resulted from both an increase in experimental group educational expectations and a

decrease in control group expectations.

Other Characteristics. During the high school years, there were no statistically significant differences between the two groups on the likelihood of being a reported school dropout, the likelihood of having children, or on self-reported school grades. However, Associates were significantly more likely to improve their contraceptive knowledge and AIDS knowledge than control group members.

Other Important Notes. There were large differences in the "Quantum effect" among the four sites. Philadelphia stood apart from the other sites by virtue of its ability to create a group identity among Quantum members, by a reliable menu of program offerings, and by success in providing stable, consistent relationships between Associates and program staff. In contrast, programs in Saginaw and Oklahoma City, by the senior year, evolved to a point where institutional ties and structured activities between youth and the programs were minimal, and attendance declined greatly. Yet, even in one of these sites, personal ties between some Associates and their Coordinator often remained strong, and these ties were often of significant value to the individuals. San Antonio, on the other hand, lost contact with nearly half of its Associates. Moreover, it provided relatively few opportunities for Associates to accrue educational, service, and developmental hours. Not surprisingly, the Philadelphia Associates had far more successful outcomes in all academic and functional skill levels and in educational goals and expectations. In contrast, there was a slightly positive effect of Quantum in Oklahoma City and Saginaw. In San Antonio, there was no positive effect during the high school years; in many cases. the control group members appeared to do slightly better than evaluation group members.

Outcomes

The success of the program was touted in a New York Times editorial in 1995:

The New York Times

March 20, 1995

A Youth Program That Worked

A random group of adolescents from welfare families can benefit greatly from an academic program that includes disciplined training, a stipend, money towards college and caring adult supervisors. That is the lesson of a Ford Foundation-financed program described in the Times recently by Celia Dugger.

The 100 teen-agers who participated from 1989 to 1993 graduated from high school, went on to college, avoided childbearing and escaped involvement with the criminal justice system at a greater rate than did a comparable control group. The program's success offers hopeful lessons for budget cutting politicians and pessimists who think no intervention can change the downward trajectory of poor youths.

The experiment, called the Quantum Opportunities Program, is especially encouraging because the participants were not special or self-selected. The 25 participants at each of four sites -- Philadelphia, Oklahoma City, San Antonio and Saginaw, Michigan – were randomly chosen from lists of students entering ninth grade whose families were on welfare. They were rough kids from rough neighborhoods. Some were killed or landed in prison.
Those who stuck it out were required to participate year-round in academic tutorial and computer skills training, community service, and life skills training, like alcohol and drug abuse awareness and family planning.

Students were given a stipend of $1.33 for each hour they participated. For every 100 hours, they received $100 bonus payments and an amount equal to their total earnings, which accrued toward college or post-secondary training. The financial rewards became an incentive for students to continue in the program and welcome extra income for financially strapped families. Over four years, students spent an average of nearly 1,300 hours in program activities. The average cost per participant was $10,600.

Many of the program's lessons went beyond books. Students were taken to museums, plays and concerts The adult supervisors, from the Opportunities Industrialization Centers of America, became not just mentors, but surrogate parents or family members, with roots in the same community.

By the end of the program, 63 percent of the Quantum Opportunities Program participants graduated from high school, 42 percent were enrolled in a post-secondary program. 23 percent dropped out of school, 24 percent had children and 7 percent had arrest records. By contrast, of the control group, 42 percent finished high school, 16 percent went on to post-secondary schools, 50 percent dropped out, 38 percent had children and 13 percent had arrest records.

The Labor Department and the Ford Foundation will test the program in a larger demonstration of about 700 participants in five sites starting in September. Even as budget-cutters prepare to slash funds for youth development and job training, the success of the program shows that careful investments in disadvantaged youth can work.

The four evaluated by the Brandeis team found that relative to a control group, Quantum Associates:

- graduated from high school more often (63 vs.42 percent)
- dropped out of school less often (23 vs. 50 percent)
- went on to postsecondary education more often (42 vs. 16 percent)
- attended a 4-year college more often (18 vs. 5 percent)
- attended a 2-year institution more often (19 vs. 9 percent)
- became teen parents less often (24 vs. 38 percent)
- more often:
    - took part in a community project in the six months following QOP (21 vs. 12 percent);
    - were volunteer tutors, counselors or mentors, (28 vs. 8 percent) and
    - gave time to non-profit, charitable, school or community groups (41 vs. 11 percent, only statistically significant at the Philadelphia site)

Contributing Factors

The Brandeis report concluded that the key contributing factor in the success of the program was ***Caring Adults:***

"If young people are connected with caring adults for sustained periods of time, year-round, positive results do emerge."

Program administrators and staff, as well as teachers and mentors, took an active interest in the welfare of the Quantum Associates, encouraging them, visiting them, following up and doing everything they could to keep them in the program. "Once in QOP, always in QOP" was the unofficial motto, and most program counselors took it to heart.

CHAPTER 2

THE DEPARTMENT OF LABOR DEMONSTRATION PROJECT

Based on the positive findings of the pilot project, several public agencies developed interest in the Quantum model. The Department of Labor (DOL) funded a five-year Quantum demonstration project in five sites and the Ford Foundation funded two additional demonstration sites. In 2002, the Department of Justice (DOJ) funded the Milton S. Eisenhower Foundation—whose mission is to replicate and demonstrate what works for disadvantaged youth and communities—to replicate Quantum in six additional sites.

In late 2002, Mathematica Policy and Research released disappointing findings from their evaluation of the DOL-funded Quantum demonstration that dampened enthusiasm. The evaluation did not find fault with the Quantum model. Rather, the program, with its emphasis on intense personal relationships between staff and youth and the extensive number of program hours, proved too expensive and demanding for agencies to fully implement. The program conformed to the realities facing the DOL demonstration sites, producing diluted results. The innovative program which showed such promise in its pilot now seemed likely to join the long list of well-meaning youth development programs of limited effectiveness.

But Quantum had showed too much promise in its pilot to be dismissed so easily. Besides the strong findings of the original evaluation, Quantum's leadership had seen the program work for too many young people and remained strong advocates for the model. "Quantum is a program that has demonstrated that we can make major changes. It's a good idea," said Robert Taggart, Quantum's primary architect and founder.

Then, ***Youth Today*** published:

> **The Best Youth Program You Can't Afford**
>
> ***Struggles to copy QOP offer sobering lessons about best practice research and 'this whole thing called reality.'***
>
> **By Patrick Boyle**
>
> *" QOP is like some kids you know: full of potential but difficult to manage, because it's different. ---*

Rather than accepting less than outstanding outcomes, the Eisenhower Foundation convened a group of evaluators, funders, and directors of Quantum demonstration and replication sites to a two-day forum in November 2003. The meeting focused on practical questions about how best to implement Quantum and how to skillfully replicate the program on a larger scale. Their insights are telling, not only for providers of the Quantum model, but to anyone involved in youth development.

Discussion of Issues

Quantum's pilot owed its success to an intensive design that devotes an equal number of hours to educational achievement, youth development, and community service. The design requires high levels of commitment from both the participating teens and the program staff. According to the evaluation of the demonstration sites, "Quantum is substantially more complex, intensive, and comprehensive than traditional programs." The rigor of the model now appears to be critically important to its success. Data from both the earlier and later evaluations show that the sites that did better were the ones that stuck closest to the original Quantum model.

Yet all of the demonstration sites experienced difficulty adhering to the model. According to the Mathematica evaluation, all seven of the demonstration sites deviated from the model, some substantially so. During the two day Forum, participants discussed specific issues

that arose during implementation for both the DOL demonstration and the Eisenhower Foundation replication sites.

Issue 1. The number of participating students in the replication sites was much larger than that of the pilot project.

One important difference between the pilot and the demonstration projects was the population with which the program worked. The DOL and Ford Foundation demonstration sites faced a harder task than did the pilot project because they work with greater numbers of students. In terms of sheer numbers, Quantum was replicated on a much larger scale than in the pilot. "When you go from a setting of 25 students to 100 students, you are going to get different results," asserts Taggart. Whereas the pilot sites served 25 students, that number rose to 100 students in the demonstration sites. Although staff ratios remained roughly the same, increasing the size of the program four-fold obviously impacts the dynamics of relationships within the program.

Issue 2. Students chosen to participate in the replication sites had poorer academic performance than those chosen to participate in the pilot program.

Perhaps even more significant than the sheer size of the program, the demonstration and replication programs targeted teens based on different criteria than did the pilot sites, significantly altering the demographic and academic profile of the students in the program. In the pilot, students were selected based on economic disadvantage. They could have been straight "A" students, but qualified for the program because their families were on public assistance. The DOL demonstration and MSEF replication sites, on the other hand, intentionally focus on students with the poorest academic records regardless of socioeconomic status. While all of the pilot sites were located in severely economically distressed urban centers, the demographics of

the demonstration and replication sites were much more diverse, and included programs in smaller cities and rural locations as well as in low-income urban areas and a middle-class suburb.

The replication and demonstration sites partnered with schools with drop out rates of 40% or greater and then targeted those youths in the bottom two-thirds of their class in school performance. This selection process meant that the demonstration and replication sites did not have the same mix of more and less motivated students found in the pilot site. According to Eileen Pederson, one of the evaluators of the demonstration sites, "The group of kids we were dealing with starting in 1995 was far different from the kids they had in '89. The problems these kids brought to the table as they entered ninth grade were so magnified." Observes Taggart, "When you pick a group based not on economic disadvantage, but on grades, it's a completely different outcome you'll be getting. They'll be motivated by different things."

Another contributing factor is the practice of mainstreaming special needs students in the sampled schools. These students were included with others assigned to Quantum because they were not classified as having special needs. In the MSEF replication sites in particular, significant numbers of participating youth are eligible for special education services. The youth population in the MSEF sites has been largely low-income as well as academically high-risk.

Recommendations

.**Enlist support from other community resources to increase the impact of the Quantum Program.**

Some participants discussed the difficulty of working with students with mental health issues. Adequately addressing these issues is beyond the scope of what they can provide to the youth in their program. But by engaging mental health providers as partners, they were able to expand the base of people able to help with those students.

Tutors were another area where program staff supplemented their programming. Staff did a great job mentoring, but tutoring requires specific skill sets. Said one Forum participant, "We've actually farmed out the tutoring piece with some of the money we had left over, we purchased professional tutoring services. I wish I would have known in year one, that we could have done that, because it was a big strain on our staff to provide all those services."

Align program goals (outcomes) with students' baseline performance.

While not specifically mentioned by forum participants, the discussion makes it clear that holding all sites to the same standards is not constructive given the different populations targeted by various sites. Rather than comparing the achievements of non-comparable groups of students, expectations should be based on students' baseline performance.

Issue 3. Implementing the "Once in Quantum, Always in Quantum" policy is difficult and not always feasible.

One of Quantum's most demanding features is the policy of "Once in Quantum, Always in Quantum." Whether or not a youth participates in the program, he or she is never removed from the program's roster. Quantum tracks not only those youth who participate for a while and then drop out, but also those who have never shown up in the first place, and everything in between. This policy makes the good results of the pilot program even more impressive. The outcomes of students who stopped participating (or never participate) are averaged in with all students. In the pilot, students were dropped for only three reasons: death, prison sentences of greater than three years, or a permanent move away from the area.

