Quality Education for Minorities (QEM) Network
Report on the QEM Initial Years

Laying A Foundation for Tomorrow
QEM Goals

Goal One: Ensure that minority children start school prepared to learn.

Goal Two: Ensure that the academic achievement of minority youth is at a level that will enable them, upon graduation from high school, to enter the workforce or college fully prepared to be successful and not in need of remedial assistance.

Goal Three: Significantly increase the participation of minority students in higher education, with a special emphasis on the study of mathematics, science, and engineering.

Goal Four: Strengthen and increase the number of teachers of minority students.

Goal Five: Strengthen the school-to-work transition so that minority students who do not choose college leave high school prepared with the skills necessary to participate productively in the world of work and with the foundation required to upgrade their skills and advance their careers.

Goal Six: Provide quality out-of-school educational experiences and opportunities to supplement the schooling of minority youth and adults.
Laying a Foundation for Tomorrow

Report on the QEM Initial Years

July 1, 1990 - June 30, 1993
Board of Directors 
During the Initial Years 1990 - 1993

Honorable Jeff F. Bingaman  
United States Senate

Mr. Erich Bloch  
Distinguished Fellow  
Council on Competitiveness

Dr. Jewel Plummer Cobb  
Principal Investigator  
Southern California Science and Engineering Access Center and Network  
California State University, Los Angeles

Dr. Alonzo Crim  
Professor  
Department of Education  
Spelman College

Honorable Wilhelmina R. Delco  
Representative  
Texas House of Representatives

Dr. William G. Demmert  
Visiting Professor  
Department of Anthropology  
Western Washington University

Dr. Mary Hatwood Futrell  
Associate Professor  
School of Education  
George Washington University

Mr. Keith Geiger  
President  
National Education Association

Dr. Paul Gray  
Chairman of the Corporation  
Massachusetts Institute of Technology

Mr. Ernest Green  
Managing Director  
Lehman Brothers

Dr. Dorothy I. Height  
President  
National Council of Negro Women, Inc.

Ms. Antonia Hernandez  
President and General Counsel  
Mexican American Legal Defense and Educational Fund

Mr. David Hornbeck, Esquire  
Chair  
Commission on Chapter One

Dr. Franklyn Jenifer  
President  
Howard University

Honorable Edward M. Kennedy  
United States Senate

Mr. Jonathan Kozol  
Author

Mr. Ira Magaziner  
President  
SJS, Inc.

Dr. Audrey Forbes Manley  
Deputy Assistant Secretary for Health, Intergovernmental Affairs  
U.S. Department of Health & Human Services

Dr. Ray Marshall  
Professor  
LBJ School of Public Affairs  
University of Texas at Austin

Mr. José F. Mendez  
President  
Ana G. Mendez University System

Dr. Richard Nicholson  
Chief Executive Officer  
American Association for the Advancement of Science

Mr. Louis Nuñez  
President  
National Puerto Rican Coalition, Inc.

Dr. Blandina Cardenas Ramirez  
Professor  
LBJ Institute of Teaching and Learning  
Southwest Texas State University

Mr. Albert Shanker  
President  
American Federation of Teachers

Dr. Frank Talamantes  
Professor  
Department of Biology  
University of California, Santa Cruz

Mr. Frank D. Zaffino  
Vice President & General Manager  
Eastman Kodak Company  
Kodak Apparatus Division
Technical Advisors Group (TAG)
During the Initial Years 1990 - 1993

Dr. Adrienne Bailey
Deputy Superintendent
Chicago Public Schools

Ms. Lovely Billups
Director
Field Services
American Federation of Teachers

Dr. Karen C. Cohen
Principal Research Scientist
Center for Educational Computing Initiative
Massachusetts Institute of Technology

Dr. Thomas W. Cole, Jr.
President
Clark Atlanta University

Dr. Al-Tony Gilmore
Senior Program Officer
Division of Human & Civil Rights
National Education Association

Mr. Manuel N. Gómez
Associate Vice Chancellor
Academic Affairs
University of California, Irvine

Dr. Manuel Gómez-Rodríguez
Director
Resource Center for Science & Engineering
University of Puerto Rico

Dr. Vinetta C. Jones
National Director
EQUITY 2000
The College Board

Dr. Shirley M. Malcom
Head, Directorate for Education & Human Resources Programs
American Association for the Advancement of Science

Dr. Kenneth R. Manning
Professor of Rhetoric and History of Science
Massachusetts Institute of Technology

Dr. Charles W. Merideth
President
New York City Technical College, CUNY

Ms. Ruth A. Myers
Assistant Director
Center of American Indian & Minority Health
University of Minnesota at Duluth

Dr. Laura I. Rendón
Associate Professor
Department of Educational Leadership & Policy Studies
Arizona State University/College of Education

Dr. Isaura Santiago-Santiago
President
Hostos Community College, CUNY

Mr. George W. Tressel
Education Consultant
# Table of Contents

**Message on behalf of the Board**  
1

**Message from the President**  
2

**Community Outreach and Leadership Development**  
The Education of Children and Youth in Low-income  
Public Housing and Other Low-income Residential Communities  
Opening Unlocked Doors  
Community Service Centers  
Community Resource Centers  
Youth Leadership Corps  
Parent/Family Leadership Corps  
Teacher Leadership Corps  
The QEM Internship Program  
5-15

**Public Policy and Legislation**  
Public Policy Initiatives  
Brownbag Discussion Series  
Acting for Tomorrow-Now Summit  
17-21

**Mathematics, Science, and Engineering**  
QEM/MSE Network  
Detroit Mathematics and Science Coalition  
Technical Assistance Project  
NASA SHARP PLUS Apprenticeships  
23-29

**Financial Review**  
Public and Private Sector Funding of QEM, Fiscal Years 1991-93  
Auditors Report  
Balance Sheets  
Statements of Support, Revenue, Expenses and Changes in Fund Balance  
Statements of Cash Flows  
Notes to Financial Statements  
31-37

**QEM Leadership and Membership**  
Board of Directors  
Technical Advisors Group  
January 15th Group  
Teacher Leadership Corps  
NASA SHARP PLUS Apprentices  
MSE Network Membership  
QEM Interns (1989 - 1993)  
39-52

**Appendix**  
QEM Network Brownbag Discussion Series  
54

**QEM Staff**  
(Inside Back Cover)
The United States is in an epoch characterized by deep economic, demographic, and technological changes that will affect the quality of life of most Americans for years to come. Without a radical restructuring of our education, the nation will find its world class status only a remnant of a distant past. The time to address this eventuality is now.

The signs of these changes can be found across the country, from the overwhelmed school districts in our major urban areas to the rising layoffs and rapid decline of certain of our industries. Solutions must be rooted in education. It is this unflattering belief that has spurred the efforts of the Quality Education for Minorities (QEM) Network. Our network seeks primarily to strengthen those concerned with quality education for minorities in order to elevate this issue on the nation’s policy agendas.

Over the past three years, QEM has worked to build coalitions that can make quality education for minorities a reality. QEM has taken a leadership role in forging partnerships that reach beyond special interests or socioeconomic boundaries. It has reached out to government, foundation, and business leaders; administrators, teachers, parents and students; schools, colleges, and universities; and national and community-based organizations. In turn, it has been met with great enthusiasm and commitment.

We must now strengthen and expand these coalitions, and reach out to form new ones, as we seek to build consensus on how best to ensure environments for success for all children and youth in order to provide the kind of education they will need to succeed in technologically based work places. From that consensus, we must build a base of political strength and strategy to meet our common goals.

Let us continue to build on the foundation QEM has laid so that our schools and communities can be responsive to the educational needs of all children and youth.

Ray Marshall
Message from the President

The one force that has sustained and empowered all of our people has been the power of education. It has been our schools that have equipped individuals to transform visions into realities, and to translate lofty goals into tasks that can be grasped and achieved. Minority children by right, and by virtue of their unlimited potential, deserve their own role as visionaries, as builders, and as future leaders. It is in our public schools, which serve a population that is increasingly minority, that the economic future of our nation will be determined. We must look to our schools to provide the skilled workforce America needs to sustain itself.

(From Education That Works: An Action Plan for the Education of Minorities, QEM Project, MIT, January 1990.)

The Quality Education for Minorities (QEM) Network is the successor to the Quality Education for Minorities Project, a project funded by the Carnegie Corporation of New York and based at the Massachusetts Institute of Technology (MIT) during the period July 1, 1987-June 30, 1990. It opened its offices in Washington D.C. on July 1, 1990 with the mission of improving education for minorities throughout the nation. The Network is a focal point for the implementation of strategies to help realize the vision and goals set forth in the QEM Project's report Education That Works: An Action Plan for the Education of Minorities. It seeks to help unite and strengthen educational restructuring efforts to the benefit of minority children, youth, and adults, while advancing minority participation and leadership in the national debate on how best to ensure access to a quality education for all citizens.

QEM believes that any strategy aimed at improving the education of those who are poorly served by our educational system must first rid our schools of out-moded curricula and class structures that assume only a privileged elite need have substantial academic success. Instead, we must create an environment that holds high expectations for all students; respects and values the cultures of all children; and promotes, rather than discourages, quality education for all students.

With support from the Carnegie Corporation of New York, the MIT-based Quality Education for Minorities Project issued Education That Works following more than two years of input from major discussions around the country, commissioned papers, and a number of focus groups. During that period, we talked with hundreds of people about the critical educational issues facing African Americans, Alaska Natives, American Indians, Mexican Americans, and Puerto Ricans. We also learned first hand of numerous effective projects and strategies, found mostly outside of schools, for improving the education of minority children, youth, and adults.

Education That Works highlights a number of successful intervention strategies and programs that are in place. It sets out six goals, and fifty eight recommendations for achieving them, to improve education for minority students from pre-school to the post-graduate level.
Over these past three years, QEM has been forming partnerships, implementing programs, convening meetings, issuing reports, and generally laying the foundation necessary to achieve our mission. We have established relationships with hundreds of individuals around the country. With major support from foundations and agencies such as the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), the Environmental Protection Agency, the Smithsonian Institution, the General Mills Foundation, and the Annenberg/CPB Math and Science Project, and in partnerships with geographically dispersed schools, colleges, and universities, we have developed (1) research apprenticeships for high school students; (2) internships with policy makers as mentors for undergraduate and graduate students; and (3) a cadre of teachers who represent the nation's first corps of minority mathematics and science teachers specifically prepared as spokespersons on behalf of educational reform for minority students.

With support from the U.S. Department of Health and Human Services, the U.S. Department of Energy, NSF, NASA, and the AT&T Foundation, we have also released two additional major reports that lay out visions and plans for respectively addressing two major problems: the underrepresentation of minorities in mathematics, science, and engineering (MSE) fields; and the lack of access to a quality education by children and youth residing in low-income public housing and other low-income residential communities.

In April 1992, QEM issued the report: Together We Can Make It Work: A National Agenda to Provide Quality Education for Minorities in Mathematics, Science, and Engineering which lays out a plan to achieve the numerical MSE goals contained in QEM's 1990 report, Education That Works. Through the MSE Network, a formal dues-paying organization of colleges and universities, school districts, and educational associations; an annual conference where successful MSE strategies are featured and a major technical assistance grant from the National Science Foundation, we are working to achieve the goals of Together We Can Make It Work. These strategies are designed to improve communications across institutions as well as to strengthen institutional proposal development, evaluation, and dissemination capabilities.

In May 1993, we released the report: Opening Unlocked Doors: A National Agenda for Ensuring Quality Education for Children and Youth in Low-income Public Housing and Other Low-income Residential Communities which details a comprehensive integrated service delivery model for meeting the educational, health, and social service needs of children and youth from low-income communities, particularly low-income public housing. With a grant
Report on the QEM Initial Years

from the Annie E. Casey Foundation, and in partnership with seven colleges and universities, we have begun the planning for campus-based community service centers, one of the major components of the comprehensive strategy in Opening Unlocked Doors.

With support from the Aetna Foundation, Inc., QEM has been keeping abreast of, and trying to help shape, the outcome of major national educational policies through the preparation of a series of action papers and biweekly "Brownbag" discussions on major education issues. The discussions bring together expert speakers and members of QEM's January 15th Group (a group of more than 200 Washington, DC-based organizations), to exchange ideas on specific topics and to discuss ways to strengthen proposed education reform policies and legislation.

To further develop strategies for influencing and formulating policy, and for creating a unified voice for change, QEM convened a major conference in June 1993 entitled Acting for Tomorrow - Now: A Summit on Quality Education for Minorities. The Summit, supported by Carnegie, McDonnell Douglas, and Aetna, focused on critical educational issues facing seven minority groups and the development of strategies for moving forward together in the quest for quality education for all.

We are pleased with the breadth and strength of our early efforts. We are very grateful for the strong and sustained support we have received from the Carnegie Corporation of New York and other foundations, federal agencies, and the hundreds of individuals across the United States who have given so generously of their time and ideas to help shape, and to help make, the visions and plans we have developed together a reality. On behalf of all children and youth, thank you for your generosity.

Shirley McBay

Shirley McBay
Empowering parents, teachers, and youth is a critical step in making the dream of a quality education for all a reality. Parents, teachers, and students must determine their own needs, establish their own priorities, and play a major role in planning, developing, and implementing programs to address these needs. No strategy to ensure quality education for minorities can succeed without the empowerment of these groups.

Through projects such as the QEM Internship Program which pairs college interns with policy makers from a variety of federal agencies; the Teacher Leadership Corps which prepares a cadre of K-12 minority mathematics and science teachers as spokespersons on education reform; a proposed Parent/ Family Leadership Corps and a proposed Youth Leadership Corps; and local alliances with community-based organizations, schools, colleges, and universities; QEM is helping to provide parents, teachers, and students with the necessary tools for sustained leadership for quality education.
In August 1992, with support from the AT&T Foundation, the Department of Health and Human Services, and the National Science Foundation, QEM sponsored a National Working Conference, “Ensuring Quality Education for Children and Youth in Public Housing Developments and Low-income Residential Communities.” The Working Conference was attended by over 85 invited representatives of predominantly minority colleges and universities located near public housing, local housing authorities, residents’ organizations, school systems, national organizations with local affiliates, and teachers’ organizations.

