

QUANTUM OPPORTUNITIES

PROGRAM

REPLICATION MANUAL

## **Introduction**

The Quantum Opportunities Program is a proven youth development program that provides after-school, computer-based tutoring, mentoring, life skills training and community service for high school youth.

This manual contains guidelines and supportive material for the Milton S. Eisenhower Foundation-sponsored Quantum Opportunities Program.

Chapter 1 describes the Quantum Opportunities Program originally implemented by Opportunities Industrialization Centers of America, Inc. In addition to lessons, special features and evaluation results, the Extra Learning System, formerly known as the Comprehensive Competencies Program, is briefly discussed.

Chapter 2 describes the Foundation's variation on Quantum that is being replicated. The Foundation's modified Quantum program will include the core competency areas, Coordinators, Associates, stipends and bonuses and opportunity accounts, and management information data collection for mid-course corrections.

This work is new. Every effort has been made to anticipate initial questions and provide answers. However, as each Eisenhower Quantum site moves toward

implementation, questions will arise that have not been addressed in this manual. The Foundation and its consultants will work with you to answer them.

## **1. An Overview of the Original Quantum**

This section summarizes how Quantum has been implemented in the past.

### **Lessons**

The main lesson from the initial replication and evaluation was that a randomly selected 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.

The one hundred teen-agers who participated in the initial Quantum replication 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 counters pessimists who assert that no intervention may change the downward trajectory of poor youths.

The initial replication of Quantum was encouraging because the participants were not special or self-selected. The twenty-five 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.

These were rough kids from rough neighborhoods. Some were killed or landed in prison.

But those who stuck it out were required to participate year-round in academic tutoring and computer skills training, community service, life skills training, alcohol and drug abuse awareness and family planning.

Students were given a stipend of \$1.33 for each hour they participated. For every one hundred 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. The financial rewards also were 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 academics. 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, sixty-three percent of the Quantum Opportunities Program participants graduated from high school, forty-two percent were enrolled in a post-secondary program, twenty-three percent dropped out of school, twenty-four percent had children, and seven percent had arrest records. By contrast, of the control group, forty-two percent finished high school, sixteen percent went on to post-secondary schools, fifty percent dropped out, thirty-eight percent had children, and thirteen percent had arrest records.

The success of the program shows that careful investments in disadvantaged youth can work.

## **Program Features**

Beyond the preceding summary, what features of the original Quantum replication deserve to be featured?

Annually, each Quantum participant was eligible to receive:

- Up to *250 hours of education*- participation in computer assisted instruction, plus mentor and peer tutoring to enhance basic academic skills;
- Up to *250 hours of human development training*- participation in cultural enrichment and other activities to promote positive personal habits, attitudes and disciplines; education regarding health, sex, drugs and alcohol, and family planning, along with assistance in planning for college or advanced technical-vocational training, and preparation for a meaningful career;
- Up to *250 of community service*- participation in community service activities, which often contributed to the capacity building of local non-profit organizations.

## **Core Program Elements**

Quantum builds on four fundamental principles: education, development, service and support.

The learning system used in the original study was called the Comprehensive Competencies Program (CCP). Opportunities Industrialization Centers of America, Inc. currently uses the Extra Learning System (ELS). The Foundation also will use the Extra Learning System.

The Extra Learning System a computerized system; consists of over one thousand core lessons or competencies for levels kindergarten through twelfth grade. Each Associate learns at his own pace. Associates can study different subjects at different levels using books, videos, or multimedia computers. The lessons are structured in tiers from basic to advanced. Most basic lessons are structured to be completed in a single session. Lessons include multiple-choice, matching, fill-in-the-blank, writing and open-ended exercises.

Each skill unit has a mastery test on which the Associate must achieve 80% or better before moving on to the next unit. Upon completion of all units a course mastery test is given. Associate progress is tracked on a Course Progress Form.

The education component consists of a total of ninety-six courses. There are forty-eight academic courses and forty-eight functional courses.

The development component consists of sixteen skill areas.

The service component encourages volunteerism and service as a means of giving back to the community and contributing to building the capacity of the program. The

Extra Learning System includes service activities in addition to the education and development components because service activities help the Associates develop skills needed to become contributing members of society. Service activities enhance formal education and teaches skills needed in the labor market. Pages 19-26 of the blueprints for Violence Prevention – Book 4 elaborate on the content of the courses, development skills and service activities.

Support activities are the responsibility of the Coordinator who functions in many capacities while guiding the Associates to a higher level of success.