In many cases, the wisdom and compassion of this policy is clear. According to Darrel Armstead, who helped implement Quantum for DOL in Yakima, Washington, the migrant farm population in the rural, agricultural area around Yakima has grown to almost 60%. "A lot of the

young people we had in our project were children of migrant seasonal farm families, some of them illegal," says Armstead. "Their time was spent in the spring harvesting hops and asparagus, in the summers harvesting cherries and peaches. In the fall a lot of the kids missed the first month of school to harvest apples and pears. Because they were in the country illegally, they had to do farm work during the harvest seasons so they could make enough money to carry the family through."

But Armstead found many of these students to be highly motivated and returned when seasonal work allowed. For them, the attention they receive from Quantum made the difference between succeeding in school or not. Staff of the implementation sites recognize that there are kids in many other circumstances who ultimately benefit from the persistent concern of Quantum staff. The policy of never giving up on a student reaffirms the student's worth even in the face of his or her difficult circumstances.

The more challenging student profile of those participating in the demonstration and replication sites also affects the implementation of the "Once in Quantum, Always in Quantum" policy. According to Deborah Scott, from the DOL-funded Philadelphia site, "We ended up with about seven students who really did have mental health issues, emotional issues, and domestic situation issues that made them more labor-intensive for the staff. Those are the ones though who came every day and needed real attention." Asks Johnnie Gage, Eisenhower Foundation's Youth and Community Program Director, "How does 'Once in Quantum, Always in Quantum' apply if I've got a child that puts other kids at risk?"

Recommendations

Implement realistic limitations on "Once in Quantum, Always in Quantum Policy.

Quantum staff have struggled with making "Once in Quantum, Always in Quantum"

feasible. With limited resources and seemingly limitless need, staff are acutely aware of the cost of holding a space for a child who won't return, especially when that space is then not available to another child. Pragmatically, there needs to be limits to the length and extent of follow-up with youth, particularly those who have only minimally participated in Quantum programming.

Employ technological solutions to make tracking more efficient and costly.

Taggart says that they are exploring an on-line system so staff at all sites can track kids wherever they are. This will help ease the additional work required to track youth and make it possible to continue to provide some support.

To make tracking meaningful, youth must be contacted regularly.

Adjust the selection criteria for Quantum to maximize success.

One staff person advises that to make the tracking meaningful, the youth must be contacted at least once a month; otherwise "there is no chance you will bring them back."

While Quantum staff provide comprehensive support and counseling for needy youth, the program is not designed to provide extensive remedial services for youth with severe special needs. Program selection criteria should be refined so that the youth admitted to the program can be effectively served by program staff.

Issue 4. Quantum requires staff to be much more involved in youths' lives than do most youth agencies. This can lead to complications.

A hallmark of Quantum's design is the commitment and dedication it requires of program staff. Far from a nine-to-five job, program staff are expected to be available 24/7, including weekends. As Mary Beth Bartholomew with Youth Opportunities Unlimited in Cleveland, Ohio puts it, "For kids at risk, you have to take risks. You can't get around it."

Program staff boundaries are quite different than those of staff of most youth agencies. Program staff frequently assist youth with family, financial, and legal troubles. One MSEF replication site director explains: "Families depend on [program staff] quite a bit, not just for monetary things, but also for transportation or whatever else they needed."

The intensity and depth of program staff's relationship with youth is seen as a strength of the program and partially responsible for the strong outcomes of the pilot. Yet for program staff, the unclear boundaries cause significant complications. According to Melissa Silvey of the Dover NH replication site, not a week went by that at least one of their two coordinators did not have some sort of gray area in dealing with the families. Says Lisa Willis, VP of the Bridges program in Memphis TN, "Compassion takes over and you suddenly feel so ultimately personally responsible for everyone—the children, their parents." She goes on to warn that program staff should watch that they do not become so compassionate that they become a crutch. "We think we're doing good, but we are simply enabling these families to stay lame," she says.

Several of the Eisenhower Foundation-sponsored Quantum Forum participants agreed that the intense relationships can lead to burnout for program staff. "They're being asked to parent [someone else's] kids over and over, and it's the same needy parents."

Recommendations

Staff need adequate training as well as clear policies and procedures to address the assistance they can appropriately offer to students and their families.

To address this issue, some suggest the need for guidelines to help program staff navigate the difficult terrain. Others emphasize the importance of training staff to clearly understand policies and procedures so that they have confidence in their own judgment. Program staff should also be familiar with what other resources are available in their community so that they

have a good sense of what situations they need to handle and what situations can be turned over to someone who is professionally trained in that area. Says Yakima program coordinator Armstead, "They need to distinguish between those times when compassion is called for and others when they need to make referrals."

Develop and implement policies to address burnout.

Other recommendations for preventing staff burnout include holding annual retreats to build community among program staff, instituting flex time and rotating weekends, in-service training in stress management, and awarding bonuses and adjusting salaries based on performance.

Issue 5. While an important component of Quantum's design, the practice of offer students stipends for participation can lead to complications.

Stipends are clearly a significant expense that greatly increases the program's cost per child. Yet the practice is as an important element of the Quantum model. It attracts students to the program and is a very tangible means of rewarding success. One Forum participant expressed regret, however, that stipends were frequently used for household expenses. She explained, "Of course I can't do anything about that because that's real life, but I would like for them to be able to use their earnings to do something that they like to do or to get something that they want to get."

Recommendation

Continue to offer stipends at the highest level possible.

Yet due to its importance to the program, the Eisenhower Foundation has explicitly stated that stipends will continue to be a part of its Quantum replication. One of the Foundation's working principles for future Quantum Implementation "acknowledges the importance and cost-

effectiveness of providing stipends." The principle continues to say that the Foundation "will continue to [provide stipends] at the level possible given funding." To this end, the Eisenhower Foundation plans to increase its investment to $6,000 per child from the current $4,500 per child investment. While this is a significant and important increase, it still does not match the original $10,000 per-child investment in the pilot project.

Issue 6. Implementation sites had difficulties providing the requisite number of programming hours.

Another element that sets Quantum apart from other youth development programs is the intense number of hours required by participating youth. According to the model, Quantum sites are to provide 750 hours of activities annually for each youth, evenly divided among education, community service, and youth development. While there is no particular magic attached to 750 hours, Quantum's program architects believe there is no question that in-depth, intensive programs provide better outcomes than short-term, single service programs.

Despite the benefits, it is not surprising that the replication and demonstration sites found it challenging to provide 750 hours a year of programming. In fact, the average number of hours provided by the DOL demonstration sites was about one-third of the goal. One reason these sites had a more difficult time engaging the youth for the stipulated number of hours is that, unlike the more economically disadvantaged youth in the pilot project, those in the DOL-funded sites were already involved in various other activities. In the pilot, staff aimed to occupy the students as much as possible. The economically disadvantaged youth in the pilot didn't have the same opportunities as more affluent children to participate in enrichment activities such as sports or clubs. There were also fewer part-time job opportunities than those available to youth in demonstration and replication sites. In the pilot, "We wanted to keep them engaged from the

time they wake up in the morning until the time they go to bed…Filling their day with programming was valuable," explains Barbara Dunn, VP of the Remediation and Training Institute in Alexandria VA.

Recommendation

Cross agency lines in order to count all hours that students spend in relevant activities.

In the DOL demonstration sites, program staff found "kids splitting their time, zipping here and zipping there." The youth were engaged in appropriate activities but the hours were not being counted against the 750 hours stipulated by Quantum. To provide a more realistic accounting of how the youth were spending their time, some sites experimented with sharing information about the kids and their activities. Tomlinson, from the Quantum site in New Waverly, Texas believes it's easy for a caseworker to meet with other agency staff working with the youth and document all the hours so that no one is expected to duplicate the services the youth is already getting. "People have got to talk to each other. You've got to cross agency lines and keep focused on what you're doing with this [youth]." While feasible, this approach does create documentation and management challenges. Says Ohio's Bartholomew, "We've got sign-in sheets all over the place."

Issue 7. Equal Attention to Program Components.

By giving equal emphasis to education, community service, and youth development, Quantum is designed to address the whole child. This approach is central to the philosophy behind Quantum's design, yet the DOL demonstration and MSEF replication sites, in general, had and are having difficulty executing this structure. Each of the three program components—community service, education, and youth development—are discussed in turn below.

Issue 8. Community service was a lower priority than either education or youth

development, despite its importance to positive outcomes for students.

In discussion, Forum participants agreed on the importance of community service. According to Pederson, the benefits of community service are that, "It enlarges kids' world so that they see where they fit and are able to appreciate their contribution." Adds Tomlinson, "If Quantum is about anything, it's about teaching kids character and developing them into adults. You learn humility; you pick up things from community service that you don't get from education and youth development."

Despite its perceived value, in practice community service was given lower priority than either education or youth development. Forum participants point to a lack of imagination and creativity when framing the community service component of Quantum. "Too often the community service was uninspiring and unrelated to kids' interest and passions," explains Bartholomew. "The kids know that it's not meaningful, so they don't want to do it." Others observed that the term "community service" has negative connotations because it is used punitively in the criminal justice system. They had more success attracting youth to the concept when they called it "community activism" or "community responsibility."

Recommendations

Allow students to define community service projects that are personally meaningful.

Whatever term is used, Forum participants agreed that community service should be defined broadly to include the many meaningful ways that youth connect with their community. Youth become most enthusiastic when community service is personally meaningful and they are able to take ownership. Community service goes beyond simply volunteering. One participant describes how kids can identify and solve problems in their community: "There's a light that doesn't work in my neighborhood. Who can we write letters to to get it working? Our little kids

don't have a crossing guard at the school. Who can we contact? She went on to explain that tackling these types of issues gets youth involved, develops their problem-solving skills, helps them to understand how to create change at the community level, and empowers them in transformative ways.

Look for community service opportunities that help develop youths' skills and interests.

Service should be youth directed to engage their energy and enthusiasm. Assignments that require students to use critical thinking and judgment are more appropriate than yard work. Program staff should take the time to learn youths' skills and interests and try to align their community service experiences accordingly. Participants also suggest framing service as work experience and allow youth to engage in areas that could potentially become a career direction. Program staff also need to be trained to appreciate the inherent value of service.

Issue 9. Students were not provided with all possible support necessary for positive academic outcomes.

There was a clear consensus among Forum participants that education plays a vital role in determining a variety of youth outcomes, from success in the workforce to other important youth development indicators, such as lower rates of teen pregnancy, crime, and drop out rates.

Yet, despite their agreement on the importance of education, DOL demonstration sites still struggled to provide the stipulated number of programming hours in this area. According to the Mathematica evaluation, few sites regularly assessed academic performance, only three sites successfully implemented computer-assisted instruction, and none developed individualized education plans or implemented a sustained program of course-based tutoring. Says Taggart, "The average minority and disadvantaged student is four grade levels behind—that's 4,000 hours of schooling behind. It doesn't matter how they learn, but you've constantly got to be stuffing

facts, figures, knowledge, decision-making, and critical thinking into these kids. We've got to get those kids up to a level where they can compete." He goes on to state, "If you're not getting the education hours then you're not going to get the education gains."