Based on the Working Conference, the QEM Network developed a strategy for ensuring a quality education for children and youth residing in low-income public housing and other low-income communities. The proposed approach brings together predominantly minority colleges and universities that are located near these communities with tenants’ organizations, schools and school districts, community-based organizations, churches, human services agencies, and others to concentrate their efforts and resources on specific low-income public housing developments and other low-income residential communities. Together, these groups would seek to provide a range of quality educational programs and enrichment activities, as well as the social services needed to ensure that children from these communities are successful in school.

A detailed model for the strategy developed at the Working Conference was articulated in the May 1993 QEM report, Opening Unlocked Doors: A National Agenda for Ensuring Quality Education for Children and Youth in Low-income Public Housing and Other Low-income Residential Communities (See description on following page). In addition to releasing this report, QEM, with support from the Annie E. Casey Foundation, has established seven pilot sites for campus-based Community Service Centers. These sites represent the initial step in implementing a comprehensive strategy to facilitate partnerships involving residents of low-income public housing and faculty, staff, and students of neighboring higher education institutions (See page 8).
Opening Unlocked Doors details a national strategy for providing equity in education for children who live in low-income public housing and other low-income residential communities.

The objectives proposed in this national agenda are to significantly increase: 1) the number of pre-school children from housing developments and low-income residential areas who enter school healthy and ready to learn; 2) the capabilities of parents and families as first teachers of their children; 3) the capabilities of schools, and of teachers, especially mathematics and science teachers, to provide a rigorous academic curriculum and enrichment experiences in and out of school that meet the needs of these students; and 4) the number of students from housing developments who remain in school, complete a high school degree, and have the knowledge, skills, and motivation to enter and succeed in college or the workplace.

Opening Unlocked Doors also addresses the cross-cutting issues of: 1) the empowerment of parents, teachers, and youth; 2) increased services to residents; 3) the image of public housing; and 4) the need to establish linkages to the broader community. It includes a detailed description of the issues, needs, priorities, goals, and strategies proposed in five areas: Quality Education for Children and Youth in Housing Developments, their Parents, Teachers, and School Administrators; Mathematics and Science Teachers of Students from Housing Developments and other Low-income Communities; Leadership Development of Students, Parents, and Teachers; Health, Social Services, and Employment Training; and Public Policy and Legislation.

Opening Unlocked Doors is an initiative whose prime purpose is to ensure that quality education is provided for children and youth in low-income public housing and other low-income residential areas. This requires tackling some of the nation's most challenging issues. Opening Unlocked Doors implores us to make clear through our actions and deeds that, though closed, many doors leading to a quality life are no longer locked for minorities.
The Community Service Centers (CSC) Project, funded by the Annie E. Casey Foundation, is currently a pilot effort for establishing community service centers on the campuses of predominantly minority colleges and universities that are located near low-income public housing or other low-income communities. The primary goal of the CSC Project is to link campus resources to the educational and training needs of residents of neighboring low-income communities. By developing the CSC model, universities and QEM are working to ensure that children and youth who reside in these communities receive a quality education. CSCs are a key component of the comprehensive strategy described in *Opening Unlocked Doors*.

"Morgan State University’s commitment is to design and implement strong programs based on residents’ needs and Morgan State’s ability to deliver quality education and appropriate support services in full partnership with the residents of the Lexington Terrace Public Housing Project."

Dr. Jay Carrington Chunn
Associate Vice President
Academic Affairs and CSC Center Coordinator
Morgan State University

Each CSC will play a major role in linking the college or university to the neighboring communities, while it promotes community service among students, faculty, and staff. Students and others at the university will provide technical assistance using their knowledge and skills in areas such as business, education, health, social work, and urban planning. Academic-year tutoring and special summer enrichment initiatives will be available to children residing in participating low-income public housing and other low-income residential communities.

With an initial $185,000 planning grant from the Annie E. Casey Foundation, QEM has established seven pilot sites for the CSCs. The seven participating sites and their Center Coordinators are:

- **Chicago State University**: Chicago, IL; Dr. Joan Hill
- **Clark Atlanta University**: Atlanta, GA; Dr. Zakiyyah Raheem
- **Florida A&M University**: Tallahassee, FL; Dr. Virden Evans
- **Morgan State University**: Baltimore, MD; Dr. Jay Chunn
- **New York City Technical College**: Brooklyn, NY; Dr. Cheryl Smith
- **Norfolk State University**: Norfolk, VA; Dr. Elaine Witty
- **York College**: Jamaica, NY; Dr. Mary Barnwell

The participating institutions were selected on the basis of criteria ranging from the personal commitment of their Presidents, to the existence of campus-community ties, to the institutions’ willingness to assume financial responsibility for the Community Service Centers after the initial phases of development. These sites will serve as models for an expanded network of at least 25 campus-based CSCs, similarly linked to adjacent low-income public housing or other low-income residential communities.
The leadership role of minority colleges and universities is a key tenet of QEM's comprehensive approach to ensuring quality education for minority children and youth. Students, faculty, and staff working with residents; health, education, and social service providers; and other community representatives will decide how best to coordinate formerly dispersed community resources, with the technical assistance of QEM. Local public officials, law enforcement agencies, and community organizations will be involved in the creation of focused service networks committed to enhancing the overall quality of life for residents while delivering quality education for minorities. A strong secondary goal of the CSC model is that of leadership development among two groups of students: those residing in low-income public housing and those enrolled in the participating colleges and universities.

**Community Resource Centers**

Community Resource Centers (CRCs), located within low-income public housing, are natural companions to the campus-based Community Service Centers. A key component of the proposed approach detailed in *Opening Unlocked Doors*, CRCs are to be centrally located in low-income public housing and will provide a variety of services including tutoring, mentoring, and hands-on educational enrichment activities for students as well as literacy and employment training, health education, and other intervention programs for adult residents. CRCs are designed to specifically address the pervasive problems of lack of information, lack of coordination across services, and widely dispersed service locations. QEM staff have begun discussions with staff in the Division of Special Populations in the Department of Health and Human Services, the Department of Housing and Urban Development, the Department of Education, the Department of Labor, the Points of Light Foundation, and Opportunity Industrialization Centers (OIC) of America about ways to develop this aspect of the model.
A major aspect of the comprehensive strategy in *Opening Unlocked Doors* is that of leadership development. QEM is seeking support to formally expand its leadership development efforts to two critically important groups: youth and parents. A proposed Youth Leadership Corps (YLC) would focus on minority students, grades four through twelve, who reside in low-income public housing or other low-income residential communities; however, minority and non-minority students from other communities would also be included. The YLC would offer year-long leadership training, cross-cultural enrichment activities, academic programs, and community service experiences for its members.

The intent of the YLC is to promote family and community responsibility and service among youth by: providing opportunities for them to engage in community service; broadening their cultural understanding, including an understanding of environments outside of low-income public housing; teaching youth leaders how to work effectively in groups; helping students think through problems and explore alternative solutions; and developing youth leaders as positive role models for their peers.

**Key YLC Ingredients**

- Leadership Skills Development
- Team Work
- Advocacy
- Academic Achievement
- Career Awareness

Other objectives of the YLC are to:

- Prepare students residing in low-income public housing for advocacy roles in educational reform and community empowerment
- Improve academic achievement and leadership skills, thereby increasing postsecondary and workforce preparedness
- Improve communication, mediation, computer, time management, and decision making skills
- Help students formulate long-term goals
- Expand students’ knowledge of health education issues
- Expand students’ awareness of college and career opportunities
The proposed Parent/Family Leadership Corps (PLC) is a means of addressing the need for an increasing number of vocal and effective minority parent and family spokespersons from low-income communities advocating quality education for their children.

Three objectives stand out:

- To provide parents and families with broad-based education, leadership skills, and media training to serve as effective advocates for their children, their communities, and themselves;

- To provide forums to enable parents to speak out effectively on education reform issues at the local level and address the implications of reform proposals for the quality of education received by minority youth in low-income public housing and other low-income residential communities; and

- To provide ongoing training to enable PLC participants to be supporters and trainers of other parents and families, with special emphasis on the connections between health, nutrition, and children’s readiness to learn.

The PLC would also focus on promoting and enhancing the leadership roles of community-based organizations in education reform in schools serving children and youth from low-income public housing and other low-income residential communities. National educational issues to be addressed by the PLC include: the national education goals; school choice; national standards for mathematics, science, and other disciplines; multicultural education; changes in national and local demographics; and labor force requirements. Local and state educational issues would also be discussed, including: opportunities for parents to become more involved in schools; the use of technology in the classroom; and local and state funding for education.

Participating parents and family members would receive training that would enable them to be effective spokespersons on education reform as well as to support and train other parents and families in their communities. Potential roles include leading community forums and town meetings and participating in meetings of the local school board or council. The PLC would also enhance the leadership roles that community-based organizations play in education reform through such activities as fostering parent and family networks, producing education-focused newsletters, developing community resource centers, and conceptualizing and implementing other community outreach projects.
The Annenberg Minority Mathematics and Science Teacher Leadership Corps (TLC) is part of QEM’s ongoing commitment to education reform that benefits minority groups historically underserved by our educational system. The TLC was created through a three-year grant awarded to QEM by the Annenberg/CPB Math and Science Project in August 1992. Its goal is to create a corps of minority mathematics and science teachers who will be well-versed in major education reform issues, particularly in mathematics and science education.

The TLC is emerging as America’s first cadre of K-12 minority mathematics and science teacher spokespersons on education reform issues and their implications for low-income and minority children and youth. The Corps is composed of 100 mathematics and science teachers, working closely with faculty at six participating universities in five states. The universities joining with QEM in the consortium are: Northern Arizona University (AZ); Morgan State University (MD); New Mexico Highlands University (NM); Fayetteville State University (NC); and Hampton University and Norfolk State University (VA).

Within each university setting, participating teachers will learn how best to promote, expand, and integrate reforms in mathematics, science, and technology into their respective schools. They will also learn how to carry their messages beyond their communities into state and national arenas.

The Teacher Leadership Corps consists of twenty teachers from each of the five states. Each participating institution/site has formed an alliance with ten schools in its local community: three elementary, three middle, and four high schools. From each school, one mathematics teacher and one science teacher are selected for the Corps.

Unique challenges and opportunities confront the Teacher Leadership Corps and its university partners. Within each university setting, participating teachers are learning how best to promote, expand, and integrate reforms in mathematics, science, and technology into their respective schools. They are also learning how to carry their messages beyond their communities into state and national arenas. QEM’s aim is to create and sustain an expanding network of committed teacher spokespersons, whose advocacy will energize each state’s entire educational system.
During the Project's initial year, participants' leadership skills and knowledge of national education reform issues were developed through seminars, media workshops, in-service training, and involvement in education reform in the teachers' respective school districts. Also, the teachers have been provided computers to enable them to strengthen their computer skills and to facilitate the use of technology in their classrooms. Computer networking within and across sites will further heighten communication and link the multi-state Corps into a coherent whole.

"The TLC has allowed me to feel more empowered as a teacher. I now know how to make myself heard as a spokesperson for our schools."

During Year Two, the Teacher Leaders, in conjunction with faculty at the host university sites, are offering mini-conferences and using other strategies to recruit, inspire, and guide a new "generation" of teacher leaders. Year Three will include a second series of mini-conferences led by the Teacher Leaders for other teachers in the regions served by the participating universities. This series will focus on state and local education reform issues.

QEM's long-term goal is to reach teachers in the 19 states in which minority students, by 1995, will represent at least 25% of each state's high school graduates; seven urban areas outside those states with school districts that are predominantly minority and are among the 25 largest school districts in the country; the District of Columbia; and Puerto Rico.

Alabama  Georgia  New Mexico  Boston
Alaska    Hawaii    New York    Cleveland
Arizona   Illinois   North Carolina    Denver
California Louisiana Puerto Rico    Detroit
Delaware  Maryland   South Carolina    Memphis
District of Columbia Mississippi Texas    Milwaukee
Florida  New Jersey     Virginia    Philadelphia
Annenberg Teacher Leadership Corps Advisory Committee

Dr. Bill Aldridge
Dr. Adrienne Bailey
Ms. DeAnna Beane
Dr. James Bruce
Mrs. Evelyn Davis
Dr. Lynn Dierking
Dr. Mary Dilworth (Chair)
Dr. Antoine Garibaldi
Dr. Manuel Gomez-Rodriguez
Dr. Richard Griego
Dr. Helène Hodges
Dr. Vinetta Jones
Dr. Mabel Phifer
Dr. Judah Schwartz
Dr. Warren Simmons
Mr. Peter Smith
Ms. Thursa Thomas
Dr. Nellouise Watkins
Mr. Keith Yocam

National Science Teachers Association
Chicago Public Schools
Association of Science and Technology Centers
Massachusetts Institute of Technology
Children's Television Workshop
Smithsonian Institution
American Association of Colleges for Teacher Education
Xavier University
University of Puerto Rico
Northern Arizona University
Association for Supervision and Curriculum Development
The College Board
Black College Satellite Network
Massachusetts Institute of Technology
Annie E. Casey Foundation
George Washington University
Office of the Mayor, District of Columbia
Bennett College
Apple Classrooms of Tomorrow

Dr. Barbara Holmes, Senior Consultant

Site Coordinators by State

Arizona
Dr. Jay Tashiro, Northern Arizona University
Maryland
Dr. Patricia Morris, Morgan State University
New Mexico
Dr. Tomás Salazar, New Mexico Highlands University
North Carolina
Dr. Leo Edwards, Fayetteville State University
Virginia
Dr. Arthur Bowman, Hampton University
Dr. Elaine Witty, Norfolk State University
Dr. Tina Marshall-Bradley, Norfolk State University
The QEM Internship Program

The QEM Internship Program is QEM's oldest leadership development activity, having been initiated in the summer of 1989 by the MIT-based QEM Project. The program is designed to: enhance the participating students' ability to apply their knowledge to the internship assignments; increase their understanding of the educational needs of minorities; and instill a sense of responsibility for helping minority students from low-income families through community service projects at their home institutions during the academic year. Through participation in the Internship Program or its science-based counterpart, the Summer Science Internship Program (SSIP), students have an opportunity to interact with individuals involved in policy-making positions at QEM and in various organizations. This increases the interns' awareness and knowledge of the issues and problems that prevent minorities from receiving a quality education; it familiarizes them with programs and strategies being implemented to address these issues; and it exposes them to policies and legislation that have an impact on the education of minorities.

