Quantum Opportunities Program 2003 Forum:

Lessons Learned

Sponsored by the

Milton S. Eisenhower Foundation

February 2005

Quantum Opportunities Program: Introduction and Context

The Quantum Opportunities Program (Quantum) is a comprehensive youth development program for disadvantaged adolescents that provides education, development activities, community service and financial incentives over a four-year period for youth in grades 9 to 12. Cohorts of youth are recruited into the program at the beginning of 9th grade and they continue in the program throughout high school.

From 1989 to 1993, the 100 teenagers from low-income families who participated in the pilot of the program at four urban sites graduated high school, went on to college, avoided childbearing, and escaped involvement with the criminal justice system at greater rates than did comparable control groups. Quantum's success offered hope that a rigorous, well-designed program could make a difference for high-risk youth.

In 1995, Brandeis University released an extremely encouraging evaluation of the pilot Quantum. The evaluation found Quantum to be one of the most successful teen youth development programs in existence. In 1998, Quantum was among only 10 programs nationally to be included in the prestigious Blueprints for Violence Prevention that highlighted the program's success.

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.

Rather than accepting less than outstanding outcomes, the Milton S. Eisenhower Foundation (MSEF) 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.

Issues

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.

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.**

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."

- **Adjust the selection criteria for Quantum to maximize success.**

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

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.

7. **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

8. 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

9. 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.