Forum participants primarily pointed to the challenges of the school settings in which Quantum programs operate. One participant said, "What Quantum students are getting from their schools is often of such poor quality. I think Quantum coordinators are really in a tough position, because you want to convince your kids that they must get that degree. Yet, at the same time, you know their needs aren't being met between 8:00 and 3:00 o'clock every day. It's really, really hard."

Recommendations

Program staff should better utilize academic assessments to ensure steady academic progress.

Forum participants stressed the importance of frequent feedback from regular academic assessment. Students and teachers should be able to see their progress day to day. "The reason you want to look at performance assessments is to know your youth better," explained one participant. "You need to know where they are at and what they need to help you intervene in the most appropriate way."

Quantum program staff should cautiously play the role of advocates for their youths' educational needs.

Some felt that program staff need to play the role of advocates to help ensure that the youth are getting adequate instruction during their regular courses. Others stressed the importance of tact and diplomacy when working within schools. "You can lose your welcome very quickly if you start thinking of yourself as a school-reform entity," stated Brandeis

University's Andrew Hahn and evaluator of the Quantum pilot.

Issue 10. Relative success in the area of youth development revealed successful practices.

According to the Mathematica evaluation, the DOL-funded sites were most successful in the area of youth development. Forum participants offered several insights into what makes youth development activities effective.

Recommendations

Youth development activities must be age-appropriate.

First and foremost, advises Hahn, services should be age appropriate. As an example of a developmentally inappropriate initiative, Hahn mentioned a major college access program of a decade ago that was aimed at high school juniors and seniors. "What's wrong with that, folks?" he queried. "It's too late to start encouraging kids to go to college in their junior and senior years. They've already tracked themselves out of taking certain courses." Hahn also reminded other participants that youth development cannot occur without healthy community development. Youth development, he asserts, is a movement to promote healthy families, healthy communities, and healthy young people.

Youth development activities should inspire students to achieve.

As with community service, Forum participants recommended that youth development activities put youth in decision-making roles that encourage empowerment. Tomlinson noted that his group mainly did life skills and image-building exercises. They tried to focus on those kinds of things to build self-confidence and make the youth understand that the benchmark or expectations for them were set higher than what they would normally set for themselves. By doing these exercises, they learned they could achieve more than what they thought they could. Once that happened, he said, the youth understood and respected the role of the staff for

constantly raising the bar. Another

Forum participant suggested setting learning goals for youth. For example, by the end of the year, all students should know how to use public transportation, set up a bank account, or manage their money.

As a tactic for reaching the full number of youth development hours, one participant suggests including such things as time spent on conducting job searches or developing a résumé. Finally, Pederson urged the practitioners to "Stay with the model," adding, "maybe 750 hours is unrealistic, but a balance between the three—development, education, and service—is crucial."

Summary Reflections

In sponsoring the Quantum Forum, the Milton S. Eisenhower Foundation brought together representatives of three generations of Quantum implementation to harvest what amounts to nearly 15 years of lessons learned about the Quantum model. Ultimately, The Eisenhower Foundation seeks to understand what works for disadvantaged, low-income, urban youth and communities. Quantum still holds great promise as a model for helping high-risk youth graduate from high school and develop positively and healthfully into adulthood.

While the issues presenting Quantum implementers do not easily lend themselves to "yes" or "no" answers, participants in the Quantum Forum identified a set of strategies and course corrections — including increasing the per-youth investment — to support the success of the Eisenhower Foundation replication initiative as well as any future investments in the Quantum model.

Perhaps the greatest lesson from the Quantum Forum lies in appreciating the value of bringing together program planners, practitioners, evaluators, and funders to reflect in a genuine spirit of seeking to learn how to best support disadvantaged young people and their communities.

Beyond the specific issues raised and recommendations made during the Forurm that have been presented above, the common wisdom and insight have highlighted the following themes that should inform the continued implementation of Quantum.

Site and youth selection

One of the common themes identified by Forum participants underscores the importance of carefully selecting future sites for Quantum Opportunity Programs. **Quantum was designed to meet the needs of economically disadvantaged youth, and the program has been shown to be most successful in low-income areas with limited other programs for youth.** Future Quantum programs should be located in areas that meet these criteria.

New programs should also develop criteria for selection of youth into the program, so that **only needy youth who can effectively be served by and benefit from the programs are selected to participate**. Selecting the appropriate target population of youth is critical to program success and will enhance the chances of staying true to the "Once in Quantum, always in Quantum" principle.

When to begin Quantum

Forum participants raised questions about the appropriateness of college counseling and other activities best suited for younger youth. This raises the question whether Quantum should recruit youth beginning in middle school, rather than waiting until high school. Extensive research has shown that many high-risk students drop out during the transition between 8th and 9th grade, and Quantum could provide much-needed support at this critical time for many youth.

One obvious challenge to this is that youth change schools between 8th and 9th grade and usually go to different high schools, so the logistics of working with youth after they transition to high school would be challenging, and will require further consideration.

Provide activities that engage youth in meaningful projects

In order to come closer to the 750 hour programming goal, **Quantum needs to provide programming that is consistently interesting and meaningful for youth.** Activities should be designed to combine the education, youth development and community service components of Quantum. It is not necessary to separate the education, youth development and community service components in separate activities.

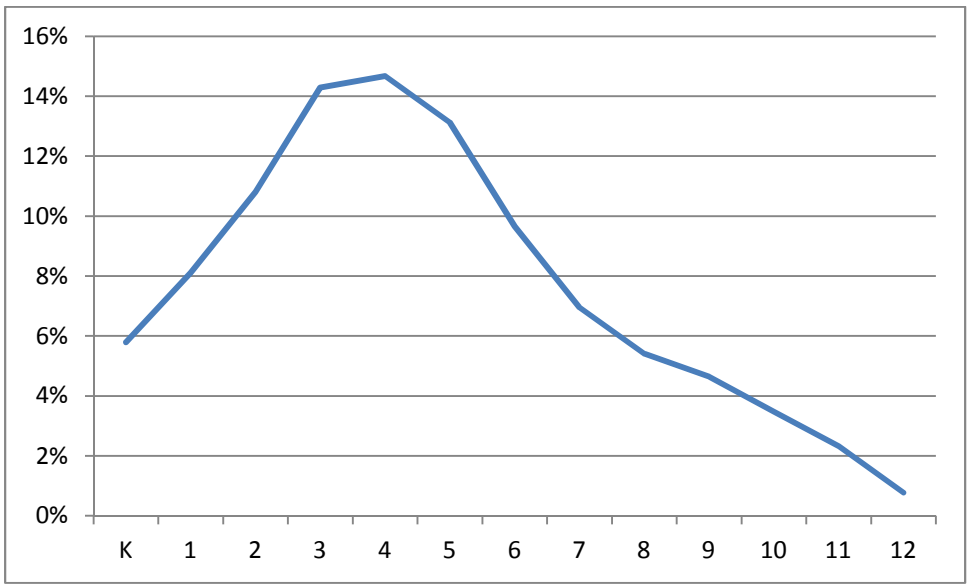
One example is production of a video documentary about a particular community problem of interest to youth. Such an activity combines educational skill building (research, video scriptwriting, videotaping, production), youth development (team building, self-esteem, public speaking) and community service (highlighting community problems, organizing solutions). Many activities such as this can be introduced in the curriculum, but Quantum staff will require training and technical assistance in order to effectively plan for and supervise the implementation of such activities.

Offering engaging activities based on project-based learning responds to several of the issues raised by Forum participants, but requires an investment in professional development for Quantum staff to support their efforts in implementing such activities. In an environment of competition for youths' time, Quantum needs to offer opportunities that are seen by youth as valuable and engaging.

FIRST EISENHOWER FOUNDATION REPLICATION

In 2001, the Eisenhower Foundation was just beginning its third generation of Youth Safe Haven – Police Ministation programs. These programs combined the Japanese Koban, or police mini-station concept with an after-school youth development program. These programs are run by a civilian staff, but with the police officer providing mentoring 20 hours a week. Theoretically the program is open to anyone in school, but it had become clear that few youth stay in the Youth Safe Haven program beyond middle school. Figure 1 shows the grade distribution of the third generation of Youth Safe Haven programs. Seeing the need for an alternative program for high school youth, the Eisenhower Foundation searched for and chose the Quantum Opportunities Program as showing the most promise.

Figure 1. Grade Distribution of Youth Safe Haven Participants.



In 2002, before the evaluation results from the demonstration sites were in, the Eisenhower Foundation had started replications of the Quantum Opportunities Program in Dover, NH; Keene, NH; Herndon, VA; and Columbia SC (two sites). Each of the sites were different in their racial and ethnic composition, as well as in the barriers that would have to be

overcome. The idea was to demonstrate that the Quantum model could be successfully replicated in a variety of different settings.

The staff of the five sites, along with Eisenhower Foundation staff were trained in the Quantum model by the staff of the Opportunities Industrialization Center of America (OICA), including Benjamin Lattimore, co-developer of the Quantum model. The emphasis at this training was on teaching the new staff that they needed to be mentors and teachers, but first and foremost advocates for the program Associates. They needed to do all within their power to remove the barriers to high school graduation that stood before their young charges.

Start-up at the sites began late in the summer. Almost immediately the first barrier was raised. Keene High School had an absolute prohibition on the release of names of students or the use of school resources to recruit students for non-school programs. A policy designed to keep military recruiters out of the school became an unbreachable barrier. All attempts to work with the school failed. It was therefore decided to find an alternative location: Portland, OR.

The following is a site by site description of each replication, discussing the successes, failures, barriers and unforeseen problems, as well as the outcomes.

CHAPTER 3

DOVER, NH

Dover is a mixed blue collar/middle class community with few minority persons and a generally adequate life-style. While having relatively low poverty and unemployment, Dover has a problem with affordable housing. This leads the poorest residents, though usually employed, to seek public housing as their only residential alternative. The unfortunate consequence of living in public housing, while attending the only high school in town, was having outsiders, including school officials, judge you unworthy of assistance.

In Dover, the Quantum program was viewed by the staff as an extension of the existing Youth Safe Haven program, now completing its second year. The target population was youth living in public housing or subsidized (Section 8) housing in the vicinity of the Seymour Osman Community Center. This attractive facility housed the Youth Safe Haven program and was familiar to all the youth of the area.

The only high school in Dover identified students residing in the aforementioned housing, who were in the bottom two-thirds academically and were in-coming freshmen. Potential participants were recruited and parents or guardians permission obtained. A sufficient number of recruits was not obtained, but by extending the geographic boundary to include students within walking distance in surrounding neighborhoods, who were receiving

free/reduced lunch, a pool of 43 was developed. Three of the youth were current participants of Youth Safe Haven and staff opposed including them in the random selection process, in the event they were selected for the control group. Separate funding was obtained to allow them to participate, outside the evaluation process. The remaining 40 youth were then randomly assigned to either the treatment (Quantum Associates) group or a control group, against which the Associates would be compared. Unlike other sites, there was no immediate loss of participants. All 20 Associates participated, to varying degrees, from day one.