SSIP provides undergraduate and graduate science and engineering students the opportunity to work with agencies and organizations involved in making science policy and to expose them to science education issues and programs related to the education of minorities. QEM's SSIP interns have been placed with mentors at the National Science Foundation, the National Aeronautics and Space Administration, the Smithsonian Institution, the Environmental Protection Agency, and QEM's Mathematics, Science, and Engineering Component.

Graduate and undergraduate students majoring in non-science fields are also eligible for QEM internships. Work assignments may fall into areas such as: community outreach; program planning and evaluation; education policy and legislation analysis; data collection and analysis; network communications; and the preparation of background papers on major education issues and their implications for the education of minorities. These internships further develop the potential of minority and non-minority student interns to become leaders and advocates for quality education for minorities. Students in this program have been placed with the U.S. Senate and the QEM Network.

The ten-week internship includes a pre-internship orientation session, a nine-week site assignment with a mentor, a post-internship reflection workshop, and an academic-year project planning period.
Program Sponsors

Each of the QEM internship sites sponsors its own student interns, with the exception of the 1993 Senate interns who were partially funded through a grant from the General Mills Foundation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National Science</td>
<td>NA</td>
<td>NA</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Foundation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Aeronautics</td>
<td>NA</td>
<td>NA</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>and Space</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smithsonian</td>
<td>NA</td>
<td>NA</td>
<td>5</td>
<td>3</td>
<td>X</td>
<td>8</td>
</tr>
<tr>
<td>Institution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Protection Agency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>5''</td>
<td>5</td>
</tr>
<tr>
<td>Senate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QEM</td>
<td>15''</td>
<td>6</td>
<td>7</td>
<td>5</td>
<td>2''</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>6</td>
<td>22</td>
<td>23</td>
<td>17</td>
<td>83</td>
</tr>
</tbody>
</table>

* Three interns divided their time between Congress and the QEM Network. They are included in the Senate count.

** MIT Undergraduates

NA - Not applicable, QEM did not seek external support of internships before 1991.

X - Did not participate, citing financial constraints
As an organization committed to working with other organizations and individuals for change, QEM seeks to influence public policy at the national, state, and local levels using a wide range of communications strategies. Through an Aetna-funded Brownbag Discussion Series, QEM and members of its "January 15th" Group engage in a lively dialogue about current educational issues with policy makers, practitioners, and researchers. QEM prepares "Background, Issues and Action" papers and sponsors conferences, such as the June 1993 Summit "Acting for Tomorrow - Now," that featured over 90 presentations by major education leaders. Since public policy is articulated in part by legislation, QEM monitors pending education-related legislation on Capitol Hill to ensure that the implications for minority children and youth are considered and addressed.
QEM recognizes the enormous potential of public policy to achieve quality education for children and youth who have been historically underserved by the educational system. In our initial years, we have employed the following strategies to help influence public policy on the issues affecting those most underserved:

- Position QEM as a resource on the issues
- Educate policy makers and influencers on the issues
- Keep a constant focus on the most critical issues through reports, issue papers, and forums
- Participate at the table where policy decisions are made
- Advocate for the inclusion of minorities in the dialogue on educational issues

The debate on education reform is filled with information, misinformation, recommended solutions, and sometimes mixed and conflicting agendas on providing quality education for all students. QEM seeks to bring clarity and focus to the issues as they affect those most underserved by serving as a credible resource for background information and current thinking on educational issues, and their implications for minorities, as well as by highlighting exemplary models that demonstrate quality education at work.

- **Biweekly Brownbag Discussions** examine the implications for minorities on proposed education reform, current and pending relevant legislation, and promising educational strategies and research findings.

- **News Brief Summaries** of the Brownbag Discussions capture the highlights of the discussions and are distributed to QEM's key targeted audiences.

- **QEM Action Papers** detail critical issues and offer background, recommendations for action, and resources for more information on the subject.

- **Press Conferences** and news releases focus media and national attention on urgent issues such as the education of children and youth living in low-income public housing and other low-income residential communities.

- **Major Reports** focus on critical needs and offer comprehensive strategies for change. QEM's three major reports to date are: (1) *Education that Works: An Action Plan for the Education of Minorities*; (2) *Together We Can Make It Work: A National Agenda to Provide Quality Education for Minorities in Mathematics, Science, and Engineering*; and (3) *Opening Unlocked Doors: A National Agenda for Ensuring Quality Education for Children and Youth in Low-income Public Housing and Other Low-income Residential Communities*. 
• **Working Conferences** bring together experts and practitioners to formulate strategies and propose solutions to significant problems.

• **Major Conferences** such as the Annual MSE Conference and the 1993 June Summit bring together leaders from throughout the country and focus on strategies and exemplary models that work in providing quality education for minorities.

• **Programs and Projects** advance QEM's agenda in its three strategic areas: leadership development; public policy and legislation; and mathematics, science, and engineering.

QEM seeks to build on the momentum of its early years by more effectively delivering our messages to policy makers, practitioners, and parents. Our aim is to create more effective policy as well as a vehicle for action that leads to quality education for minorities.
At a time when there is a heavy emphasis on education reform with major implications for all children and youth, but particularly for low-income minority children and youth, there is a clear need for communication between and among members of the education community, the public, and the government.

QEM’s Brownbag Discussion Series is a two-way communications forum designed to give members of QEM’s “January 15th” Group, QEM staff, and other interested persons an opportunity to stay informed on relevant educational issues with the assistance of knowledgeable individuals. The “January 15th” Group, so named because the first meeting of this group took place on January 15, 1988, consists of representatives of organizations and individuals involved in education and primarily based in Washington, D.C. The Brownbag discussions also provide guest presenters an opportunity to gain valuable feedback from a diverse and informed audience of community and educational leaders. Twice a month, “January 15th” Group members meet over box lunches for one and a half hours to hear invited experts discuss current educational or related issues and their impact on the availability of quality education for minorities.

Major objectives of the Brownbag Discussion Series are as follows:

1) Raising participant awareness of current and continuing education issues and decisions that have implications for quality education for minorities.

2) Ensuring that the QEM Network is sufficiently informed so that it can be a credible source of information and opinion for Network affiliates and others seeking information from the Network on these issues.

3) Informing the participants, and eventually Network affiliates, of actions and positions taken by others with respect to these issues.

4) Providing a minority voice and perspective by making the implications of certain issues in education for minorities known to the general public.

5) Developing and disseminating background papers on the issues as appropriate, and discussing them in various public forums.

The Reginald F. Lewis Foundation, Merrill-Lynch Foundation, and Delta Sigma Theta Sorority made financial contributions to help support the series during its first two years. Grants from the Aetna Foundation, Inc. in 1992 and 1993 have made possible the expansion of the series as well as the preparation and distribution of background papers, videotapes of the series, and newsbriefs. Examples of issues discussed include: school choice, national testing, educational tracking, expectations, racial climate on campus, violence in schools, community service, and the role of business in shaping American education. A detailed list of the Brownbag Discussion Series can be found on page 54.
In June 1993, QEM sponsored an action forum, *Acting for Tomorrow—Now: A Summit on Quality Education for Minorities*, in a climate of heightened expectations brought about by the new administration's clearly articulated intent to address head-on America's most pressing educational needs. QEM Board Member and former Secretary of Labor Ray Marshall chaired the Summit which brought together over 200 participants—teachers, students, parents, foundation officers, government officials, and representatives of business, community groups, and educational associations in an interactive forum to work for change.

The Summit participants examined in-depth the critical issues raised by education reform efforts and the implications of such efforts for minorities. Their challenge was to articulate the issues, share the strategies, help shape the solutions, forge new partnerships, and create a unified voice for significant change to ensure that minorities, especially those from low-income families, receive the education and opportunities they need in order to join others in leading America.

Among the many barriers standing in the way of quality education for minorities in America is the assumption that national education reforms will automatically benefit minorities. Nothing could be further from the truth. The educational needs of various minority groups must be understood and built into national reform efforts at the outset.

- 1993 Summit Flyer

Participants focused on the educational status of seven minority groups (African Americans, Alaska Natives, American Indians, Asian Americans, Central Americans, Mexican Americans, and Puerto Ricans). The discussions revealed that the diverse groups had many of the same concerns and called for increased efforts to move forward together.

The Summit also revisited the 1990 QEM Report, *Education That Works: An Action Plan for the Education of Minorities* to assess where we are with respect to the goals and recommendations, to examine exemplary programs that should be replicated, and to identify next steps.
With many distinguished presenters including the Honorable Richard Riley, U.S. Secretary of Education; Dr. David A. Hamburg, President, Carnegie Corporation of New York; the Honorable Jeff Bingaman, Member, United States Senate; the Honorable William F. Goodling, United States House of Representatives; Dr. Dorothy Height, President, National Council of Negro Women, Inc.; Former Secretary of Labor Ray Marshall; and the Honorable Wilhelmina Delco, Member, Texas State Legislature, the Summit participants were able to voice their concerns to policy makers who are directly involved in education reform.

Participants called for an equity analysis of the national education goals, an end to the practice of tracking, increased sensitivity to bilingual needs, meaningful multicultural education, safe schools, high expectations for all students, and continued pressure from all levels of society to ensure significant change. With a deeper understanding of common issues, unique differences, and urgent educational needs of minority groups traditionally underserved by our educational and social service systems, participants also identified more effective media and political strategies, expanded partnerships, and a unified voice as the key foundation on which to Act for Tomorrow - Now.
The need for highly skilled workers throughout our work force and for a more scientifically literate citizenry is forcing America to turn for leadership and talent to those groups whose mathematics, science, and engineering education has been historically neglected. Dramatic shifts in racial, ethnic, and geographical demographics are also making the utilization of members of these groups in our scientific workforce more urgent. In order to secure America’s technological leadership and its standard of living, a greater emphasis must be placed on ensuring quality mathematics, science, and engineering education for minority students.

QEM seeks to play a nationwide leadership role in significantly increasing the participation of minorities in all sectors of the mathematics, science, and engineering community. Through coalitions such as the QEM/MSE Network as well as specific projects like the NASA SHARP PLUS Research Apprenticeship Program for High School Students with talent and interest in science and the NSF-supported Technical Assistance Project, QEM is laying a foundation for achieving its goal of significantly increasing minority participation in mathematics, science, and engineering.
Established in April 1991, the QEM/MSE Network is a coalition of minority and non-minority educational institutions, school districts, and national mathematics, science, and educational organizations. MSE members are collaborating to achieve the numerical MSE goals in QEM’s 1990 report, *Education That Works*, using strategies outlined in the MSE Network’s April 1992 report: *Together We Can Make It Work: A National Agenda to Provide Quality Education for Minorities in Mathematics, Science, and Engineering*.

**QEM's MSE Goals:**

1) to quadruple the number of minority students receiving baccalaureate degrees annually in the physical and life sciences and engineering, from 17,000 in 1987 to 68,000 in the year 2000;

2) to triple the number of minorities receiving doctorates annually in science and engineering, from 389 in 1987 to 1,200 in the year 2000; and

3) to quintuple the number of minority college students newly qualified to teach from about 6,000 in 1986 to 30,000 by the year 2000, with at least 30% of this group being mathematics and science pre-college teachers.

Through its annual conferences, the MSE Network seeks to develop and promote national awareness of exemplary programs and projects that serve to increase minority participation in mathematics, science, and engineering fields. In partnership with each other, and with QEM, MSE Network members design and implement MSE programs that are potential models for other universities, particularly those located in states with significant minority student enrollment at the K-16 levels.

The MSE Network collects membership dues from participating organizations and institutions to support the attendance of members of its various committees at meetings at which MSE Network business is conducted. The QEM Network is seeking corporate sponsorship for its MSE activities and is very pleased that the McDonnell Douglas Corporation has become the Network’s first corporate sponsor.

"The vision of the Quality Education for Minorities in Mathematics, Science, and Engineering (MSE) Network is to realize a significant increase in the participation of underrepresented minorities in all sectors of the nation's mathematics, science, and engineering community to a level that is at least comparable to their numbers in the general population and at a pace consistent with the country's shift in demographics."

*(Together We Can Make It Work, April 1992)*
Laying a Foundation for Tomorrow

MSE Network Steering Committee

Dr. Billy C. Black, Chair  
President, Albany State College

Dr. Oswald P. Bronson, Sr.  
President, Bethune-Cookman College

Dr. Johnnetta B. Cole  
President, Spelman College

Dr. Thomas W. Cole, Jr.  
President, Clark Atlanta University

Dr. Edward B. Fort  
Chancellor, North Carolina A&T University

Dr. Norman C. Francis  
President, Xavier University

Dr. William R. Harvey  
President, Hampton University

Dr. David Henson  
President, Alabama A&M University

Dr. Franklyn G. Jenifer  
President, Howard University

Dr. Leroy Keith  
President, Morehouse College

Dr. Harold W. Lundy  
President, Grambling State University

Dr. James E. Lyons  
President, Jackson State University

Dr. Modesto A. Maidique  
President, Florida International University

Mr. Jose F. Mendez  
President, Ana G. Mendez University System

Dr. Charles W. Merideth  
President, New York City Technical College

Dr. Yolanda T. Moses  
President, City College of New York

Dr. Diana Natalicio  
President, University of Texas at El Paso

Dr. Jerry Sue Owens  
President, Cuyhoga Community College

Dr. Benjamin F. Payton  
President, Tuskegee University

Dr. Patsy Reid  
President, Northern Arizona University

Dr. Earl Richardson, Vice Chair  
President, Morgan State University

Dr. Prewell R. Robinson  
President, St. Augustine's College

Dr. James M. Rosser  
President, California State University at Los Angeles

Dr. Gilbert Sanchez  
President, New Mexico Highlands University

Dr. Dolores Spikes  
President, Southern University

Dr. Charles M. Vest  
President, Massachusetts Institute of Technology

Dr. Harrison B. Wilson  
President, Norfolk State University

MSE Network Conference Planning Committee

Dr. Callie Coaxum  
Fayetteville State University

Dr. Diane Ebert-May  
Northern Arizona University

Dr. Etta Falconer  
Spelman College

Dr. Betty Ward Fletcher  
Jackson State University

Dr. Advertus Hoff  
Barber-Scotia College

Dr. Abdul Mohamed  
Jackson State University

Dr. Sharron Ronco  
University of Texas at El Paso

Dr. Tomás Salazar  
New Mexico Highlands University

Dr. Julie Sanford  
University of Texas at El Paso

Dr. Jay Tashiro  
Northern Arizona University

Dr. Anthony Teate  
Morgan State University
Under a subcontract with the National Medical Association (NMA), the QEM Network provided assistance to NMA in conducting a collaborative initiative with the City of Detroit to develop a model process to help produce systemic reform in mathematics and science education and to enhance the scientific literacy of minorities. A “Comprehensive Plan to Enhance Mathematics and Science Education in Detroit” was developed during the collaboration, along with an “Evaluation and Documentation Plan.” NMA received support for this initiative from the Human Resources and Services Administration of the U.S. Department of Health and Human Services.