The original Quantum addressed many of the deficits common to poor and disadvantaged families, including:

- *A perceived lack of opportunity* for a successful future. Quantum strives to instill the belief in participating youth that success and upward mobility is attainable.
- A genuine lack of opportunities for *positive involvements and interactions*. Quantum provided an ongoing relationship with a caring adult and peers who sought to obtain pro-social beliefs and values. The Quantum coordinator functioned as surrogate parent, role model, advisor, and disciplinarian.
- *A paucity of social and academic skills*. Quantum enhanced the academic and social skills of participating youth.
- *A real lack of continuity and positive reinforcement* in their lives. Quantum instructors, and instructional materials, regularly reinforced

individual effort and achievement, which over time instilled in youth a sense that he or she was capable and worthy-- and a sense that they could achieve their dreams.

### **Evaluation**

For much more detail on the original Quantum and how it was replicated, see the Blueprints for Violence Prevention – Book 4. The Foundation expects staff from all new replication sites be familiar with the details of the book.

In part, the evaluation of the original Quantum replication attributed success to:

- Use of small groups of about twenty young people who bonded with each other and with responsible, caring adults.
- Deployment of a community-based case management approach which was linked closely to school and was individually tailored to youth needs and circumstances.
- Serious investments in a youth's future year-round, over a four year period.
- Provision of multiple solutions--which impacted basic social, living and coping skills, broadened horizons, and enabled a youth to give back to his or her own community.



- Priority on performance-based financial incentives that rewarded youth for effort and achievements, plus periodic bonuses and a scholarship fund.
- Insistence that Quantum staff go the extra mile by tracking the whereabouts of youth, making home visits, and motivating youth to go the extra mile, too.

## **2. The Eisenhower Foundation's Variation on Quantum**

The Foundation will replicate a variation of Quantum. The variation will start up in the summer of 2002. The program will run over the 2003 school year. Funding is from the United States Department of Justice. (Funds initially will be released up to 31 March 2003. Funds for the rest of the school year and beyond will come from next year's budget).

Funding permitted the Foundation plans to work with each youth in the program over all four years of high school.

### **Criteria for Participation**

To ensure fair access, youth will be chosen by lottery. For youth chosen, consent to participate will be secured from school authorities and parents (or guardians).

To participate in Eisenhower Quantum, a youth must be:

- Between the ages of 13-15 and entering the 9th grade.
- Currently functioning below grade level and ranked in the bottom two thirds of the class, as identified through school records.
- Chosen at random based on school records.

Once enrolled in Eisenhower Quantum, the youth will be called "Associates" -- to reinforce their sense of dignity and ownership of the program. Every effort then will be made to maintain contact with each Associate, including obtaining addresses of extended family members, so that youth always can be tracked.

The adults who run the program will be called Coordinators.

After random selection Eisenhower Quantum Associates will be assessed for risk factors that may be used to help develop individualized strategies. Coordinators will help identify outcomes to be measured.

The Foundation will gather information on each Associate on a regular basis at each site as part of an information management system that will provide feedback for mid-course corrections. Information also will be collected on control group youth (i.e. youth not in the program).

### Locations

Initially, Eisenhower Quantum will be located at:

Vecinos Unidos	Herndon, Virginia
Allen-Benedict Youth Safe Haven	Columbia, South Carolina
Latimer Manor Youth Safe Haven	Columbia, South Carolina

Dover youth Safe Haven

Dover, New Hampshire

Keene youth Safe Haven

Keene, New Hampshire

### **Examples of Initial Outcomes:**

Here are some of the possible initial outcomes that may be considered for the first school year. Compared to the control group youth, Eisenhower Quantum youth will:

- Improve in school attendance as for the first school year.
- Improve in academic performance.
- Be more connected to peers.
- Be disciplined less, and for less serious behavior.
- Experience fewer arrests and reports of involvement with the criminal justice system.
- Be better able to identify and focus on areas of interest and/or competency (i.e. athletics, computers, art/graphics, academics, business, music/dance).
- Become more computer literate.
- Be less tardy at school.

### **The Budget**

Tab 3 contains budget for the first year of implementation.

The Foundation will replicate the three core components of the original Quantum program: education, human development training, and community service. The highest priority will be education. The next priority will be human development training. As with

the original Quantum, Associates will be provided stipends, bonuses, and opportunity accounts.

### Coordinators

The Tab 3 budget shows one full-time paid coordinator for each twenty Associates. See the Blueprints for Violence Prevention – Book 4.

Coordinators will be paid a straight salary.

### Stipends to Associates

Stipends paid at the rate of \$1.00 per hour for approved activity area: education, human development training, and community service.

There is provision for bonuses to Associates during the course of the program. There is a \$100.00 bonus for completion of the first 100 hours of education. The 100 hours must be accumulated in one activity area, starting with education.

There will be absenteeism and attrition of Associates. As a result, funds will accrue. The funds can be used for incentives for those associates who may need them.

Funds for direct pay-out to Associates will be forwarded to the sites on a monthly basis in equivalent amounts of 1/7 of the total allocation for the funding period. The match-funds designated for the accrual accounts will be held in a designated Foundation account for pay-out at the end of the program.