While it would have been desirable to obtain detailed information on the socioeconomic and family characteristics of the participants and control youth, it was decided that such information could not or need not be obtained for four reasons. First, most of the recruited youth were from households eligible for subsidized housing and all were eligible for free/reduced lunch, and were therefore deemed to be poor. Second, it was anticipated that recruiting sufficient youth would be difficult, and that requiring parents or guardians to provide sensitive information would further complicate the recruitment process. Third, the living and custodial relationships of many youth were known to be unstable. Youth in kinship care and those who shuttle between parents in a joint custody situation would further complicate the gathering of data. This is made even more complicated because the custodial situation of some youth was expected to change over the four years of the program. Finally, it was believed that those completing the survey might not accurately report the information requested, either from lack of knowledge or fear of disclosing information that might be used against them in some way. It was decided that such information was not strictly necessary, since the target population was objectively poor.

Programs

Very early the Associates began to feel that the two rooms assigned to Quantum were 'their space', their clubhouse. They decorated it as they wanted, with the more creative Associates contributing their own art.

While the program theoretically operated from 3:00 to 6:00, in reality there would be Associates at the center as late as 8:00 or even 9:00. Staying late became the norm after an addition was built onto the community center. The addition included a commercial kitchen. A community volunteer, with a Food Handlers permit, would cook a communal meal each evening, often with the help of Quantum Associates, a favorite task of most. The meal was open to anyone, and often the Associates would stay for chili, spaghetti, Sheppard's pie, or whatever had been prepared.

Because of the extended hours, there was greater flexibility in programming. Typically the afternoon would start with Associates arriving after school, though some arrived after sports and other extracurricular activities. After some socialization and snacks, provided by the local food pantry, they would begin their homework. As a working relationship developed between the Quantum staff and the teachers, the staff would be provided with information on homework assignments, allowing them to check the accuracy of the information provided by the Associates themselves.

Baseline testing of the Associates and controls had demonstrated that most associates were not actually behind in their work, they just weren't performing to the best of their ability and weren't keeping up with other students at Dover High School. This was particularly a problem since with only one high school, those with parents who couldn't provide support were competing with those students whose parents were able to provide academic support and enrichment.

The Associates rapidly developed their own support system, with those who were good in specific subjects helping those who were weak. Many gained pride from being recognized by their peers as being good in a subject. In fact, the staff had to be careful that the 'experts' didn't fall behind in their own work, while helping others in their area of expertise.

While the program focused on academics for the first year, they then moved to youth development and enrichment activities during the second year. This is not to imply that youth development had been ignored the first year. The first year had focused on 1) Awareness Skills, 2) Relationship and Social Skills, 3) Decision Skills, and 4) Family Skills. These are basically the skills that many youth fail to develop, that place a barrier between them and success in the larger, adult world.

It was during the second year that trips to Boston to experience cultural activities and an annual baseball game were highlights of the program for the Associates. It was also during the second year that the Associates received certification in CPR and first aid, skills that made them feel proud to have acquired. Associates also participated in Youth Safe Haven trips to the shore and elsewhere, generally supported by the National Guard, who provided buses and drivers at no cost to the programs.

At the end of the second year, the two coordinators left the program. With a deep staff at the community center, a new and familiar face was placed in charge. Unfortunately, a trip to Boston, with an Associate inadvertently left behind on the return trip, led to a new director. Again, a familiar face was put in charge. The availability of a variety of staff at the community center meant that the program was never without a leader whom the Associates knew and trusted.

The summer between their sophomore and junior years, the program assisted the Associates in getting their driver's licenses. The Associates also began to examine post-secondary opportunities that they might like. With the University of New Hampshire only six miles away and several UNH students volunteering as mentors with the younger children of the Youth Safe Haven, it was easy to explore what opportunities there were, what the barriers were and what college life might be like. They also explored a local culinary school, other tech schools and community college.

The third and fourth years proceeded as the third, with trips and new skill offerings, but also the challenge of jobs and romantic relationships. The emphasis placed on "Once in Quantum, Always in Quantum," helped the staff focus on getting the Associates to attend as often as possible. The late hours also helped, for some Associates might show up as late as 8:00 PM, to stay in touch and maybe get help with homework, or assistance with a personal problem. Youth Safe Haven staff and volunteers were often present to help, even if the Quantum staff had left for the night. Even the cook, a trained mentor, could be called upon for words of wisdom and guidance.

Community Service

The Dover Youth Safe Haven had developed, with the assistance of the Remediation and Training Institute of Alexandria, VA, both a Kid Quantum and Mid Quantum, for elementary and Middle School youth, respectively. These programs relied on the same material and computer systems used by the Quantum Associates, but at an appropriate grade level.

The Quantum Associates got great joy out of helping the younger kids with their work, and the younger kids liked working with what one 3rd grader referred to as my Big Brother, though they weren't in fact related. The near-peer mentoring relationship that developed benefited all involved.

Computer-Based Learning

A fundamental component of the Quantum program has been the eXtralearning system, which provides academic remedial and enrichment activities. During the four years of the Quantum program, the eXtralearning system evolved from hardcopy and CDs, to network drives, to an internet-based system. These transition points created a barrier to the use of the system. The CDs were useful, but the network drives remained problematic, and were seldom used, the staff and Associates preferring to use the CDs and hardcopy. Once the internet system was brought on-line, the necessity to use a dial-up service meant that interaction with eXtralearning was frustratingly slow. Again, the program reverted to the CDs. Finally, a broadband connection would provide problem free access to the internet and eXtralearning.

Despite these problems, eXtralearning remained a key component of the Quantum program, helping the Associates with material that they had not adequately mastered and allowing them to enrich their learning with material more advanced than they received in their classes. The staff believed that eXtralearning was a major factor in the Associates doing well on

the standardized testing mandated under No Child Left Behind. However, eXtralearning was always seen as supplemental. It was never the primary focus of the academic component. It was used when an Associate had a particular academic weakness that needed remediation.

Barriers to Success

In the beginning, the youth in public housing faced a negative stereotype leading some in the community, including school teachers and staff, to believe that providing services to them would be a waste of resources. As the program developed, the staff developed new relationships with the school and the Associates did better, both academically and behaviorally, consequently, attitudes changed. However, the attitudes didn't just change toward the Associates. All youth of Whittier-Mineral Park benefitted. This change had begun with the implementation of the Youth Safe Haven-Police Ministation program in December 1999, but really took off with the improved behavior of the teenagers.

Facilitating Factors

There were a number of factors that influenced the success of the program. Strong leadership at the upper management level, being located near the homes of the youth, transportation support from the National Guard, a deep and caring staff at the community center, a great facility and good funding, both from the Foundation and other sources, were all important. Of all the factors, probably the most significant was not having transportation problems.

As discussed in subsequent chapters, the other sites struggled with transportation. Getting the Associates to and from school, the site and home was often time consuming and a distraction. In Dover, ease of access was a major factor in the high participation rate of the Associates. The Associates lived in the neighborhood and were bused to the site every school

day. After leaving the site, they could easily walk home in what had become a relatively safe neighborhood.

Outcomes

By the end of the four-year program, it was still possible to track all the Associates, two of whom had moved from the community, and all but one of the control group youth. Comparison analyses between the Associate and Control groups in Dover showed that Associates were significantly more likely to graduate from high school (90% vs. 63%) (see Table 2 and Figure 2) and Associates were significantly more likely (80% vs. 21%) to continue to post-secondary education or training (including Job Corp and National Guard). At the same time, Associates were less likely to have run-ins with law (0% vs. 10.5%) and become teenage parents (0% vs. 5%), though the low incidence rates were not statistically significant.

Table 2. Comparison of Associates and Controls on Outcome Variables

	Associates (N=20)		Controls (N=19)	
	Number	Percent	Number	Percent
High School Graduation *	18	90.0	12	63.2
Advanced Education or Training *	16	80.0	4	21.1
Legal Problems	0	0.0	2	10.5
Pregnancy	0	0.0	1	5.3

* Statistically significant ($p<.05$)

Figure 2. Comparison of Outcomes for Associates and Controls

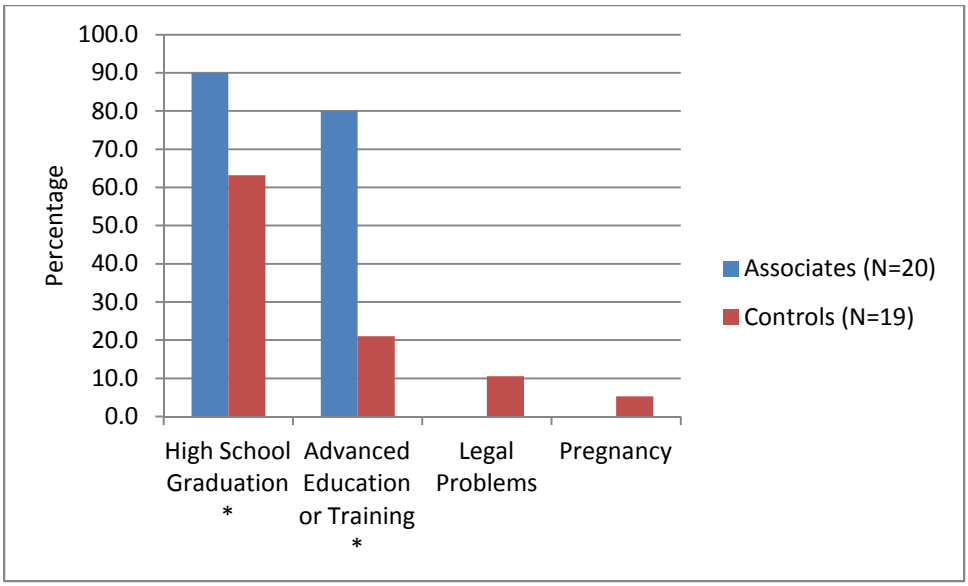


Table 3. Change in TABE Test Scores, Baseline (T1) to Final Semester (T5)

CONTROL	Language T1	Math T1	Language T5	Math T5
means	49.158	29.632	56.929	28.357
Standard Dev.	10.167	5.649	7.098	6.476
N	20	20	12	12
ASSOCIATE	Language T1	Math T1	Language T5	Math T5
means	49.727	30.682	56.810	33.952
Standard Dev.	10.241	4.824	8.364	4.318
N	20	20	18	18

Due to the extreme variability in classes taken by associates and control group members, it was not possible to directly compare grades, without standardization, and the small sample size prevented objective standardization. Further, those associates with the lowest grades stayed in school, while the control youth with low grades dropped out. Thus, any comparison of grades would have been difficult and possibly meaningless.

It was possible to explore the possible academic gain by examining the change in standardized test scores (Test of Adult Basic Education, TABE) . Table 3 presents the Language

and Math scores for both groups for the baseline testing (T1) at program start and during the spring of their senior year (T5). The language scores show no difference between the two groups over the period. For math, the associates made significant gains, when compared to the controls. The associates gain, above that of the controls, was more than an extra year (1.1 years), or the equivalent of two semester of math.