Through this initiative, a wide range of groups in Detroit representing colleges and universities, school systems, community-based organizations, professional associations, businesses, teachers, and parents’ groups met to:

1) identify the issues, needs, and priorities related to enhancing mathematics and science education in Detroit;
2) develop a Comprehensive Plan of Action to address identified needs;
3) develop an Evaluation and Documentation Plan; and
4) identify resources in and outside the community that could be tapped to implement the Plan.

The Plan was developed with the guidance of a Mathematics and Science Education Advisory Committee and a Mathematics and Science Education Coalition. The Advisory Committee consisted of the following individuals:

Dr. David W. Adamany
Mr. Peter Bankson
Ms. Carolyn Blanding
Ms. Juanita Clay Chambers
Rev. Lawrence Foster
Dr. Alma Rose George
Dr. Yolanda George
Mr. Frank Hayden
Mr. Kenneth Hill
Dr. Deborah McGriff
Mr. Armando Rivas

Wayne State University
Cities In Schools, Inc.
Howe Elementary School
Detroit Public Schools
Hartford Memorial Baptist Church
Physician, Detroit, Former NMA President
American Association for the Advancement of Science
President, Detroit Board of Education
Detroit Area Pre-College Engineering Program
Detroit Public Schools
Latin Americans for Social and Economic Development, Inc.
Technical Assistance Project (TAP)

Initiated in the Spring of 1993, QEM’s Technical Assistance Project (TAP) is working to increase 1) the effectiveness of the efforts of grantee institutions and 2) the involvement of minority institutions in NSF-sponsored programs in order to significantly increase the number of minorities entering mathematics, science, and engineering, teaching, and research careers.

To help achieve TAP’s first goal, successful strategies within NSF-supported projects that focus on minorities are being identified and will be highlighted through a series of state-wide conferences. Information on these strategies, other exemplary models, and promising research findings will be disseminated to institutions served by TAP and made available to other interested institutions. The intent is to avoid unnecessary duplication of effort, promote replication of successful strategies, facilitate communication across projects, and better coordinate and connect efforts across educational levels. At the state level, this should enable states with a significant minority population to make their “fair share” contribution to the production of minority MSE degree recipients.

To help achieve the project’s second goal, TAP is working to increase the participation of non-grantee minority institutions in NSF programs by assisting them in the development of more competitive proposals. Emphasis is placed on the importance of:

1) basing proposals on agreed-upon institutional goals for the sciences or engineering; a realistic assessment of institutional needs and resources for achieving those goals; and activities that are likely to result in qualitative improvements in their mathematics, science, and engineering programs; and

2) ensuring that measures are in place for recruiting, and retaining through graduation, larger numbers of talented minority students in new or enhanced programs.

The Project specifically targets non-grantee minority institutions that are eligible for NSF programs but have not had grants in the last five years. Institutional needs assessments and site visits will be used to determine the level and nature of additional technical assistance to the institutions.
TAP is implementing activities in three areas:

**Technical Assistance to grantee institutions** in NSF’s minority-focused programs. Assistance will be offered in the evaluation of project activities, in the dissemination of information on exemplary strategies developed within their projects, and in the electronic linking of these projects to facilitate communication across grantee institutions.

**Technical Assistance to non-grantee minority institutions** that are eligible for NSF’s programs. Assistance will include: a) a series of proposal development and evaluation workshops and b) formal one-year Technical Assistance Agreements based upon institutional needs assessments and Project resources.

**An MSE Clearinghouse** to collect and disseminate mathematics, science, and engineering-related information for grantee institutions and non-grantee minority institutions. The Clearinghouse will: a) serve as a national computer information exchange on issues, programs, strategies, and research findings related to mathematics and science instruction; b) disseminate information on exemplary projects following site visits by the Project’s Evaluation Specialist to institutions with promising science-focused initiatives; and c) prepare and disseminate background papers on emerging issues and promising research findings potentially leading to improved education, recruitment, and retention of minorities in mathematics, science, and engineering.

A Board of Advisors has been established to assist the Project staff in identifying technical assistance needs of participating institutions as well as key issues, programs, and promising strategies for minorities in mathematics, science, and engineering. Members of the TAP Board of Advisors are as follows:

Dr. Clara Adams  
Dr. Beverly J. Anderson  
Dr. Ann Bay  
Ms. Helen Carithers  
Dr. Etta Falconer  
Dr. Henry Hooper  
Dr. Arthur Jones  
Dr. Ron Latanision  
Dr. Abdul Mohamed  
Dr. Luis Ortiz Franco  
Dr. Elmer Washington  

Morgan State University  
University of the District of Columbia  
Smithsonian Institution  
Benjamin E. Mays High School  
Spelman College  
Northern Arizona University  
Mathematical Sciences Education Board  
Massachusetts Institute of Technology  
Jackson State University  
Chapman University  
Chicago State University
SHARP PLUS is a program of the National Aeronautics and Space Administration (NASA) conducted by the QEM Network. NASA SHARP PLUS is a research-based mentor program that was initiated in 1993. It is the residential analogue of the NASA Summer High School Apprenticeship Research Program (SHARP), a commuting program that takes place at NASA Field Centers. SHARP PLUS research experiences occur in industry or in laboratories at universities that host SHARP PLUS apprentices on their campuses. SHARP PLUS sites are colleges or universities that have demonstrated success in educating and graduating minority students in mathematics, science, or engineering (MSE) fields. Participating institutions are located in or near one of the eight states in which there are NASA Field Centers (Alabama, California, Florida, Maryland, Mississippi, Ohio, Texas, and Virginia).

The goal of the NASA SHARP PLUS program is to increase minority students’ participation and success rates in mathematics and science pre-college courses, thereby increasing the potential pool of minority mathematics, science, and engineering (MSE) majors in college and, hence, the number of minority science and engineering professionals available for the workplace.

Each year, NASA SHARP PLUS will offer a select group of minority high school students the opportunity to participate in an intensive apprenticeship program. By establishing individual working relationships between students and active researchers in aerospace-related fields, this program offers researchers and other science and engineering professionals the opportunity to serve as mentors to minority students who are rising eleventh and twelfth graders with MSE interest and potential.

For consideration in this program, students must meet the following conditions: 1) be at least 16 years of age, be enrolled in high school, and have completed at least the tenth grade; 2) have a significant/demonstrated interest in pursuing a science or engineering related career; 3) have completed algebra, geometry, and at least one year of biology, chemistry, or physics with a grade of B or better in each course; and 4) belong to a recognized minority group underrepresented in science and engineering (African American, Alaska Native, American Indian, Hispanic, or Pacific Islander).
The 1993 NASA SHARP PLUS students came from 17 states, Puerto Rico, and Washington, D.C. and represented 78 high schools. The 100 participants included 39 males and 61 females; 60% of the students were African American, 37% were Hispanic, 2% were Pacific Islander/Filipino, and 1% were Native American. In this first year of the Program, over 600 students applied for the 100 SHARP PLUS positions.

The apprenticeship program is conducted at participating predominantly minority universities for eight weeks during the summer months. The students live on the institutions' campuses and work with researchers/mentors at nearby industrial sites or in research laboratories at the institutions in which cutting edge research is being conducted. In 1993, the program took place from June 21 to August 13. The five participating sites and their SHARP PLUS Faculty Coordinators were:

- Alabama A&M University; Normal, AL, Mr. Wallace Henderson
- Florida A&M University; Tallahassee, FL, Dr. Henry Williams
- Hampton University; Hampton, VA, Dr. Kwesi Ewur
- Morgan State University; Baltimore, MD, Mr. Kevin Peters
- Texas Southern University; Houston, TX, Dr. Edward Booker

During their apprenticeships, the students carry out research assignments, prepare written reports, make oral presentations, and participate in a variety of enrichment activities under careful supervision of the Faculty Coordinator at each institution. They are also required to prepare written final reports on their experiences for submission to NASA.

Along with their apprenticeship assignments, participants also receive information and guidance on: MSE careers and college admissions requirements; college preparatory mathematics and science course selections; other mathematics and science-oriented opportunities; and available financial resources.

The QEM Network is developing a Database Tracking and Monitoring System in order to identify potential participants and to monitor the progress of the students who participate in NASA SHARP PLUS to allow for early identification of a significant pool of potential college science and engineering majors. Based on the success of the first NASA SHARP PLUS class, plans are now under way to expand the Program to 200 participants in 1994.
The Quality Education for Minorities (QEM) Network has been very fortunate in its initial years to have received funding from a variety of sources. Prior to its formal move to Washington, D.C. from the Massachusetts Institute of Technology (MIT), the Quality Education for Minorities (QEM) Project received its funding from the Carnegie Corporation for New York. Since arriving in Washington, the QEM Network has continued to receive its core operational support from the Carnegie Corporation of New York, while receiving funding for specific projects from several federal agencies and private foundations. As a major sign of its commitment to the mission of QEM, MIT provided salary and fringe benefits for the initial two years for the President of the Network who had served the previous ten years as MIT’s Dean for Student Affairs.

In addition to funding from various sources, QEM has received staff support from the National Science Foundation, the Lawrence Berkeley Laboratory, the Smithsonian Institution, and the Public Health Service within the Department of Health and Human Services. The contributed services from employees of these organizations were and continue to be invaluable to QEM.

A list of grants received by QEM during Fiscal Years 1991-93 follows, along with financial information on QEM for Fiscal Years 1991 and 1992 prepared by our auditors, Arthur Andersen and Company.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Carnegie Corporation of New York</td>
<td>$458,740*</td>
<td>$700,000</td>
<td>$700,000</td>
</tr>
<tr>
<td>Gimbel Foundation</td>
<td>5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McDonnell Douglas Corporation</td>
<td></td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>McDonnell Douglas Foundation</td>
<td></td>
<td>11,000</td>
<td></td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>103,955</td>
<td>109,210</td>
<td>50,830</td>
</tr>
<tr>
<td>Intergovernmental Personnel Act</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributed Services (7/91 - 12/93)</td>
<td>199,113</td>
<td>283,948</td>
<td>42,932</td>
</tr>
<tr>
<td>from Massachusetts Institute of Technology, Lawrence Berkeley Laboratory, Smithsonian Institution, U.S. Department of Health and Human Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSE Working Conference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Department of Energy</td>
<td>25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• NASA</td>
<td>25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• National Science Foundation</td>
<td>25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Department of Health and Human Services</td>
<td>25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Jostens Learning Corporation</td>
<td>3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Assistance Project</td>
<td></td>
<td></td>
<td>1,000,000</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASA SHARP PLUS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• NASA</td>
<td>667,562</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Detroit Math and Science Coalition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• National Medical Association</td>
<td>74,832</td>
<td>91,900</td>
<td></td>
</tr>
<tr>
<td>Housing Development Initiative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• AT &amp; T Foundation</td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>• Department of Health and Human Services</td>
<td>34,900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• National Science Foundation</td>
<td>29,660</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Service Centers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Annie E. Casey Foundation</td>
<td></td>
<td></td>
<td>185,000</td>
</tr>
<tr>
<td>Teacher Leadership Corps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Annenberg /CBP Math and Science Project</td>
<td>659,850</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Phillip Morris Companies, Inc.</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>QEM Internship Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• National Science Foundation</td>
<td>42,000</td>
<td>58,000</td>
<td>59,000</td>
</tr>
<tr>
<td>• National Aeronautics and Space Administration</td>
<td>42,000</td>
<td>57,935</td>
<td>60,000</td>
</tr>
<tr>
<td>• Smithsonian Institution</td>
<td>42,000</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>• Environmental Protection Agency</td>
<td>59,159</td>
<td></td>
<td>40,000</td>
</tr>
<tr>
<td>• General Mills Foundation</td>
<td></td>
<td></td>
<td>25,000</td>
</tr>
<tr>
<td>Brownbag Discussion Series</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Aetna Foundation, Inc.</td>
<td></td>
<td></td>
<td>50,000</td>
</tr>
<tr>
<td>• Reginald F. Lewis Foundation</td>
<td>2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Merrill Lynch &amp; Co. Foundation</td>
<td>2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Delta Sigma Theta Sorority</td>
<td></td>
<td></td>
<td>1,000</td>
</tr>
</tbody>
</table>

* - Total grant was $575,000 and included support to the MIT-based QEM Project.
Auditors Report

ARTHUR ANDERSEN & CO.

Report of Independent Public Accountants

To the Board of Directors of
Quality Education for Minorities Network:

We have audited the accompanying balance sheets of Quality Education for Minorities Network ("QEM" — a District of Columbia nonprofit corporation) as of June 30, 1992 and 1991, and the related statements of support, revenue, expenses and changes in fund balance and cash flows for the years then ended. These financial statements are the responsibility of QEM's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Quality Education for Minorities Network as of June 30, 1992 and 1991, and the results of its operations and its cash flows for the years then ended, in conformity with generally accepted accounting principles.