Site coordinators will provide Eisenhower with a monthly report tallying the total stipends paid out to each of the Associates. Each associate is identified by an Eisenhower Quantum ID number and name. The columns show total number of participation hours;

additional hours or reduced hours based on performance standards set by the program; adjustments; rate of pay; the stipend total; bonuses, and the grand total. The form shows how an Associate has done in a given month.

Once an individual is selected, he/she remains a Quantum associate for the duration.

#### Funds For the Extra Learning System

Funds will be expended by the Foundation to purchase hard and software equipment-- consisting of a snap drive with Extra Learning System materials, books, activities, tests, and assessments. Eisenhower Quantum activities, manuals, Eisenhower Quantum database, and Eisenhower Quantum videos. Sites are provided computers, a high speed printer, cabling and switch boxes, phone line router, cables, installation, training, and 1.5 days for installation.

This is a one-time expenditure for the first year only.

## Field Trips

Field trips are an essential part of the program. Funds have been allocated for trips. Coordinators and site staff are encouraged to engage community support to cover expenses associated with field trips.

## Supplies

Funds have been allocated for supplies. Sites are encouraged to solicit donations of furnishings and other in-kind goods.

## **Initial Milestones**

Here are the program's milestones through September.

June 4, 2002	Program sites are identifies.
June 12, 2002	Job descriptions for Eisenhower Quantum Coordinators are developed and sent to sites.
June 24, 2002	Funds are advanced so that sites are able to start advertising for the Coordinator.
July 15,2002	The Eisenhower Foundation sends to Police Chiefs a packet that outlines Quantum and asks for support. This packet includes a sample letter that the foundation asks be sent by the Chief to school principals, requesting their support of the program and a list of eligible students.

July 19-26, 2002

Site Directors will contact school principals to set meetings that will include Foundation staff. The goal of the meetings will be to provide Quantum program overviews, introduce the Quantum Coordinators, explain eligibility criteria for youth participation, request a list of eligible students and get commitments from principals to provide school records and later.

July 25, 2002

Site Directors and other stakeholders are provided with the Eisenhower Quantum Opportunities Program manual.

July 29,2002

All Quantum Coordinators will have been selected, approved by Eisenhower staff, hired, and be ready for work.

July 22 -29, 2002

Meetings will take place among school principals, Quantum Coordinators, site Directors, and Foundation staff. The goal of the meetings will be to provide Eisenhower Quantum overviews, explain eligibility criteria for youth participation, request list of eligible students for random selection and obtain commitments from principals to provide school records later.

July- August 2002

As necessary, Coordinators will continue to secure lists of eligible students from school principals on an ongoing basis.

July 22-24, 2002	Quantum computer hardware will be ordered by the Foundation.
July 22-26, 2002	Coordinators will identify designated Quantum space, measure square footage and prepare space for computer installation. A photograph of the designated area must be sent to Eisenhower for review.
August 1, 2002	Coordinators will have secured final lists of eligible students to be used in the random selection process.
August 5-30, 2002	Coordinators will obtain parental consent and youth assent. All consent/assent letters must be obtained during this period.  A process will be developed and guidance will be provided by the Foundation to obtain parental consent and youth assent. After which random selection of Quantum Associates will take place.
August 12,13,2002	Computer hardware will be installed in Dover and Keene, New Hampshire.
August 14, 2002	New Hampshire sites will attend a full day of “Extra Learning System” training session in New Hampshire. Each site director, coordinator, and one other staff will be trained on-site to use the computer hardware and the “Extra Learning System” software.



August 17,18,2002	Computers will be installed in Columbia S.C.
August 19,2002	Columbia sites will attend a full day of the “Extra Learning System” training session in Columbia. Each site director, coordinator, and one other staff will be trained on-site to use the computer hardware and the “Extra Learning System” software.
August, 2002	A national Eisenhower Quantum training session will be held in Philadelphia. TEA.
August 29, 2002	Computers will be installed in Virginia.
August 30,2002	The Virginia site will attend a full day of the “Extra Learning System” training session in Virginia. The coordinator and two other staff/volunteers will be trained on site to use the computer hardware and the "Extra Learning System" software.
September 1, 2002	Participation in Eisenhower Quantum program begins. Bonding with Associates is vital at this point. Two tests will be administered to Eisenhower Quantum Associates and controls. The importance of these tests must be explained to Eisenhower Quantum Associates. Youth surveys will be administered to designated youth. The Test of Adult Basic Education (TABE) will be administered to designated youth.

Bonuses can be used as incentives at this point to get good attendance during the testing period.

## ***A Youth Program That Worked*** ***New York Times Editorial***

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 child-bearing 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.

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, 38 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