The actual differences were probably greater, because the lowest performing control youth were not available for the T5 testing at the end of the senior year. Thus again, only the highest performing control youth are represented in Table 3.

The Katrina Trip

As graduation approached, the Associates were offered the opportunity to go to Washington DC or Disney World. With little hesitation, they choose a third alternative, a trip to the Gulf Coast to spend a week helping rebuild after Katrina. They went to a small town near Gulf Port Mississippi, where they spent their week building small storage structures where people could secure those few possessions they had been able to save.

While this level of civic involvement is commendable, the fact that they worked to obtain the money and support necessary to go to Mississippi shows the level of maturity they developed during their four year involvement with the program.

CHAPTER 4

HERNDON, VA

Herndon, VA, a suburb of Washington DC, was different, by virtue of the city's composition. Herndon is a community with two distinct populations. The largest segment of the population is composed of middle class and upper-middle class residents who work at a number of hi-tech companies in the area, or commute to government jobs in Washington DC. The second group, representing about 40 percent of the population, are immigrants, mainly from El Salvador and Nicaragua, though also from various Asian, African and other Latin American countries. An indication of the diversity of the community is suggested by the fact that the schools have parent information packets in 27 languages. As described by a police official, Herndon was a community where "half the population are immigrants and half the population hates immigrants." Addressing the needs of the immigrant population was a daunting, but necessary task.

Vicinos Unidos/Neighbors United was a prominent organization attempting to address the needs and concerns of both sides. It was an organization consisting of several prominent local business people. They accepted the task of serving as the fiscal agent for the Quantum program, and the equally important task of raising additional funds and in-kind support for the program. They were also prominent in their support for the Neighborhood Resource Center, where immigrant families could go for various kinds of support, including classes.

The target group for the Quantum program was the immigrant youth. The only high school in the community provided contact information for those students in the bottom two-thirds of the freshman class. Because immigration status is not determined for youth registering for school, it was not known at the time of recruitment if the youth were legal residents or not.

Many of the immigrants to the area were there under Temporary Protected Status (TPS), related to Hurricane Mitch in 1998 and the Salvadoran Earthquake of 2001. As it would turn out, at least three were not legal and the status of others was in limbo, as the Bush administration flirted with revoking TPS status toward the end of the four-year program. (Note also that this was to have a significant impact on the desire and ability of Herndon's youth to enroll in advanced training.)

Families were contacted using both English and Spanish flyers. Program staff, working with the Neighborhood Resource Center, went to community and church meetings in an attempt to persuade immigrant families to allow their students to participate. The recruitment process was agonizingly slow as families had to be convinced that programs like Quantum were in the best interest of their children and that there was no cost, that in fact their child would be getting

paid for participating. Such programs were so culturally different that many potential Associates were kept from participating out of fear.

Eventually, a pool of 46 predominantly immigrant youth were recruited and randomly assigned to the two groups (treatment/control). While the precise economic status of the families was not known, it was known from parent meetings and both parent and youth focus groups that many of the adults held multiple low wage jobs, including day-labor jobs. There were two known exceptions, a Russian orphan who had been adopted by a local family and an African youth whose father was a physician working as a nurse because of his inability to get a medical license in the U.S. All other families would be subjectively classed as low-income.

It should be noted that in addition to language barriers, the educational level of most parents was low, and the parent's academic expectations for their children tended to be low, particularly in comparison to a majority of the youth in the high school, which had at least one parent with a Nobel Prize.

Of those youth, 23 were assigned to the program as Quantum Associates, 20 youth were considered as part of the control group, and 3 youth participated in the activities offered by the

program but were not part of the Eisenhower Foundation evaluation and did not receive stipends. Of the 23 originally assigned to the Associate group, two never participated and were dropped before the end of the 30 day cut-off period for replacement. The present report focuses on the remaining 21 youth who were Quantum Associates and 18 youth in the Control group, who were still in the area at the end of the program period.

Program

Unlike Dover, with a nice facility and ease of access, the Herndon program lacked both. Initially located in a two-bedroom apartment, in a complex that many parents felt was too dangerous at night, the hours of programming were limited. Though open from 3:00 to 6:00, it was seldom that the youth could spend more than two hours at the site. While they could reach the site by school bus, they had few options besides walking or public buses for getting home. While many lived within walking distance, the threat of gangs, including the extremely violent MS13, meant that they had to leave early during the winter. Few parents were able to provide transportation. During the third year, the program would move to an equally small apartment in a much safer and esthetically pleasing complex, just two blocks from the original location.

Original Site Location

Second Site Location

Despite the problems, Herndon had a good participation rate. Quantum was one place where the Associates felt comfortable and safe. As with all Quantum sites, the emphasis was on

academics. The immigrant youth faced a rather unusual barrier. They were, of course, required to take English classes, but also four semesters of a foreign language. While they all spoke both English and their household language fluently, they generally had no ability to write or sometimes read one or both languages. If they could pass a test in their household language, they could not use it as a foreign language, nor could they use English. Thus, the better students often had to take a third language. Therefore, assisting the Associates with language classes was a primary focus.

Saturdays were particular important at the Herndon Quantum. Unlike the other sites, where Saturday activities were rare, the Herndon Associates would often spend the entire day at the Quantum site, studying, hanging-out, working on service activities or participating in various enrichment activities.

The original program director, who spoke Spanish, left after six months, to be replaced by a non-Spanish speaking director. While the language barrier was a problem when communicating with parents, it also meant that the Associates were forced to use English at all times, and may well have led to improved grades in English.

A new and well-liked assistant was hired to do outreach. When the second director quit, she was replaced by her assistant, who was the best liked of all staff over the four-years of the program.

Barriers to Success

Herndon began with the school providing transportation to the site. The problem was getting the youth home, while still maintaining a staff presence at the site. The Associates were left to deal with the transportation problem on their own, leading to shortened participation hours. After two years, transportation policy changed and busing was no longer provided for

youth who lived within a mile of the school. The location of the site didn't matter. This made it even more difficult for some of the youth to attend on a regular basis. Most were able to work out some process for getting to the site.

Non-Spanish speaking staff were also a problem. This was particularly the case in their interaction with the parents. The lack of familiarity with the cultural background of the families was also a minor barrier. Though the staff were quick to learn, it wasn't until the final director was on staff that there was a real sense of mutual understanding and respect.

On-going conflict between Latino day-laborers and the non-Latino population, as well as between immigrants in general and a small group of vocally anti-immigrant residents, placed the parent organization at the center of a lot of publicity, both good and bad. With the 7-Eleven one block from the site acting as the unofficial day-labor pick-up site, the Latino youth felt somewhat threatened as the conflict escalated. Also, public support for Latino dominated programs declined precipitously.

Unofficial Day-labor Pick-up Location

Facilitating Factors

The program's strongest supporter was a police captain who had developed a soccer league ten years before Quantum came to town. This league, aimed at the immigrant youth, had given youth something positive to do after school and on weekends. He was admired by the

immigrant community and often spoke for them in their interaction with community officials and businesses. Acting as a go-between, he was fundamental in getting the Quantum located in Herndon and getting local support.

Outcomes

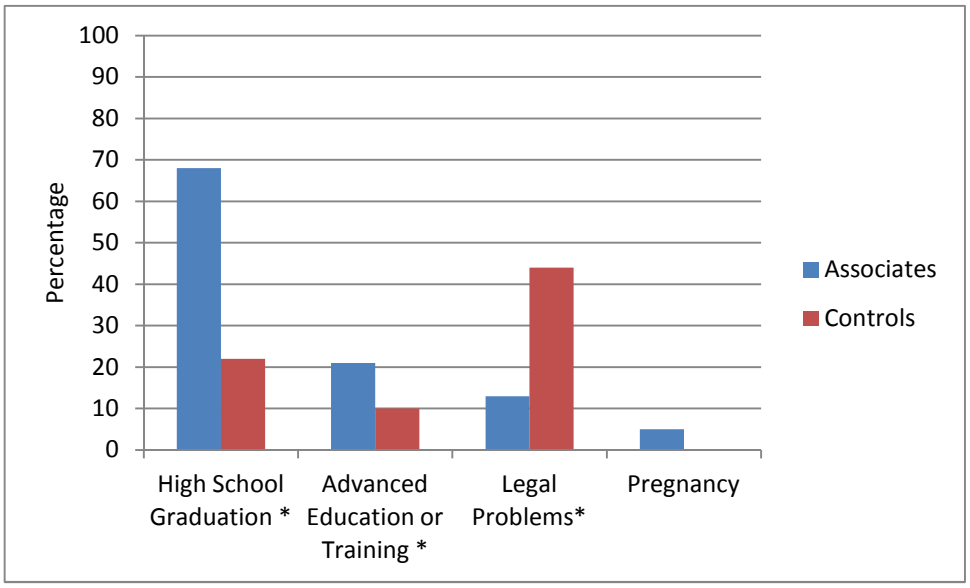
Comparison analyses between the Associate and Control groups in Herndon showed (see Table 4 and Figure 3) that Associates were more likely to graduate from high school (68% vs. 22%) and Associates were more likely (26% vs. 11%) to continue to post-secondary education or training. At the same time, Associates were less likely to have run-ins with law (10.5% vs. 44%). However, while one of the Associates became a parent during her high school years, no cases of teenage pregnancy were found among the 18 youth in the control group. However, this single pregnancy occurred after the young woman, then 18, had married.

Table 4. Comparison of Associates and Controls on Outcome Variables

	Associates (N=19)		Controls (N=18)	
	Number	Percent	Number	Percent
High School Graduation *	13	68.4%	4	22.2%
Advanced Education or Training *	5	26.3%	2	11.1%
Legal Problems*	2	10.5%	8	44.4%
Pregnancy	1	5.3%	0	0.0%

* Statistically significant ($p<.05$)

Figure 3. Comparison of Outcomes for Associates and Controls



Because of the extra academic burden placed on the Spanish speaking students, an additional three Associates graduated a semester late. If one accepts that these Associates fulfill the criteria of completing high school, then Table 5 and Figure 4 more realistically represents the outcomes.