Washington, D.C.,
December 21, 1992
# Balance Sheets

## As of June 30, 1992 and 1991

### ASSETS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents (Note 2)</td>
<td>$211,048</td>
<td>$164,766</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>641,444</td>
<td>439,215</td>
</tr>
<tr>
<td>Grants receivable</td>
<td>41,431</td>
<td>49,129</td>
</tr>
<tr>
<td>Interest and other receivables</td>
<td>10,735</td>
<td>14,286</td>
</tr>
<tr>
<td>Inventory</td>
<td>29,292</td>
<td>31,914</td>
</tr>
<tr>
<td>Other current assets</td>
<td>25,518</td>
<td>38,044</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td><strong>959,468</strong></td>
<td><strong>737,354</strong></td>
</tr>
</tbody>
</table>

**Property and Equipment, net of accumulated depreciation of $73,214 in 1992 and $35,288 in 1991 (Note 3)** | 114,083  | 150,548   |

**Total assets** | **$1,073,551** | **$887,902** |

### LIABILITIES AND FUND BALANCE

**Current Liabilities:**

- Accounts payable | $14,692  | $11,467  |
- Current portion of deferred rent expense (Note 5) | 7,740  | 7,740  |
- Deferred dues revenue | 39,275  | 12,770  |
- Deferred grant revenue (Note 2) | 115,071 | 77,628  |

**Total current liabilities** | 176,778 | 109,605 |

**Noncurrent Deferred Rent Expense (Note 5)** | 15,480  | 23,220  |

**Total liabilities** | 192,258 | 132,825 |

**FUND BALANCE** | 881,293 | 755,077 |

**Total liabilities and fund balance** | **$1,073,551** | **$887,902** |

The accompanying notes are an integral part of these balance sheets.
### Statements of Support, Revenue, Expenses and Changes in Fund Balance

For the Fiscal Years Ending June 30, 1992 and 1991

<table>
<thead>
<tr>
<th></th>
<th>1992</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support and Revenue</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted grants - Federal</td>
<td>$330,093</td>
<td>$142,456</td>
</tr>
<tr>
<td>Contributions - corporations and foundations</td>
<td>701,500</td>
<td>1,171,740</td>
</tr>
<tr>
<td>Other contributions (Note 2)</td>
<td>283,948</td>
<td>290,277</td>
</tr>
<tr>
<td>Other revenue</td>
<td>36,205</td>
<td>34,488</td>
</tr>
<tr>
<td>Membership dues</td>
<td>61,775</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Total support and revenue</strong></td>
<td>1,413,521</td>
<td>1,638,961</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries</td>
<td>844,648</td>
<td>377,591</td>
</tr>
<tr>
<td>Employee benefits and payroll taxes</td>
<td>43,984</td>
<td>32,091</td>
</tr>
<tr>
<td><strong>Total salaries and related expenses</strong></td>
<td>888,632</td>
<td>409,682</td>
</tr>
<tr>
<td>Occupancy (Note 5)</td>
<td>122,345</td>
<td>119,712</td>
</tr>
<tr>
<td>Travel</td>
<td>58,676</td>
<td>63,709</td>
</tr>
<tr>
<td>Meetings</td>
<td>41,427</td>
<td>36,835</td>
</tr>
<tr>
<td>Publications</td>
<td>18,875</td>
<td>35,159</td>
</tr>
<tr>
<td>Depreciation</td>
<td>37,926</td>
<td>36,240</td>
</tr>
<tr>
<td>Furniture and equipment, not capitalized</td>
<td>4,927</td>
<td>33,209</td>
</tr>
<tr>
<td>Professional fees</td>
<td>17,164</td>
<td>25,679</td>
</tr>
<tr>
<td>Printing</td>
<td>3,420</td>
<td>19,088</td>
</tr>
<tr>
<td>Honoraria</td>
<td>---------</td>
<td>18,900</td>
</tr>
<tr>
<td>Relocation costs</td>
<td>---------</td>
<td>10,831</td>
</tr>
<tr>
<td>Supplies</td>
<td>5,885</td>
<td>10,347</td>
</tr>
<tr>
<td>Telephone</td>
<td>10,088</td>
<td>10,148</td>
</tr>
<tr>
<td>Postage and copying</td>
<td>17,182</td>
<td>8,531</td>
</tr>
<tr>
<td>Student housing</td>
<td>22,835</td>
<td>6,503</td>
</tr>
<tr>
<td>Utilities</td>
<td>6,345</td>
<td>5,950</td>
</tr>
<tr>
<td>Repairs and maintenance</td>
<td>3,003</td>
<td>4,463</td>
</tr>
<tr>
<td>Loss on theft of property</td>
<td>-</td>
<td>3,944</td>
</tr>
<tr>
<td>Subscriptions</td>
<td>3,125</td>
<td>3,033</td>
</tr>
<tr>
<td>Insurance</td>
<td>2,129</td>
<td>2,415</td>
</tr>
<tr>
<td>Bank service charges</td>
<td>927</td>
<td>1,077</td>
</tr>
<tr>
<td>Licenses and memberships</td>
<td>1,040</td>
<td>550</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>21,354</td>
<td>17,879</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td>1,287,305</td>
<td>883,884</td>
</tr>
</tbody>
</table>

**SUPPORT AND REVENUE IN EXCESS OF EXPENSES** 126,216

**Fund Balance, beginning of year** 755,077

**Fund Balance, end of year** $881,293

$755,077

The accompanying notes are an integral part of these statements.
Statements of Cash Flows

For the Fiscal Years Ending June 30, 1992 and 1991

<table>
<thead>
<tr>
<th>Cash Flows From Operating Activities</th>
<th>1992</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support and revenue in excess of expenses</td>
<td>$126,216</td>
<td>$755,077</td>
</tr>
<tr>
<td>Adjustments to reconcile support and revenue in excess of expenses to cash provided by operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>37,926</td>
<td>36,240</td>
</tr>
<tr>
<td>Amortization of deferred rent expense</td>
<td>(7,740)</td>
<td>(7,740)</td>
</tr>
<tr>
<td>Donated property</td>
<td>-------</td>
<td>(182,849)</td>
</tr>
<tr>
<td>Donated inventory</td>
<td>-------</td>
<td>(81,216)</td>
</tr>
<tr>
<td>Loss on theft of property</td>
<td>-------</td>
<td>3,944</td>
</tr>
<tr>
<td>Decrease (increase) in grant receivable</td>
<td>7,698</td>
<td>(49,129)</td>
</tr>
<tr>
<td>Decrease (increase) in interest and other receivables</td>
<td>3,551</td>
<td>(14,286)</td>
</tr>
<tr>
<td>Decrease (increase) in other current assets</td>
<td>12,526</td>
<td>(38,044)</td>
</tr>
<tr>
<td>Decrease in inventory</td>
<td>2,622</td>
<td>49,302</td>
</tr>
<tr>
<td>Increase in accounts payable</td>
<td>3,225</td>
<td>11,467</td>
</tr>
<tr>
<td>Increase in deferred dues revenue</td>
<td>26,505</td>
<td>12,770</td>
</tr>
<tr>
<td>Increase in deferred grant revenue</td>
<td>37,443</td>
<td>77,628</td>
</tr>
<tr>
<td>Increase in deferred rent expense</td>
<td>-------</td>
<td>38,700</td>
</tr>
<tr>
<td><strong>TOTAL ADJUSTMENTS</strong></td>
<td><strong>123,756</strong></td>
<td><strong>(143,213)</strong></td>
</tr>
</tbody>
</table>

**NET CASH PROVIDED BY OPERATING ACTIVITIES** | 249,972 | 611,864 |

**Cash flows from investing activities**

| Purchases of short-term investments | (641,444) | (979,589) |
| Sales/ maturities of short-term investments | 439,215 | 540,374 |
| Purchases of property and equipment | (1,461)  | (14,118) |
| Proceeds from insurance             | -------  | 6,235    |

Net cash used in investing activities | (203,690) | (447,098) |

**NET INCREASE IN CASH AND CASH EQUIVALENTS** | 46,282 | 164,766 |

**CASH AND CASH EQUIVALENTS, beginning of year** | 164,766 | ------- |

**CASH AND CASH EQUIVALENTS, end of year** | $211,048 | $164,766 |

Supplemental schedule of noncash investing activities:
Received donated property and equipment during the year ended June 30, 1991, totaling $209,061 of which $182,849 was capitalized.
Received donated inventory during the year ended June 30, 1991, valued at $81,216.

The accompanying notes are an integral part of these statements.
1. Organization and Operations:
Quality Education for Minorities Network ("QEM") was relocated in July 1990 from the Massachusetts Institute of Technology ("MIT") to Washington, DC. QEM was incorporated on November 20, 1989; however, its separate corporate existence commenced upon relocation principally under a grant from the Carnegie Corporation.

QEM was organized to address the unsatisfactory educational opportunities available to minorities throughout the United States, principally for African American children, American Indian children, Alaska Native children, and Puerto Rican and Mexican American children.

2. Summary of Significant Accounting Policies:

Basis of Accounting

QEM follows the accrual basis of accounting in preparing its financial statements. In addition, the financial statements are presented in the format recommended by the American Institute of Certified Public Accountants' Audit and Accounting Guide, Audits of Certain Nonprofit Organizations.

Cash and Cash Equivalents

QEM considers all cash investments purchased with a maturity of three months or less to be cash equivalents.

Investments

Investments are recorded at cost, which appropriates market.

Fixed Assets

Fixed assets are recorded at cost. Furniture and equipment are depreciated over five years on a straight-line basis.

Deferred Grant Revenue

QEM recognizes revenue on restricted contracts and grants to the extent that related expenditures have been incurred.

Support and Revenue

Revenues from contributions, grants, and interest are recognized as income in the year in which they are earned. QEM receives contributions from foundations and corporations. All contributions are considered to be available for unrestricted use unless donors have placed restrictions thereon.

Dues, which commenced in 1992, are recognized ratably over the period covered by the membership.

Other Contributions

QEM received contributions during the year ending June 30, 1991, in the form of donated property and equipment from MIT and Apple Computer. These amounts were $81,808 and $127,253,
respectively. In addition, QEM received the reports recorded as inventory valued at $81,216 as a donation from MIT. There were no contributions of inventory or equipment during the year ended June 30, 1992. However, QEM received $283,948 of contributed services during the year ended June 30, 1992.

Other Revenue

QEM earns other revenue from the sale of publications and interest on cash deposits. Other revenue is considered to be available for unrestricted use.

3. Property and Equipment:

At June 30, 1992 and 1991, QEM's property and equipment consists of the following.

<table>
<thead>
<tr>
<th></th>
<th>Useful Life</th>
<th>1992</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>Furniture and office equipment</td>
<td>5 years</td>
<td>$63,231</td>
<td>$63,231</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>5 years</td>
<td>124,066</td>
<td>122,605</td>
</tr>
<tr>
<td>Less - Accumulated depreciation</td>
<td></td>
<td>187,297</td>
<td>185,836</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(73,214)</td>
<td>(35,288)</td>
</tr>
<tr>
<td>Property and equipment, net</td>
<td></td>
<td>$114,083</td>
<td>$150,548</td>
</tr>
</tbody>
</table>

4. Income taxes

QEM is exempt from Federal income taxes under the provisions of Section 501 (c) (3) of the Internal Revenue Code under an advance ruling from the Internal Revenue Service. The advance ruling also determined that QEM was a publicly supported entity. Accordingly, no provision for income taxes is reflected in the accompanying financial statements.

Final determination of QEM's tax status will be decided by the Internal Revenue Service at the end of the advance ruling period in 1993.

5. Office Lease:

QEM leases office space under a noncancelable operating lease agreement expiring in 1995.

Minimum lease payments for the years ending June 30 are as follows.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>$120,799</td>
</tr>
<tr>
<td>1994</td>
<td>123,222</td>
</tr>
<tr>
<td>1995</td>
<td>126,200</td>
</tr>
<tr>
<td></td>
<td>$370,221</td>
</tr>
</tbody>
</table>

In addition, QEM received 4 months "free rent" which has been deferred and will be recognized over the 60-month life of the lease.
The QEM Leadership and Membership is essential to QEM as it strives to achieve its mission of quality education for minorities. We are very grateful for the guidance and participation of so many talented individuals from education, business, private foundations, federal agencies and the community. Together, they are providing QEM with the direction, insight, and support necessary for QEM to accomplish its goals.
Report on the QEM Initial Years - Leadership and Membership

January 15th Group

During The Initial Years

Academic Search Consultation
Academy for Educational Development
Academy for Educational Development
Aetna Foundation, Inc.
African Education Foundation
African
American Association for Higher Education
American Association for Higher Education
American Association for Higher Education
American Association for the Advancement of Science
American Association of Colleges for Teacher Education
American Association of Colleges for Teacher Education

American Association of Community Colleges
American Council on Education
American Council on Education
American Council on Education
American Council on Education
American Council on Education
American Federation of Teachers
American Federation of Teachers
American Federation of Teachers
American Federation of Teachers
American Society for Engineering Education
American Society for Microbiology
American University
Annenberg/CPB Projects
Annie E. Casey Foundation
ASPIRA Association, Inc.
ASPIRA Association, Inc.
ASPIRA Association, Inc.
Associates for Renewal in Education, Inc.
Associates for Renewal in Education, Inc.
Associates for Renewal in Education, Inc.
Association for Supervision & Curriculum Development
Association for Supervision & Curriculum Development
Association of American Medical Colleges
Association of American Medical Colleges
Association of American Medical Colleges
Association of Science-Technology Centers
Baltimore City Public Schools
Black Issues in Higher Education
Black Student Fund
Brookings Institution
Business & Professional Women's Foundation
Calvary Bilingual Multicultural Learning Center
Center for Policy Alternatives
Center for Women's Policy Studies
Challenger Center
Children's Defense Fund
Children's Television Workshop
Children's Television Workshop
Christian College Coalition
Cities In Schools
Cities In Schools
City University of New York
Close Up Foundation