Table 5. Comparison of Associates and Controls on Outcome Variables

	Associates (N=19)		Controls (N=18)	
	Number	Percent	Number	Percent
High School Graduation *	16	84.2%	4	22.2%
Advanced Education or Training *	6	31.6%	2	11.1%
Legal Problems*	2	10.5%	8	44.4%
Pregnancy	1	5.3%	0	0.0%

* Statistically significant ($p<.05$)

Figure 4. Comparison of Outcomes for Associates and Controls

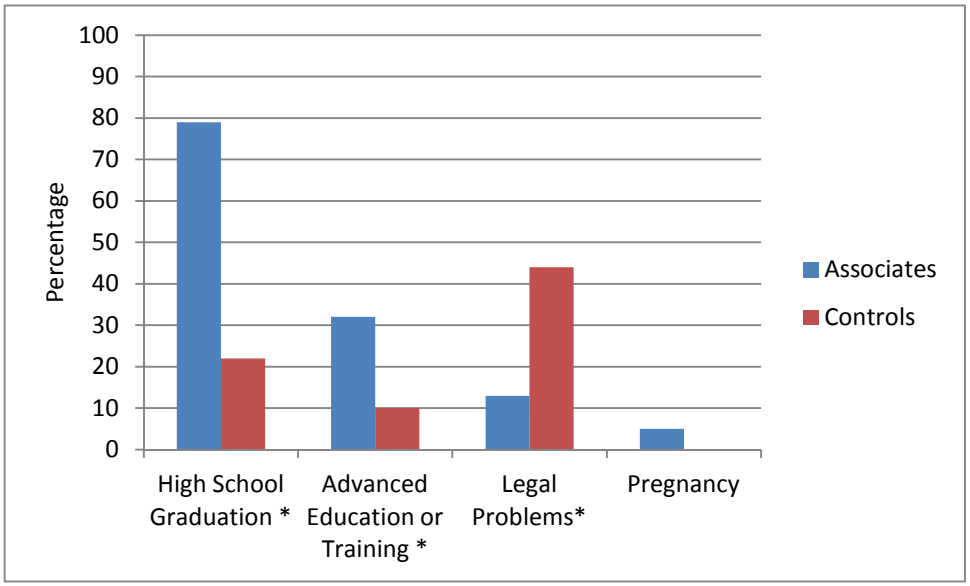


Table 6. Change in TABE Test Scores, Baseline (T1) to Final Semester (T5)

CONTROL	Language T1	Math T1	Language T5	Math T5
means	48.353	30.529	50.800	35.133
Standard Dev.	9.552	4.939	3.610	3.701
N	20	20	9	9
ASSOCIATE	Language T1	Math T1	Language T5	Math T5
means	44.500	27.150	50.357	33.786
Standard Dev.	11.124	6.800	2.134	3.984
N	23	23	16	16

As with Dover, there was great variability in classes taken by associates and control group members, so it was again not possible to directly compare grades. Once again, it is possible to explore academic gain by examining the change in TABE scores. Table 6 presents the Language and Math scores for both groups for the baseline testing (T1) at program start and

during the spring of senior year (T5). The language scores show that over the period, the associates gained an extra semester. For math, the Herndon associates made the same significant gains as in Dover, when compared to the controls. There gain was more than an extra year (1.1 years), or the equivalent of two semesters of math. As with Dover, all graduating Associates are counted, but only nine control youth, including

Following graduation, many of the Herndon associates ran into problems when trying to enroll in local schools or training programs. The local community college, which is very affordable, would accept any high school graduate, no questions asked about the legality of their residence. However, to get the substantially lower in state tuition, legal status had to be proven.

Due to changes in the status of families who had entered the U.S. on Temporary Protected Status, and considerable confusion regarding the procedure for establishing citizenship when born here to parents of questionable status, many associates opted to take jobs, rather than go on for advanced training. One might convincingly argue that the percent who would have gone on for advanced training would have been twice as high, were it not for the residence problem.

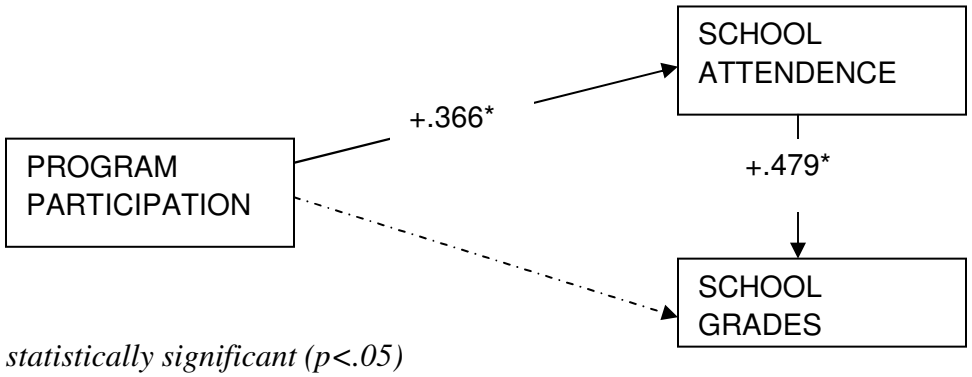
Program Participation and Grades

As with most youth programs, not all Quantum Opportunities Associates participate at the same level. In the case of Herndon, the staff was diligent in tracking hours of participation and hours of direct educational involvement. This allowed the examination of two fundamental questions:

1. Does the level of participation have a significant impact on school grades?
2. If so, does participation have a direct or indirect impact on grades?

To answer these questions, statistical path analysis was used. Grades in core subjects, program participation and school attendance for a five semester period are used.

Despite the small sample size, it was found that Quantum has a significant direct impact on school attendance, which then translates into higher grades. The direct relationship between program participation and grades was not significant. This relationship is shown in the following simple path diagram:



** statistically significant (p<.05)*

This means that Quantum is having an impact on grades, but also on the scholastic behavior of the Associates. Such behavioral changes have long-term implications for academic performance and go beyond grade improvement that comes from simple homework assistance. The change in behavior should translate into better academic performance in the future.

CHAPTER 5

PORTLAND, OR

In Portland, the target group was drawn from two racially and ethnically mixed high schools in the poorest areas of the city. All the youth selected for inclusion in the group were eligible for free/reduced lunch. As with the other cities, the youth were randomly placed in either treatment or control groups.

In Portland, 54 youth agreed and got parental permission to be part of the Quantum program. The majority (64.8% i.e., n = 35) of the students were Black, followed by 31.5% White youth (n = 17), 5.6% Immigrant, and 3.7% Latino. Of those youth, 21 were assigned to the program as Quantum Associates, 20 youth were placed in the control group, and the remaining 13 were held as alternates, in the event that students dropped out within the first 30 days. The addition of a 21st Associate was necessitated by having identical twins split between the Associate group and the alternates. The present report focuses on the 21 youth who were Quantum Associates and 16 control youth that could still be located at the end.

Program

Like Dover, Portland had a spacious and inviting facility, first in a house, then in several rooms of a newly constructed church. Like Herndon, transportation was a problem. While all the youth came from two high schools, not too distant from the site, the Associates would ultimately be located in seven schools throughout the city. More important, while the youth had tended to

reside in the general area of the schools, by the end, many had moved away. This included twin sisters who moved to Los Angeles and one Associate who moved to Seattle. All three continued to participate, with the twins ultimately returning to Portland. Despite an excellent public transportation system, the neighborhoods where the youth lived were generally poorly served. This led to major transportation problems, both getting the youth to the program and home again.

Despite the problems, Portland consistently had more than half the Associates at the site each day. Because the program was housed in a church for the final three years of programming, it was accessible until after 9:00 each night. It was also seen as a safe place to be, both by the Associates and their parents.

One factor behind the success of the program was having a director who stayed with the program for the full four years, though was absent twice on maternity leave. Another key factor behind the success of the Portland program was having a single individual assigned the task of getting the Associates to the site as regularly as possible. This was a considerable challenge, for one-third of the Associates were homeless at some point during the four years. Some were thrown out of their homes by their parents or step parents, while others found themselves on the street or sleeping on a friend's sofa because of family financial problems.

The outreach specialist worked as an advocate, reaching out to the youth, working with parents, child protective services, the church that sponsored the program and with community members to find a place for the youth to stay.

The youth of the program also drifted away to seven different high schools. The outreach coordinator worked with the various schools to which the students went to help maintain a degree of continuity for them. It was this advocacy that ultimately led the Associates, none of whom did particularly well academically, to stay in school and graduate.

Barriers to Success

In Portland, the youth were bused to the site from the original two schools, but not from the schools to which they subsequently moved. Many not only moved to new schools, but also to new neighborhoods. This made transportation a major problem, but also a surprising asset.

Facilitating Factors

The outreach coordinator was available to provide transportation. Transporting the youth was not seen as a waste of time. It was a time to mentor the youth. By changing the route, the outreach coordinator could spend additional one-on-one time with different Associates on different days. They could also discuss issues in small groups. No time was wasted. Additionally, the youth understood the special effort that was being made to get them to the site.

The support of the church congregation was also important to the success of the program. While never proselytizing the youth, the church congregation provided considerable support for the youth that found themselves without a place to live. Church members assisted the staff in developing relationships with Youth Services and the police. They also provided places for the youth to stay while a more permanent situation could be worked out.

Outcomes

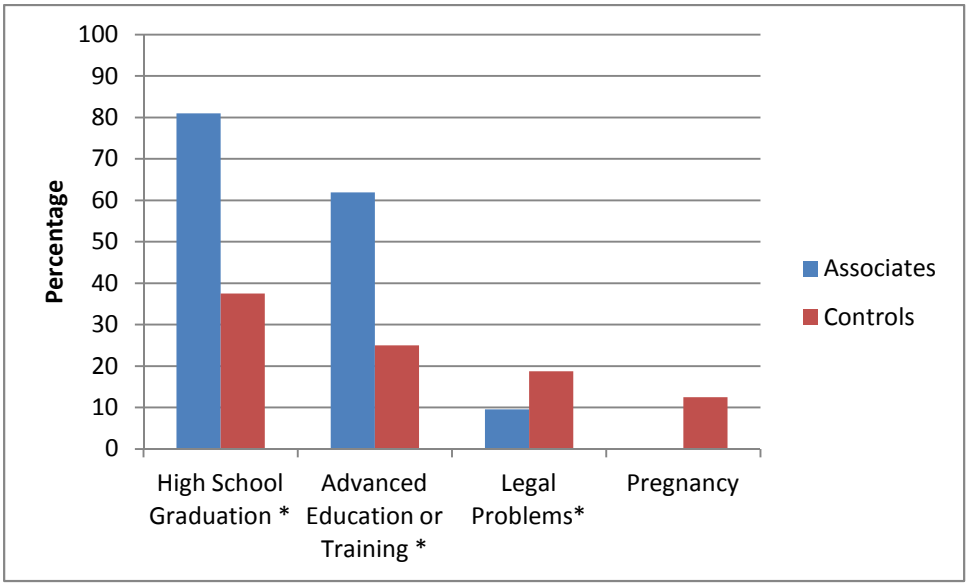
Comparison analyses between the Associate and Control groups in Portland showed (Table 6 and Figure 5) that Associates were more likely to graduate from high school (81% vs. 37.5%) and Associates were more likely (62% vs. 25%) to continue to a post-secondary education or training. At the same time, Associates were less likely to have run-ins with law (9.5% vs. 19%) and become teenage parents (0% vs. 12.5%).

Table 6. Comparison of Associates and Controls on Outcome Variables

	Associates (N=21)		Controls (N=16)	
	Number	Percent	Number	Percent
High School Graduation *	17	81.0%	6	37.5%
Advanced Education or Training *	13	61.9%	4	25.0%
Legal Problems	2	9.5%	3	18.8%
Pregnancy	0	0.0%	2	12.5%

* Statistically significant (p<.05)

Figure 5. Comparison of Outcomes for Associates and Controls



Grades in Portland were even more analytically problematic than in Dover and Herndon, because of the numerous different schools to which the Associates and controls had transferred. Once again a comparison of TABE scores would be informative, but the testing of the controls was problematic and too many tests had to be rejected to allow for a comparison. Though paid a small stipend for taking the TABE, the controls appear to have not actually have answered to the best of their ability.