Ms. Christine Young
Mr. Rafael Valdivieso
Ms. Karen Johnson PIttman
Ms. Gail Promboin
Dr. John Brown, Jr.
Mr. Melvin Foote
Mr. Nevin Brown
Ms. Carol Stoele
Ms. Kati Haycock
Dr. Shirley Malcom
Dr. Mary Dilworth
Ms. Mwangaza
Michael-Bandele
Ms. Enid Jones
Dr. Reginald Wilson
Mr. Mario Payne
Ms. Cecilia Ottinger
Ms. Eileen O'Brien
Ms. Janetta Hammock
Mr. Dale Boatsright
Ms. Barbara Van Blake
Ms. Lovely Billups
Ms. Maria Hernandez
Mr. William Gamble
Mr. Robert Watkins
Dr. Robert Lerman
Dr. Mara Mayor
Ms. Sandra Brock Jibrell
Ms. Mirka Negroni
Dr. Janice Petrovich
Ms. Elena Pell
Dr. Kaye Williams
Mr. Milton Douglas
Mrs. Brenda Nixon
Dr. Helené Hodges
Ms. Mikki Terry
Dr. Tim Ready
Ms. Emilia Rodriguez-Stein
Ms. Brooke Whiting
Ms. DeAnna Beane
Mrs. Patricia Speights
Ms. Joan Morgan
Ms. Barbara Patterson
Ms. Laurel McFarland
Ms. Irma Burks
Ms. Beatriz Otero
Ms. Linda Tarr-Welhan
Ms. Jennifer Tucker
Ms. Michele Maduro
Ms. Olivia Golden
Mr. Allen Mogol
Ms. Joanne Livesey
Ms. Deborah Bailey
Dr. Ronald Lewis
Mr. Peter Bankson
Mr. Clyde Avelhe
Mr. David Harrington
January 15th Group

College Board
College Board
College Board
College Board
Colorado Institute on Hispanic Education & Economic Development
Community Systems & Services, Inc.
Community Vision, Inc.
Conference Board
Congressional Black Caucus Foundation
Congressional Hispanic Caucus
Congressman Calvin Dooley’s Office
Congressman Major R. Owens’ Office
Congressman Mike Parker’s Office
Congresswoman Jolene Unsoeld’s Office
Consortium for the Advancement of Private Higher Education
Council for Basic Education
Council of Chief State School Officers
Council of Chief State School Officers
Council of Chief State School Officers
Council of Chief State School Officers
Council of Graduate Schools
Council of Independent Colleges
Council of Independent Colleges
Council of Latino Community-Based Organizations
Council of the Great City Schools
Council of the Great City Schools
Council of the Great City Schools
Crossroads Management Systems
Cuyahoga Metropolitan Housing Authority
D.C. Committee on Public Education
D.C. Department of Corrections
D.C. Private Industry Council
D.C. Public Access Corporation
D.C. Public Schools
D.C. Service Corps
Delta Sigma Theta Sorority, Inc.
Development Associates, Inc.
Digital Equipment Corporation
Digital Equipment Corporation
Educational Testing Service
Educational Testing Service
Educational Testing Service
Eugene Walton Enterprises
Federal Information Exchange, Inc.
Federal Information Exchange, Inc.
Federation of Behavioral, Psychological & Cognitive Sciences
Federation of Behavioral, Psychological & Cognitive Sciences
Franklin Institute Science Museum
Funds for the Community’s Future
George Washington University
George Washington University
Hispanic Association of Colleges & Universities
Hispanic Link News Service
Hispanic Policy Development Project
Howard University College of Liberal Arts
Howard University Research & Training Center
Howard University School of Engineering

Dr. Vinetta Jones
Ms. Evelyn Davila
Ms. Irene Spero
Mr. John Childers
Ms. Polly Baca
Ms. Carol Whitcomb
Mr. Milton Bins
Ms. Ann Klepper
Mr. Norman Meyer
Mr. Richard Lopez
Ms. Lori Denham
Ms. Jacqueline Ellis
Mr. Samuel Thornton
Ms. Karen Anderson
Ms. Mary-Mack Callahan
Dr. Ruth Mitchell
Dr. Christopher Harris
Dr. Glenda Partee
Mr. Burton Taylor
Ms. Cynthia Brown
Ms. Margaret Tyler
Mr. Allan Splete
Mr. Russell Garth
Ms. Susan Cepeda
Mr. Michael Casserly
Ms. Ruth Granados
Ms. Terry Tabor
Ms. Sara Lee Todd
Ms. Claire Freeman
Dr. Conrad Snowden
Ms. Reesa Motley-McMurtry
Mr. Michael Gilbert
Mr. Atif Harden
Ms. Barbara Clark
Mr. Benjamin Canty
Dr. Wilhelmina Goff
Dr. Harry Day
Mr. Bernard Brown
Mr. Lou Horner
Dr. Carl Sullivan
Ms. Charlotte Kuh
Ms. Jessie Jones
Dr. Eugene Walton
Dr. Patricia Devaux
Mr. Clarence Henry, III
Mr. David Johnson
Ms. Claudia Feller
Ms. Kelly Woodland
Mr. David Milner
Dr. Peter Smith
Ms. Charlene Rivera
Mr. Rafael Magallan
Mr. Charlie Erickson
Ms. Mildred Garcia
Dr. Ebo Oluva, Jr.
Dr. Sylvia Walker
Dr. Carmen Cannon
Howard University School of Engineering
Indian Health Service
Institute for Educational Leadership
Institute for Educational Leadership
Institute for Educational Leadership
Institute for Educational Leadership
Institute for Independent Education
Interagency Council on the Homeless
Joint Center for Political & Economic Studies
Law Offices of William L. Taylor
Law Offices of William L. Taylor
League of United Latin American Citizens
Library of Congress
Library of Congress
Maryland State Department of Education
Mathematical Sciences Education Board
Mathematics Association of America
Mathematics Association of America
MESA
Mexican American Legal Defense & Education Fund
Mid-Atlantic Equity Center
Mid-Atlantic Equity Center
Milton S. Eisenhower Foundation for the Prevention of Violence
Montgomery County High Technology Council
Morgan State University
NAACP
NAACP Legal Defense & Education Fund
NAACP Legal Defense & Education Fund
NAACP Special Contribution Fund
NASA Headquarters
NASA Headquarters
NASA Headquarters
National Action Council for Minorities in Engineering
National Advisory Council on Indian Education
National Alliance of Black School Educators
National Association for State Directors of Special Education
National Association of Secondary School Principals
National Association of State Universities & Land-Grant Colleges
National Black Alumni Association
National Black Child Development Institute
National Black Child Development Institute
National Black Media Coalition
National Board for Professional Teaching Standards
National Center on Education & the Economy
National Center on Education & the Economy
National Committee for Citizens in Education
National Council for Negro Women
National Council of Educational Opportunity Associations
National Council of Educational Opportunity Associations
National Council of La Raza
National Council of La Raza
National Education Association
National Education Association
National Governors' Association
National Governors' Association
National Hispanic Leadership & Policy Development Institute
National Medical Association
National Portrait Gallery
Ms. Marilyn Lanier-Nolley
Ms. Donna Leno
Dr. James Calvin
Ms. Anita Obarakpor
Ms. Joan Wills
Ms. Linda Moore
Ms. Joan Davis Ratteray
Mrs. Marsha Henderson
Ms. Barbara McCloud
Mr. William L. Taylor
Ms. Dianne Piche
Mr. Jess Quintero
Ms. Carolyn Brown
Ms. Mary Jack Wintle
Ms. Jill Christianson
Dr. Patricia Butler
Dr. Florence Fasanelli
Dr. William Hawkins
Ms. Dianne Smith
Mr. Steve Carbo
Dr. Sheryl Denbo
Ms. Jill Moss Greenberg
Dr. Lynn Curtis
Ms. Shannon Savage
Ms. Brenda Haynes
Dr. Audrey Fisher-Brown
Ms. Janell Byrd
Ms. Phyllis McClure
Dr. Beverly Cole
Dr. Eddie Anderson
Dr. Lewin Warren
Ms. Charlotte Kea
Dr. Lea Williams
Mr. John Cheek
Mr. William Saunders
Ms. Amy Batiste
Dr. Gwendolyn Cooke
Dr. Joyce Payne
Mr. H. Ray Lanier
Ms. Sherry Deane
Ms. Claudia Thorne
Ms. Carmen Marshall
Ms. Yolanda Rodriguez
Dr. Warren Simmons
Mr. Michael Cohen
Mrs. Anne Henderson
Ms. Eleanor Hinton-Hoyt
Dr. Arnold Mitchem
Ms. Maureen Hoyler
Mr. Raul Yzaguirre
Ms. Emily Gantz McKay
Dr. Boyd Bosma
Ms. Warlene Gary
Ms. Susan Traiman
Dr. Paul Goren
Ms. Beverly Ellerman
Ms. Carmelita Grady
Mr. Harry Jackson, Jr.
National Puerto Rican Coalition, Inc.
National Puerto Rican Coalition, Inc.
National Research Council
National School Boards Association
National Science Center Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Science Foundation
National Urban Coalition
National Urban League
National Urban League
National Urban League
Network of Educators on Central America
Network of Educators on Central America
NOW Legal Defense & Education Fund
Post-Secondary Education Commission
Public Education Fund Network
Public Leadership Education Network
Science Weekly
Senator Jeff Bingaman’s Office
Seton Hall University
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Smithsonian Institution
Southern Education Foundation, Inc.
Southern Education Foundation, Inc.
Thandi’s Place Productions
U.S. Department of Commerce
U.S. Department of Education
U.S. Department of Education
U.S. Department of Education
U.S. Department of Education
Ms. Lisa Cintron
Ms. Ruth Pagan
Dr. Cheryl Leggon
Dr. Jeremiah Floyd
Mr. Robert Williamson
Dr. Jane Stuttsman
Dr. Julia Clark
Ms. Betty Ruth Jones
Dr. Madeleine Long
Dr. Paul Rodriguez
Dr. Robert Watson
Dr. Roosevelt Johnson
Ms. Sue Kemnitzer
Dr. Ramona Edelin
Dr. Billy Tidwell
Dr. Dionne Jones
Dr. Michael Webb
Ms. Marguerite Lukes
Ms. Erica Gilbertson
Ms. Walteen Grady Truely
Mr. Jamie Merisotis
Ms. Amanda Broun
Ms. Marianne Alexander
Mr. Claude Mayberry
Mr. Ray Ramirez
Dr. Bernice Bass de Martinez
Dr. Douglas Lapp
Mr. James Early
Mr. John Franklin
Mrs. Nora Panzer
Ms. Carmel Ervin
Dr. Claudine Brown
Ms. Elizabeth Sharpe
Ms. Elizabeth Veatch
Ms. Roberta Rubinoff
Ms. Ruth Selig
Dr. Herman Reese
Mr. Eric Weir
Ms. Thandi Harper
Mr. Tony Torres
Mr. Edward Moore
Ms. Carolyn Joyner
Mr. James Roberts
Ms. Victoria Ware
## Arizona
### Northern Arizona University

### Elementary Schools
- **Ganado Intermediate School**
  - Ms. Mary Ann Chee
  - Ms. Ella Tsosie
- **Killip Elementary School**
  - Mr. Johnny Anaya
  - Ms. Dori Ulburri
- **Whiteriver Elementary School**
  - Ms. Eloise Evans
  - Ms. Mary Anne Tessay

### Middle Schools
- **Tuba City / Eagles Nest Intermediate School**
  - Ms. Lucy LaMesa
  - Ms. Leila McCabe
- **Greasewood School**
  - Ms. Mary Boyd
  - Ms. Loretta Chee
- **Roskrufe Bilingual Magnet Middle School**
  - Ms. Ozzie Espinoza
  - Mr. Dale Lopez

### High Schools
- **North High School**
  - Mr. J. Eduardo Limas
  - Ms. Zita Robinson
- **Central High School**
  - Ms. Linda Fulmore
  - Ms. Asela Sanchez
- **Pueblo High School**
  - Ms. Wilma Amaro
  - Ms. Brenda Ugalde
- **Westview High School**
  - Mr. Michael Lopez
  - Mr. Richard Sanchez

## Maryland
### Morgan State University

### Elementary Schools
- **Frederick Elementary School**
  - Ms. Lendora Cleveland
  - Ms. Elizabeth Saunders
- **Thomas G. Hayes Elementary School**
  - Mr. Robert Larkins
  - Ms. Deral Henderson
- **Harford Heights Elementary School**
  - Mr. Ronnie McNeil
  - Mr. Charles Williams

### Middle Schools
- **West Baltimore Middle School**
  - Ms. Carolyn Eades
  - Ms. Trezeline Brooks
- **Chinquapin Middle School**
  - Ms. Andrenette Mack
  - Mr. Charles Matthews
- **Northeast Middle School**
  - Ms. Gloria Barnes
  - Ms. Angela Bynum

### High Schools
- **Lake Clifton/ Eastern High School**
  - Ms. Sylvia Savage
  - Mr. Edward Moore
- **Northwestern High School**
  - Ms. Marian Tutt
  - Ms. Ernest Jackson
- **Southwestern High School**
  - Ms. Jeanne Phillips
  - Ms. Shelia Oliver
NEW MEXICO
NEW MEXICO HIGHLANDS UNIVERSITY

Elementary Schools
Algodonnes Elementary School
Ms. Gertrude Trujillo
Ms. Sonya Hunting Horse

Mora Elementary School
Ms. Maria Esquivel
Ms. Florence Trujilo

Roosevelt Elementary School
Ms. Elizabeth Casaus
Ms. Josephine Quintana

Santa Rosa Elementary School
Ms. Ruby Montoya
Ms. Lorraine Madrid

Middle Schools
Daniel Fernandez
Intermediate School
Ms. Christine Chavez
Mr. Steven Sanchez

Enos Garcia Middle School
Ms. Antionette Gonzales
Mr. Joe Gonzales

Santa Rosa Middle School
Ms. Anna Marie Marquez
Mr. Leonard Valasques

High Schools
Robertson High School
Mr. Phillip Madrid
Ms. Geraldine Pacheco

Taos Junior High School
Mr. Michael Gutierrez
Mr. Santiago Tafoya

Wagon Mound High School
Ms. Brenda Bobinsky
Mr. Robert Mondragon

NORTH CAROLINA
FAYETTEVILLE STATE UNIVERSITY

Elementary Schools
Bowley Elementary School
Ms. Muriel Brooks
Ms. Rhonda McPhatter

Manchester Elementary School
Ms. Mary Jones
Ms. Monica Vaughn

South Harnett Primary School
Ms. Jewel Dawson
Ms. Viola Elliot

Middle Schools
Bladen Middle School
Ms. Bettye McLaughlin
Ms. Linda Johnson-Baldwin

Clarkston Middle School
Ms. Annie Spaulding
Ms. Cappie Johnson

Irwin Middle School
Ms. Margaretta Kelly
Ms. Roberta Brown

High Schools
Cape Fear High School
Mr. Ernest Joyner
Ms. Larell Higginbotham

East Bladen High School
Ms. Norma Martin
Ms. Annie Rhodes

Triton High School
Mr. Raymond McCall
Ms. Veronica Surles

West Forsyth High School
Mr. James McCorkle
Ms. Annette Crews
ANNENBERG TEACHER LEADERSHIP CORPS

VIRGINIA

HAMPTON / NORFOLK STATE UNIVERSITY

Elementary Schools

Crestwood Intermediate School
Ms. Marva McCoy
Mr. William Whichard

Park Elementary School
Mr. Jobie Boone
Ms. Tonita Joyner

Trekle Elementary School
Ms. Aerica Antoine
Ms. Brenda Petty

Middle Schools

Booker T. Middle School
Mr. Jerome Barber

Jefferson Davis Middle School
Ms. Janice Richison
Ms. Blanche Turner

Lindsey Middle School
Ms. Carol Mann
Ms. Vashti Redcross

Spratley Middle School
Mr. Willie Pope
Ms. Del Sykes

High Schools

Bethel High School
Ms. Beneta Brown

Indian River High School
Ms. Berneta Queen
Ms. Marie Robinson

Oscar Smith High School
Ms. Rosalind Jennings
Ms. Barbara McGlone

Phoebus High School
Ms. Ernestine Thomas
Ms. Augustine Tyson
<table>
<thead>
<tr>
<th>NAME</th>
<th>CITY</th>
<th>HIGH SCHOOL</th>
<th>SHARP PLUS SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lewis, Ms. TaShonda L.</td>
<td>Tuscaloosa</td>
<td>Holt High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Milton, Ms. Shenique M.</td>
<td>Eutaw</td>
<td>Eutaw High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Cash, Ms. Lekesha L.</td>
<td>Tustin</td>
<td>Tustin High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Culpepper, Ms. Tavara N.</td>
<td>Benicia</td>
<td>Berkeley High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Gomez, Mr. Miguel A.</td>
<td>Santa Ana</td>
<td>Santa Ana High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Lopez, Mr. Omar</td>
<td>Santa Ana</td>
<td>Santa Ana High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Tu, Mr. Philip</td>
<td>San Francisco</td>
<td>Phillip &amp; Sala Burton High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Wilson, Jr., Mr. Keith D.</td>
<td>Washington</td>
<td>Benjamin Banneker High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Blandon, Mr. Luis E.</td>
<td>Miami</td>
<td>Miami Senior High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Bryant, Mr. Donald WJ</td>
<td>Orlando</td>
<td>Edgewater High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Centeno, Mr. Joel O.</td>
<td>Miami</td>
<td>Miami Jackson Senior High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Dorneval, Mr. Jumson</td>
<td>Miami</td>
<td>Miami Edison Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Henry, Ms. Shelise M.</td>
<td>Tallahassee</td>
<td>Leon High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Hernandez, Ms. Erika</td>
<td>Miami</td>
<td>Miami Jackson Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>James, Ms. Sheresse D.</td>
<td>Tallahassee</td>
<td>James Rickards High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Jenkins, Ms. Dietrich R.</td>
<td>Tallahassee</td>
<td>FAMU Developmental Research School</td>
<td>Florida</td>
</tr>
<tr>
<td>Milford, Mr. Joe</td>
<td>Miami</td>
<td>Miami Jackson Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Miranda, Mr. Arturo</td>
<td>Miami</td>
<td>Miami Jackson Senior High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Morales, Ms. Marlen</td>
<td>Hialeah</td>
<td>Miami Springs Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Prince, Ms. Marie K.</td>
<td>Miami Beach</td>
<td>Miami Beach Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Robaine, Mr. Samuel</td>
<td>Hialeah</td>
<td>Miami Springs Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Roberts, Ms. Farrah N.</td>
<td>Quincy</td>
<td>James A. Shanks High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Sarkees, Mr. Michael L.</td>
<td>Miami</td>
<td>Miami Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Stocks, Ms. Sharnell T.</td>
<td>Orlando</td>
<td>Dr. Phillips High School</td>
<td>Florida</td>
</tr>
</tbody>
</table>
# 1993 NASA SHARP PLUS Apprentices

<table>
<thead>
<tr>
<th>NAME</th>
<th>CITY</th>
<th>HIGH SCHOOL</th>
<th>SHARP PLUS SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GEORGIA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curry, Ms. Kamila A.</td>
<td>Decatur</td>
<td>McNair Senior High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Smith, Ms. Chalanda' S.</td>
<td>Lithonia</td>
<td>Lithonia High School</td>
<td>Alabama</td>
</tr>
<tr>
<td><strong>ILLINOIS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burrell, Ms. Rachel J.</td>
<td>Rockford</td>
<td>Illinois Mathematics and Science Academy</td>
<td>Texas</td>
</tr>
<tr>
<td>Johnson, Mr. Alfred G.</td>
<td>Chicago</td>
<td>Jesse Spalding High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Lymas, Ms. BenJean</td>
<td>Chicago</td>
<td>Lane Technical High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Nelson, Ms. Safiya A.</td>
<td>Chicago</td>
<td>Seton Academy</td>
<td>Virginia</td>
</tr>
<tr>
<td><strong>LOUISIANA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miles, Mr. Benjamin M.</td>
<td>Grambling</td>
<td>Grambling High School</td>
<td>Texas</td>
</tr>
<tr>
<td><strong>MARYLAND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hagans, Ms. Jarita A.</td>
<td>Clinton</td>
<td>Gwynn Park High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Miles, Ms. Tiffany D.</td>
<td>Temple Hills</td>
<td>Crossland High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Pinderhughes, Ms. Alicia D.</td>
<td>Baltimore</td>
<td>Baltimore Polytechnic Institute</td>
<td>Maryland</td>
</tr>
<tr>
<td>Richardson, Ms. Justine L.</td>
<td>Baltimore</td>
<td>Paul Lawrence Dunbar High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Taylor, Mr. Curtis R.</td>
<td>Clinton</td>
<td>Gwynn Park High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Valentine, Ms. Summer D.</td>
<td>Baltimore</td>
<td>Western High School</td>
<td>Maryland</td>
</tr>
<tr>
<td><strong>MICHIGAN</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lewis, Ms. Courtney M.</td>
<td>Kalamazoo</td>
<td>Loy Norrix High School</td>
<td>Maryland</td>
</tr>
<tr>
<td><strong>MISSISSIPPI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>McCullum, Ms. Wanda F.</td>
<td>Yazoo City</td>
<td>Yazoo City High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Muse, Ms. Teconna E.</td>
<td>Pace</td>
<td>West Bolivar District High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Phillips, Ms. Tracey T.</td>
<td>Rosedale</td>
<td>West Bolivar District High School</td>
<td>Alabama</td>
</tr>
<tr>
<td><strong>NORTH CAROLINA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gore, Mr. Mitchell R.</td>
<td>Clemmons</td>
<td>West Forsyth High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Hairston, Ms. Dorothy M.</td>
<td>Kernersville</td>
<td>Glenn High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Herriott, Ms. Nicole R.</td>
<td>Winston-Salem</td>
<td>Mount Tabor High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Lane, Mr. Timronto O.</td>
<td>Winston-Salem</td>
<td>Mount Tabor High School</td>
<td>Alabama</td>
</tr>
<tr>
<td><strong>NEW JERSEY</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabros, Ms. Jacqueline O.</td>
<td>Jersey City</td>
<td>William L. Dickinson High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Heredia, Ms. Sylvia A.</td>
<td>Englewood</td>
<td>Dwight Morrow High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Stewart, Ms. Stacy D.</td>
<td>Newark</td>
<td>Science High School</td>
<td>Maryland</td>
</tr>
</tbody>
</table>
### 1993 NASA SHARP PLUS Apprentices

<table>
<thead>
<tr>
<th>NAME</th>
<th>CITY</th>
<th>HIGH SCHOOL</th>
<th>SHARP PLUS SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEW MEXICO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walker, Ms. Valerie R.</td>
<td>Tohatchi</td>
<td>Tohatchi High School</td>
<td>Texas</td>
</tr>
<tr>
<td><strong>NEW YORK</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accetta, Mr. Stephen M.</td>
<td>Brentwood</td>
<td>Brentwood Ross High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Espinosa, Ms. Laura</td>
<td>Brooklyn</td>
<td>George Westinghouse High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Martin, Ms. Kim M.</td>
<td>New York</td>
<td>Bronx High School of Science</td>
<td>Virginia</td>
</tr>
<tr>
<td>Rodriguez, Mr. Gabriel</td>
<td>Brentwood</td>
<td>Brentwood High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Roman, Mr. Adam A.</td>
<td>Coram</td>
<td>Longwood Senior High School</td>
<td>Virginia</td>
</tr>
<tr>
<td><strong>PUERTO RICO</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ares Cuadrado, Ms. Lorna D.</td>
<td>Las Piedras</td>
<td>Ramon Power Y Giralt Escuela Superior</td>
<td>Maryland</td>
</tr>
<tr>
<td>Casasus, Ms. Anna I.</td>
<td>San German</td>
<td>Colegio San Jose</td>
<td>Maryland</td>
</tr>
<tr>
<td>Crespo, Ms. Agmarys</td>
<td>Yabucoa</td>
<td>Teodoro Aguilar Mora</td>
<td>Florida</td>
</tr>
<tr>
<td>Cruz, Ms. Daisy A.</td>
<td>Yabucoa</td>
<td>Teodoro Aguilar Mora</td>
<td>Florida</td>
</tr>
<tr>
<td>Gomez-Rosa, Ms. Lorna L.</td>
<td>Yabucoa</td>
<td>Teodoro Aguilar Mora</td>
<td>Florida</td>
</tr>
<tr>
<td>Hernandez, Mr. Juan J.</td>
<td>Hormigueros</td>
<td>Colegio San Jose</td>
<td>Maryland</td>
</tr>
<tr>
<td>Jorge, Mr. Alex R.</td>
<td>Hormigueros</td>
<td>Colegio San Jose</td>
<td>Maryland</td>
</tr>
<tr>
<td>Melendez, Mr. Jose D.</td>
<td>Juncos</td>
<td>Jose Collazo Colon School</td>
<td>Florida</td>
</tr>
<tr>
<td>Morales, Ms. Saribel</td>
<td>Yabucoa</td>
<td>Teodoro Aguilar Mora</td>
<td>Maryland</td>
</tr>
<tr>
<td>Rivera, Mr. Ricarte J.</td>
<td>Carolina</td>
<td>Dr. Jose M. Lazaro High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Vazquez, Mr. Jose M.</td>
<td>San Lorenzo</td>
<td>Teodoro Aguilar Mora</td>
<td>Maryland</td>
</tr>
<tr>
<td><strong>SOUTH CAROLINA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beaufort, Mr. Patrick J.</td>
<td>Huger</td>
<td>Calhoun High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Johnson, Mr. Darian B.</td>
<td>Florence</td>
<td>Wilson High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Johnson, Mr. Varian C.</td>
<td>Florence</td>
<td>Wilson High School</td>
<td>Florida</td>
</tr>
<tr>
<td>Jones, Ms. Jamila L.</td>
<td>Columbia</td>
<td>W. J. Keenan High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Lloyd, Ms. April L.</td>
<td>Gadsden</td>
<td>W. J. Keenan High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Moore, Ms. Dannerlyn E.</td>
<td>Bennettsville</td>
<td>Marlboro County High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Williams, Ms. Jaynas R.</td>
<td>Effingham</td>
<td>West Florence High School</td>
<td>Alabama</td>
</tr>
</tbody>
</table>
### 1993 NASA SHARP PLUS Apprentices