CHAPTER 6

COLUMBIA, SC – WHAT HAPPENED?

The Quantum Opportunities Program in Columbia, SC, was officially opened in two locations in September 2002, with the intent of having 30 Associates at each location. However, before the doors could open a major stumbling block arose.

A solid relationship had been developed with two high schools, which were to provide the necessary 120 youth for the program and control groups. At the last minute, one school was designated an 'Academy', meaning that it was to begin attracting high performing students from across the district. The new administration did not see the value in cooperating with a program designed for the most disadvantaged students, since they would be expected to transfer to other schools by the following year.

Finally, in December, after a new partnership was developed, the combined program recruited over 120 students to be placed into the Associate and control groups. Within the first month, 10 Associates dropped out of the program, followed by an additional 15 students who

never attended the program, reducing the total count of Quantum Associates at the Columbia Quantum site to 35 from the original 60.

It was decided that despite the Quantum motto of "Once in Quantum, Always in Quantum", the loss of nearly half the Associates within the first month of operation was not acceptable. Additional students were recruited and the full complement of Associates began receiving services in February. However, the loss of participants continued through the spring semester and summer.

The main factor behind the early loss of Associates was the transfer of popular staff from positions working directly with the youth, to management positions. This downward pattern in the number of Associates attending the program continued into the fall and winter of 2003, when management at the site was realigned and the responsibility for the Columbia Quantum program was turned over to new management.

By the end of February 2004, of the 60 youth who were in Quantum at the beginning of February 2003 only 26 remained active. That is, 34 youth, or 56.7 percent, had dropped out of the program within the first 17 months. Although it is true that most Quantum sites experience a drop in students' interest in the program and in students' daily participation during the first year of the program's operation, the drop in the number of Associates being served in Columbia was

unusually high. Further, no steps were being taken to draw the missing students back into the program, despite the fact that all were still living in Columbia and attending the same schools.

At the end of April 2004, the program and evaluation staff visited the site to assess the situation. This site visit was followed by four more visits during the same year: one in mid May, two in September, and one in mid October. During these visits, the Foundation staff noticed: (1) no true structure to the program, (2) no significant program participation by youth, (3) no operational computers for Quantum Associates, (4) no necessary contact between the site and the high schools which Associates attended, (5) no understanding on the part of the staff regarding Quantum program goals, (6) irregularities in participation hours recorded, and (7) irregularities in dollar amounts paid to students based on students' participation hours. Only one of four staff was aware of the fundamental concepts of the program, and he had been reassigned to work with a different group of Associates.

While stipend payments to youth were still being made, there was *no clear evidence* that could be used to justify the payments. Hours were logged in but the multiple visits to the site did not support the statements being sent to the Foundation. For Quantum Associates who attended the program between March 2003 and Spring 2004, no measurable improvement in grades was identified.

The 'Drug Incident'

After considerable effort on the part of the Foundation program and evaluation staff, it was determined that a single incident was at the bottom of the loss of many of the Associates. A participant at the Gonzales Gardens site had been found to have marijuana. The police officer Associated with the Gonzales Gardens Youth Safe Haven had been called and had arrested the youth at the Quantum site during Quantum hours. At that point, all the Associates in attendance

left, never to return. When the word of the incident reached the Latimer Manor site, several more Associates quit.

Remediation

Based on the assessments of the situation, the Columbia Quantum program was encouraged to implement the following changes:

- Restructure the management at the Columbia Quantum site. The site was told that there must be a single individual given principal authority over the daily operation of the program. The staff was to report to this director on a regular basis, preferably daily.
- Implement a significant outreach program to lure the Associates back into active participation. The site was told that, if possible, one staff person should be dedicated to identifying the problems and barriers that were keeping the Associates away. This individual should focus on those who left because of the drug incident.
- Conduct outreach to the schools and to the larger community before the fall semester began.
- Replace some of the staff with more mature staff, or with young staff with proper training. Since staff turnover appeared to be a problem, the site was encouraged to find new staff willing to stay for the final two years of the Columbia Quantum cohort.
- The Foundation also offered on-site training, as well as a training session in Dover, where the Quantum model was being followed as precisely as reasonably possible.

Following these recommendations, the Quantum site in Columbia made some changes, but there was little progress toward the goal of getting the Associates more involved and helping them develop into mature citizens.

Outreach Failure

Perhaps the most stunning change was the individual who was hired to do outreach to the Associates who had left. The program hired a man with many years of experience doing background checks on potential federal law enforcement personnel. He had the personality and bearing of a police officer. Also, he was white, in a 100 percent African American, 'deep south', public housing community. While he worked hard to gain trust, he found that every door at which he knocked either went unopened, or was metaphorically slammed in his face, since the residents were generally too polite to actually slam their door. After three months, he had not succeeded in bringing a single Associate back to the program.

Closure

With virtually no success in remediating the problems, and with no more than three or four Associates attending on a typical day, the site, with great regret, was closed.

Barriers to Success

One Columbia site was like Dover, with the site located in the housing and the school bringing the Associates home at the end of the day. The other site, also located in housing, was served by a school that did not bus the students home at the end of the day.

Of course, transportation was a minor barrier, when compared to the management problems. Additionally, administration turnover at the schools was a problem, particularly with program staff not reaching out to the schools to gain cooperation.

Facilitating Factors

The main facilitating factor was a seven year history of cooperation between the parent organization, Koban Inc., the city, the Housing Authority and a number of other city institutions. Getting the resources for start-up was no problem. If continued management support had been forthcoming, this access would have allowed for other problems to have been overcome.

CHAPTER 7

WASHINGTON, DC

Quantum in Washington DC served the Carver Terrace apartment community in Northwest DC. Telesis Corporation was rehabilitating the apartments in an effort to bring peace to an area sometimes referred to as Little Vietnam, not because of the ethnic composition of the population, but because of the almost nightly gun fire. Early in the redevelopment process, there were four murders within one block of the site, in a single week. To benefit the community, the Eisenhower Foundation opened a Youth Safe Haven program for elementary and middle school youth and a Quantum program.

Early in the development of the program, a positive relationship had been developed with the local high school, and its new principle. It was understood by all parties that the program was too serve the high school youth of the Carver Terrace community, not the high school per se. What hadn't been anticipated was a slight idiosyncrasy in the DC Public Schools.

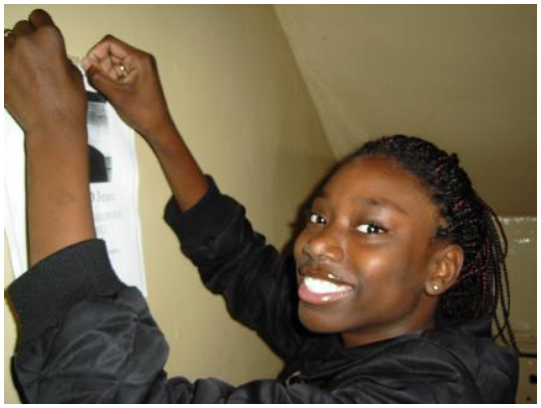
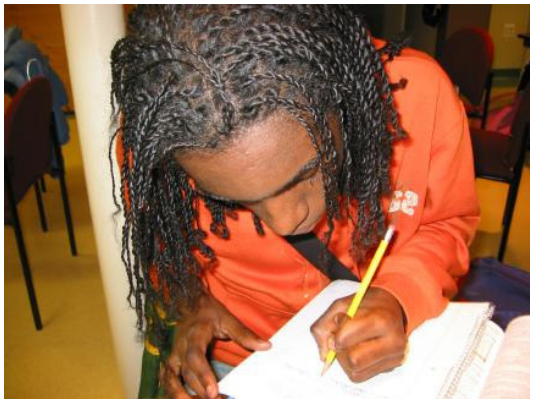
DC has both junior high schools (grades 7 thru 9) and middle schools (grades 6 thru 8). The local high school had students from both. This meant that there were some freshmen at the high school, but about one-third of the students wouldn't begin at the high school until their sophomore year. As it turned out, the target population attended a junior high school which would not cooperate with the Quantum program.

To recruit the necessary 40 students, it was necessary to go door-to-door. Ultimately only 33 students were recruited, with 17 in the Associate group and 16 in the control group, rather than the expected 20 in each. Baseline testing was done and revealed that some of the freshmen tested at barely above the fourth grade level, providing a serious challenge to the program. Further, with the nation's capitol just a ten minute drive and the free Smithsonian museums only three minutes further, none of the Associates had been to either, suggesting a lack of concern on the part of parents and community institutions.

Despite the problems, the program opened in extremely cramped quarters, but with a very talented director. As long as the youth lived in the community, attendance was good, nearing 100 percent. As apartment buildings were closed for renovation, families moved, some out of the area, or even out of DC. Finally, a core group of 13 participated on a regular basis, though none were still in the community. Emphasizing homework completion, academic remediation and an introduction to the larger world outside Carver Terrace, the Associates became devoted to Quantum, and more specifically, to the director.

Control group evaluation became difficult, for just as the Associates had moved, so had the control group youth, and without the incentives of the program, it was virtually impossible to attract them back for testing. By the beginning of the sophomore year, only half could be found, and all had disappeared by the junior year, most having dropped out.


For the first two years, the Associates received regular stipends. As the third year began, funding had been cut to a bare minimum, due to factors unrelated to the success of the site. With the elimination of stipends came no reduction in participation, suggesting that the program was the reason for attending, not the money. Also, TABE scores from the end of the second year showed that the Associates were approaching, but had not reached grade level on a nationally standardized test. Also, they now had at least a 'B' average (Mean GPA= 2.86) at the lower performing DC high school and only one Associate had their grade decline, but still remained a 'B'.

The third year was the final year of operation. Funding was not available for a final year. Despite this, the behaviors that had been established during the program served the Associates well. Of the 13 that could be contacted at the end of four years, all had graduated from high

school, none were involved with the police and none were pregnant or had a child. No control group members could be found and none were registered in the DC school system.

Quantum Associate working with Youth Safe Haven kids

Barriers to Success

There were three significant barriers: the rehabilitation process, with families moving from the area, local politics, and the DC Public Schools. Prior to the rehabilitation process, it had been estimated that most families would stay in the area and move back into the renovated housing as it was completed. This turned out not to be the case. Further, the funding source for the second and subsequent years specified that the program was for Carver Terrace residents only. Once the youth had moved from the community, they were no longer eligible for stipends. In fact, they supposedly couldn't be allowed to participate in a program housed in a Carver Terrace facility.

Grand Opening of Renovated Facility

Police Arresting Gang Members Across the Street During Ceremony

At the beginning of the process, the community's recognized leader, Miss Patsy Hartsfield, had been a driving force behind getting the facility and the program. Because of Miss Patsy's ill health and her subsequent passing, the year had progressed with considerable political infighting within the community. One aspiring politician convinced many in the community that he could bring funding for youth programs to the community, but he couldn't if there were other programs in the facility that held Quantum. Pressure was placed on the committee that managed the facility. Eventually, with both funding and community support dwindling, the program was forced to close. The promised funding from the aspiring politician was never forthcoming, and no youth program has existed in the neighborhood since the Eisenhower programs were forced out.

The program had received initial support from the local high school, but not from other schools, or the central administration. Without this support, evaluation was difficult and systematic work with school staff was difficult. It was only through extraordinary effort on the part of the program director that any teachers were willing to help.

Facilitating Factors

Initially, the community, led by Miss Patsy Hartfield, was a valuable asset. As community members moved away, and after Miss Patsy's death, there was no local community support. The community felt that the program should employ a local director and local support staff.

Throughout the ups and downs of the program, the director provided the guidance and support that was needed to get the Associates to the site on a regular basis. A less dynamic individual would have given up.

Quantum Director Reginald Grant
Recipient of the 3rd Annual Violet Collins "Caring for Children"

CHAPTER 8

LESSONS LEARNED AND EISENHOWER FOUNDATION'S NEXT COHORT

The evidence from the first cohort of Eisenhower Foundation sponsored Quantum sites is consistent with the findings from the original pilot project. The retention rates were comparable, as were the outcomes, though the Eisenhower sites performed slightly better. Each cohort had one site that failed. The problem with the evaluation of both cohorts was the sample size. The pilot (excluding Milwaukee) began with 100 in each group and concluded with 83 Associates and 76 controls. The Eisenhower cohort (excluding Columbia) began with 62 Associates and 60 controls, and conclude with 60 Associates and 53 controls. Such small sample sizes do not allow for more than a univariate analysis.

There are, however, a number of important lessons that can be learned from the work that has come before. While some are supported by moderately good evidence, some are merely anecdotal, but still useful.

Lesson 1 - Staff Dedication

First and foremost is the observation that the Brandeis report's conclusion that *"If young people are connected with caring adults for sustained periods of time, year-round, positive results do emerge,"* is absolutely correct. In the four successful sites (including DC), the staff really cared for the Associates, even though there was occasionally some staff instability. In Columbia, the original staff cared. When they were promoted to management, the new Quantum staff never showed the same level of concern. They never internalized the importance of taking the extra step for the youth. The job was just that, a job. There was no real dedication to the Associates. The program will not be successful if the key staff are not dedicated to the youth. A bond must be created and held, if the youth are to participate and have real gains from their participation.

OICA Training Story

The training of the original staff of the Eisenhower Quantums was conducted by the staff of the Opportunities Industrialization Centers of America (OICA), in Philadelphia. Following and introduction, the first day emphasized the importance of staff dedication and that Quantum was a 24/7 job. Staff needed to understand the commitment they were making when they accepted the job.

The second day there were a few presentations on testing and recordkeeping, then the rest of the day consisted of testimonials by former Associates on how important the commitment of the staff to the youth really was. It was again emphasized that it was a 24/7 job.

The final day of training was an introduction to the eXtralearning system, followed by a discussion of how important it was for the staff to be nearly totally dedicated to the Associates and how it was a 24/7 job.

By this point, the trainees were in complete agreement that the OICA had made its point, they had to be dedicated and that the job was 24/7. The whole program depends on the dedication of the staff.

During the final site visits, those staff remaining from the original training were asked about their training experience. In retrospect, the original staff, trained by OICA, all agreed that OICA didn't emphasize enough the level of dedication required.

Lesson 2 – Bonding with the Program

The importance of staff dedication leads to an equally important observation, that bonding with the program, early in the process, is critical. If the Associates are to bond with the program, they must feel that it is theirs. They need to have their own space. They need to have T-shirts that identify them as members of this special program. This, in turn, leads to yet another observation that is extremely relevant to the evaluation process. There is always a tendency for staff to want to maximize the use of available resources by replacing youth who drop out. While it is okay to include additional youth, outside of the evaluation process, as happened at all of the successful Eisenhower sites, this should be done at the beginning. Any change in the composition of the Associate group, after the bonding process is complete, may have negative

consequences. Changes during the first 30 days are not generally a problem, particularly if start-up is at the beginning of school. Once the program has developed a rhythm, a familiar schedule, a 'way of doing things', change should be minimized. Integrating new Associates into the process at the beginning of the new academic year was tried, outside of the evaluation process, but the new Associates never fit in and did not participate after a few weeks, at most. They were seen as interlopers.

The exception to this was in Dover, where a separate, smaller cohort (N=10) was added to the program at the mid-point. Because they were separate, the original cohort viewed them as one might view a younger sibling. The original group reached out to them, provided them with guidance as near-peers, but the new group maintained its own identity, though they shared the same computer lab and generally went on the same field trips.

Part of the success of this add-on group was having their own director. Though part-time, the separate director provided the necessary separation of the original program from the new smaller cohort.

Lesson 3 - Transportation

There can be little doubt that transportation was a critical problem for most sites, Dover being the exception. Consider for a moment the different transportation scenarios discussed above. In Dover, the program was located in the housing area where the youth lived. At the end of the school day they were transported home and generally got off the bus at the community center. Herndon had transportation to the site for some, but nothing for the rest. Portland had a staff person transport the Associates, using the time for one-on-one and small group mentoring. Columbia had problems that dwarfed the transportation problem. Washington DC began with the Associates in the neighborhood, but eventually all moved. With the assistance of bus passes,

excellent public transportation and youth who are familiar with using public transit, they were able to get to and from their schools, homes and the site.

Ideally the problems of transportation should be addressed in a manner appropriate for each community. However, if staff provide transportation, then the staff should learn from Portland Quantum. The time spent in the van, car or bus should be used for mentoring. By varying the route, staff can have short periods to work one-on-one with Associates. They can also work with small groups of two to five. Longer trips, or trips with larger groups can be used to discuss important topics that are ordinarily covered in a more formal setting.

Lesson 4 – Advocacy

Quantum staff must develop a solid relationship with important individuals and institutions in the lives of the Associates. Staff may feel that time spent with the youth is more important. However, Quantum is most effective when there is support from teachers, parents and others. First and foremost the staff must get to know the teachers. Once the teachers and the school know that the staff are supportive, they will in turn be supportive. Homework assignments, permission to attend parent teacher conferences and even access to IEP conferences will benefit the Associates.

Some parents may resist staff advocacy, some may have little or no concern for their child and some may value assistance. It's up to the staff to develop the relationships necessary to work with the parents, support the parents or act as the parents, when they won't act in their child's interest.

If an Associate gets into trouble, the staff may need to speak for the youth. In both Portland and DC staff intervention prevented Associates from being adjudicated. By showing the police, or the district attorney that the youth is in a supportive program that is attempting to

address problems in the youth's life, the legal system will ften give a youth the benefit of the doubt. Of course, the staff must then follow through and work with the youth to make certain that the problem doesn't recur.

Lesson 5 – Patience

Quantum requires patience. Academic gains do not generally appear until the second year of operation. Behavioral gains may take as long. However, it's in the first few weeks of the program that the foundation is set. If the Associates do not bond (see Lesson 2) with the program early, they may never feel like they belong.

Lesson 6 – Integration of Non-Quantum Activities

There are a number of activities that potentially conflict with Quantum. Sports, other extra-curricular activities, jobs, and romantic relationships are the main conflicts. However, Associates must feel that they can have a normal life, with Quantum as one component, or they will abandon Quantum. This doesn't mean that all Associates will be extremely involved with other activities, just that staff need to be prepared to work with the Associates, so that they can participate in other activities, with Quantum providing support.

If Associates are involved in sports, cheerleading, drama or other activities to which students normally go, then the program should show support by also attending. The Associates need not attend every game, match, or performance, but a visible presence helps the athlete or thespian feel they are still part of Quantum.

It's normal for Quantum to help find summer jobs for Associates during the summer between their sophomore and junior years. This is a time when resume writing, learning to fill out applications, job readiness skills and proper on-job behavior should be taught. By being supportive of jobs, the Associates are more likely to see them as part of Quantum.

Romantic relationships can place a burden on Quantum, but also provide an opportunity for lessons about relationships, proper behavior in social settings, gender empowerment and so forth. Again, by supporting the Associates activities, the bond is maintained. Also, Quantum can be a supportive environment when a relationship collapses, as they generally do at this age. While few romantic relationships have developed within the Quantum group, staff must be on guard, in the event it does and it either fails or goes too far.

Additionally, getting a driver's license can be time consuming and distracting. If possible, the program should try to develop a procedure for facilitating the acquisition of a license. Once again, it will be seen as a benefit of being in Quantum.

Lesson 7 – Drug Use, Drinking and Smoking

While preventing youth from using drugs is the ideal, the reality is that many of the Quantum Associates are already involved in drugs, usually Marijuana, before they join the program. Therefore, the goal should be to help these youth reduce their drug use, with an eye toward them eventually ceasing all together. The single event in Columbia points out the problem of a zero tolerance policy.

The same is true of alcohol use and smoking. Helping Associates understand the long-term consequences of alcohol, particularly binge drinking, and smoking, as well as the short-term consequences of driving under the influence, should be a goal from day one.

Lesson 8 – What is Success

It is easy to assume that if youth are no longer attending regularly, or at all, that the program has failed them. The reality is that over time, particularly by the senior year, some youth are doing well in school and have moved on to other activities. Just as a caring parent hopes to

raise a child to be independent, the Quantum program should help youth develop so that they no longer need the program.

One might expect this to occur upon graduation, but if it occurs earlier, the program has still succeeded. Of the four sites that succeeded, as many as half of the associates were no longer attending by the final year. Staff stayed in contact, but the Associates would seldom come to the site. However, the graduation rate for the non-participants was not significantly different from those that continued participating, and was significantly higher than the controls. When asked, those not participating at the end generally acknowledged that they were still Quantum Associates, expecting the money from their accrual account, but they had other things to do, like holding a job to make money for college. Quantum had made success possible, and they were taking the next step.

The Next Quantum Cohort

To better demonstrate the potential of the Quantum model to benefit youth, the Foundation has undertaken a new replication of the Quantum model in Boston MA, New Bedford MA, Baltimore MD, St. Petersburg FL, Toledo OH, Milwaukee WI and Albuquerque NM. With the random assignment of 30 Associates and 30 controls at each site, the potential exists for there to be more than 200 youth in each group. This will be sufficient to allow a more detailed, multivariate analysis.

A youth survey constructed with the assistance of ChildTrends and the TABE are being used, along with school records and detailed mentoring reports to measure the benefits of the program to the Associates, as compared to the controls. With continuous monitoring of site activities and by learning from the successes and problems of the past, the current cohort should

demonstrate the true potential of a broad implementation of Quantum in our nation's high schools, particularly those at risk.

As part of this implementation, enhanced mentoring, with extensive advocacy for the Associates is being explored, with the help of the site staff, who bring many years of experience to the Foundation's quest for a mentoring model that goes beyond that implemented through Big Brothers/Big Sisters and similar programs.

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