<table>
<thead>
<tr>
<th>NAME</th>
<th>CITY</th>
<th>HIGH SCHOOL</th>
<th>SHARP PLUS SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TENNESSEE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harrington, Ms. Patrice D.</td>
<td>Chattanooga</td>
<td>Chattanooga School for the Arts &amp; Sciences</td>
<td>Alabama</td>
</tr>
<tr>
<td>Sorrells, Ms. Crystal E.</td>
<td>Chattanooga</td>
<td>Brainerd High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Williams, Ms. Kenna L.</td>
<td>Memphis</td>
<td>East High School</td>
<td>Alabama</td>
</tr>
<tr>
<td><strong>TEXAS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adams, Ms. Angela R.</td>
<td>Dallas</td>
<td>The High School for Health Professions</td>
<td>Texas</td>
</tr>
<tr>
<td>Carrillo, Mr. Hector</td>
<td>Odessa</td>
<td>Odessa High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Carroll, Ms. Dana' L.</td>
<td>Dallas</td>
<td>A. Macao Smith High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Chavez, Ms. Josie S.</td>
<td>San Antonio</td>
<td>Sidney Lanier High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Franco, Mr. Michael A.</td>
<td>El Paso</td>
<td>Del Valle High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Garcia, Ms. Carina</td>
<td>Edinburg</td>
<td>Edinburg North High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Garcia, Ms. Joleen S.</td>
<td>San Antonio</td>
<td>William Howard Taft High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Garza, Ms. Angelica M.</td>
<td>Edinburg</td>
<td>Edinburg North High School</td>
<td>Alabama</td>
</tr>
<tr>
<td>Henderson, Ms. Dekia M.</td>
<td>Dallas</td>
<td>High School for Health Professions</td>
<td>Texas</td>
</tr>
<tr>
<td>Johnson, Ms. Mishunda D.</td>
<td>Dallas</td>
<td>A. Macao Smith High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Jones, Ms. Stacy C.</td>
<td>Henderson</td>
<td>Henderson High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Lopez, Ms. Roxanne</td>
<td>San Antonio</td>
<td>Sam Houston High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Medina, Mr. Jose R.</td>
<td>Houston</td>
<td>Galena Park High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Miramontes, Mr. Jose O.</td>
<td>El Paso</td>
<td>Del Valle High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Murillo, Mr. Edgar</td>
<td>El Paso</td>
<td>El Paso High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Olivarez, Ms. Veronica</td>
<td>Laredo</td>
<td>St. Augustine High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Perez, Mr. Jose' A.</td>
<td>Miranda</td>
<td>Bruni High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Ramirez, Ms. Anita T.</td>
<td>Corpus Christi</td>
<td>Foy H. Moody High School</td>
<td>Texas</td>
</tr>
<tr>
<td>Williams, Mr. Sidney C.</td>
<td>Houston</td>
<td>MacArthur High</td>
<td>Alabama</td>
</tr>
<tr>
<td><strong>VIRGINIA</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adeyiga, Mr. Lake O.</td>
<td>Yorktown</td>
<td>Tabb High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Benjamin, Jr., Mr. Ernest G.</td>
<td>Newport News</td>
<td>Ferguson High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Bullock, Mr. Errol E.</td>
<td>Hampton</td>
<td>Bethel High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Garris, Ms. Tifani L.</td>
<td>Hampton</td>
<td>Bethel High School</td>
<td>Maryland</td>
</tr>
<tr>
<td>Huslage, Ms. Melody A.</td>
<td>Manassas</td>
<td>Thomas Jefferson Science/Tech High School</td>
<td>Virginia</td>
</tr>
<tr>
<td>Parks, Mr. Clinton R.</td>
<td>Newport News</td>
<td>Menchville High School</td>
<td>Maryland</td>
</tr>
</tbody>
</table>
MSE NETWORK MEMBERSHIP

ALABAMA
- Alabama A&M University
- Tuskegee University

ARIZONA
- Northern Arizona University
- Tucson Unified School District

CALIFORNIA
- California State University at Los Angeles
- Foundation on Employment & Disability
- Oakland Unified School District
- Sacramento Unified School District

COLORADO
- University of Colorado at Boulder

DELWARE
- Delaware State University

DISTRICT OF COLUMBIA
- American Association for the Advancement of Science
- Associates for Renewal in Education, Inc.
- Council of the Great City Schools
- National Association for Equal Opportunity in Higher Education
- National Board for Professional Teaching Standards
- National Education Association
- Howard University
- Independent Colleges Office

FLORIDA
- Bethune-Cookman College
- Dade County Public Schools
- Florida International University
- Miami-Dade Community College
- University of Miami

GEORGIA
- Albany State College
- Clark Atlanta University
- Georgia State University
- Morehouse College
- Paine College
- Spelman College

ILLINOIS
- Chicago State University

INDIANA
- Metropolitan School District of Lawrence Township

LOUISIANA
- Dillard University
- Grambling State University
- Southern University System
- Xavier University

MARYLAND
- Morgan State University
- Prince George's County Public Schools
- Triangle Coalition for Science and Technology Education

MASSACHUSETTS
- Massachusetts Institute of Technology

MISSISSIPPI
- Alcorn State University
- Jackson State University

MISSOURI
- McDonnell Douglas Foundation
- University of Missouri at St. Louis

NEW JERSEY
- Englewood Public Schools
- Newark School District

NEW MEXICO
- New Mexico Highlands University

NEW YORK
- Bronx Community College, CUNY
- City College of New York, CUNY
- College of New Rochelle
- Lehman College, CUNY
- Medgar Evers College, CUNY
- New York City Technical College, CUNY

NORTH CAROLINA
- Barber-Scotia College
- Fayetteville State University
- North Carolina A&T State University
- Saint Augustine's College
- Wake County Public School System
- Winston-Salem/Forsyth County Schools

OHIO
- Cleveland Public Schools
- Cuyahoga Community College

OKLAHOMA
- Oklahoma City Public Schools

PENNSYLVANIA
- Pittsburgh School District

PUERTO RICO
- University System of the
  Ana G. Méndez Educational Foundation
- University of Puerto Rico - Central Administration
- University of Puerto Rico at Mayaguez

TENNESSEE
- LeMoyne-Owen College
- Meharry Medical College

TEXAS
- Aldine Independent School District
- Corpus Christi Independent School District
- Corpus Christi State University
- Laredo State University
- Texas A&M University
- Texas A&M University System
- University of Texas at El Paso

VIRGINIA
- Hampton University
- National Council of Teachers of Mathematics
- Norfolk State University
- Virginia Beach City Public Schools
- Virginia State University
- Cooperating Hampton Roads Organization for Minorities in Engineering

WISCONSIN
- Milwaukee Public Schools
- University of Wisconsin/Madison
### SUMMER 1993:

<table>
<thead>
<tr>
<th>NAME</th>
<th>COLLEGE/ UNIVERSITY</th>
<th>AGENCY/OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dike Ahantatu</td>
<td>MIT</td>
<td>NSF</td>
</tr>
<tr>
<td>Noel Blackburn</td>
<td>City College, CUNY</td>
<td>EPA</td>
</tr>
<tr>
<td>Neha Dave</td>
<td>University of Miami</td>
<td>NSF</td>
</tr>
<tr>
<td>Karriem Dean</td>
<td>Fisk University</td>
<td>QEM Network and Office of Senator Carl Levin (D-MI)</td>
</tr>
<tr>
<td>Tiffney Dickens</td>
<td>York College</td>
<td>QEM Network and Office of Senator Daniel Moynihan (D-NY)</td>
</tr>
<tr>
<td>Jared Ellison</td>
<td>Tuskegee University</td>
<td>NSF</td>
</tr>
<tr>
<td>Salvador Gandara</td>
<td>University of Texas at El Paso</td>
<td>EPA</td>
</tr>
<tr>
<td>Deyna Herrera</td>
<td>Clark Atlanta University</td>
<td>Office of Senator Paul Coverdell (R-GA)</td>
</tr>
<tr>
<td>Min Kim</td>
<td>University of California at Berkeley</td>
<td>EPA</td>
</tr>
<tr>
<td>Denise Lewin</td>
<td>MIT</td>
<td>NASA Goddard Space Flight Center</td>
</tr>
<tr>
<td>Ben Louie</td>
<td>California State University, LA</td>
<td>NSF</td>
</tr>
<tr>
<td>Felicia Middleton</td>
<td>University of South Carolina</td>
<td>Office of Senator Strom Thurmond (R-SC)</td>
</tr>
<tr>
<td>Dennis Parces</td>
<td>University of Miami</td>
<td>EPA</td>
</tr>
<tr>
<td>Boris Ricks</td>
<td>University of Southern California</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Sandra Waite</td>
<td>Spelman College</td>
<td>QEM Network and Office of Senator Paul Coverdell (R-GA)</td>
</tr>
<tr>
<td>Karen Williams</td>
<td>Spelman College</td>
<td>NSF</td>
</tr>
<tr>
<td>Melanie Yelder</td>
<td>Tuskegee University</td>
<td></td>
</tr>
</tbody>
</table>

### SUMMER 1992:

<table>
<thead>
<tr>
<th>NAME</th>
<th>SCHOOL</th>
<th>AGENCY/OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lorinette Bee</td>
<td>Alabama State University</td>
<td>EPA</td>
</tr>
<tr>
<td>Leonard Benton</td>
<td>Howard University</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Elaine Bonner</td>
<td>University of Michigan</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Katrina Brown</td>
<td>Clark Atlanta University</td>
<td>NSF</td>
</tr>
<tr>
<td>Ruth Castrodad</td>
<td>University of Puerto Rico</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Salvador Gandara</td>
<td>University of Texas at El Paso</td>
<td>NASA</td>
</tr>
<tr>
<td>Sharriff Glover</td>
<td>Virginia State University</td>
<td>NASA</td>
</tr>
<tr>
<td>Kimberly Harris</td>
<td>Jackson State University</td>
<td>EPA</td>
</tr>
<tr>
<td>Zack Hart</td>
<td>Jackson State University</td>
<td>EPA</td>
</tr>
<tr>
<td>Dianne Isom</td>
<td>Rochester Institute of Technology</td>
<td>NASA</td>
</tr>
<tr>
<td>Anthony Jones</td>
<td>Fisk University</td>
<td>NSF</td>
</tr>
<tr>
<td>Ida Jones</td>
<td>Alabama State University</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Ishak Kang</td>
<td>Kaes College</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Gregory Lawrence</td>
<td>MIT</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Karen Miyoshi</td>
<td>California State University, LA</td>
<td>NSF</td>
</tr>
<tr>
<td>Byron Orey</td>
<td>SUNY At Stony Brook</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Dana Patterson</td>
<td>Clark Atlanta University</td>
<td>EPA</td>
</tr>
<tr>
<td>Tahelia Powe</td>
<td>Alcorn State University</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Stanford Smith</td>
<td>Clark Atlanta University</td>
<td>NASA</td>
</tr>
<tr>
<td>Anim Steel</td>
<td>Williams College</td>
<td>EPA</td>
</tr>
<tr>
<td>Ana Suarez</td>
<td>Florida International University</td>
<td>NSF</td>
</tr>
<tr>
<td>Tara Taite</td>
<td>Alabama State University</td>
<td>NASA</td>
</tr>
<tr>
<td>Ernest Williams</td>
<td>Alabama State University</td>
<td></td>
</tr>
</tbody>
</table>
# QEM Interns

## SUMMER 1991:

<table>
<thead>
<tr>
<th>NAME</th>
<th>SCHOOL</th>
<th>AGENCY/OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basheera Abdus-Sabur</td>
<td>Bryn Mawr College</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Ivy Alston</td>
<td>American University</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Darryl Anderson</td>
<td>University of Pennsylvania</td>
<td>NASA</td>
</tr>
<tr>
<td>DeLicia Ballard</td>
<td>Spelman College</td>
<td>NSF</td>
</tr>
<tr>
<td>Christopher Blanc</td>
<td>MIT</td>
<td>NASA</td>
</tr>
<tr>
<td>Ruth Castrodad</td>
<td>University of Puerto Rico</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Barrington Edwards</td>
<td>University of Missouri</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Dennis Greene</td>
<td>Norwalk Community College</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Neil Hislop</td>
<td>Howard University</td>
<td>NASA</td>
</tr>
<tr>
<td>Cleophus Jackson</td>
<td>University of the District of Columbia</td>
<td>NSF</td>
</tr>
<tr>
<td>Rick Johnson</td>
<td>University of Illinois</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Kendra Jones</td>
<td>Columbia University Graduate School</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Terry Lee</td>
<td>Spelman College</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Marianne Liu</td>
<td>The New School for Graduate Research</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Kirt Medine</td>
<td>Howard University</td>
<td>NASA</td>
</tr>
<tr>
<td>Karen Miyoshi</td>
<td>California State University, Los Angeles</td>
<td>NSF</td>
</tr>
<tr>
<td>Nancy Moorachian</td>
<td>Simmons College</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Zain Muse</td>
<td>Spelman College</td>
<td>Smithsonian Institution</td>
</tr>
<tr>
<td>Nicole Nelms</td>
<td>Florida A&amp;M University</td>
<td>NSF</td>
</tr>
<tr>
<td>S. Kevin Phillips</td>
<td>Florida A&amp;M University</td>
<td>NSF</td>
</tr>
<tr>
<td>Adella Russell</td>
<td>University of Pennsylvania</td>
<td>NASA</td>
</tr>
<tr>
<td>Andrei Saunders</td>
<td>MIT</td>
<td>QEM Network</td>
</tr>
</tbody>
</table>

## SUMMER 1990:

<table>
<thead>
<tr>
<th>NAME</th>
<th>SCHOOL</th>
<th>AGENCY/OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christina Boyle</td>
<td>MIT</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Donna Davidson</td>
<td>University of Maryland, Eastern Shore</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Neil Finkenstein</td>
<td>University of California at Berkeley</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Judea Lawton</td>
<td>New York City Technical College</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Andrei Saunders</td>
<td>MIT</td>
<td>QEM Network</td>
</tr>
<tr>
<td>Andrew Strehle</td>
<td>MIT</td>
<td>QEM Network</td>
</tr>
</tbody>
</table>

## SUMMER 1989:

<table>
<thead>
<tr>
<th>NAME</th>
<th>SCHOOL</th>
<th>AGENCY/OFFICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joaquin Abreu</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Laura Ann Armstrong</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>William Bankhead</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Bevin Bouman</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Christina Boyle</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Steve Danner</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Thomas Fahy</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Natalia Fuente</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Alberto Herrera</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Kirsten Hoyte</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Jonathan Katz</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>William Large</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Michael Mitchell</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Jason Sliebeck</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
<tr>
<td>Andrew Strehle</td>
<td>MIT</td>
<td>QEM Project</td>
</tr>
</tbody>
</table>

---

53
1992-93 AETNA BROWN BAG SERIES
LIST OF DISCUSSION TOPICS AND DATES

SESSIONS HELD SEPTEMBER - DECEMBER, 1992

• Special Session: The Education of Minorities in China
  Date: Tuesday, September 15
  Presenters: United Nations' Multicultural and Minority Education Delegation from The People's Republic of China

• National Education Goals (Revisited):
  National Urban Education Goals: Baseline Indicators, 1990-91
  Date: October 2
  Presenter: Dr. Michael Casserly, Interim Executive Director, Council of Great City Schools

• Current Status of Assessing National Education Goals
  Date: October 16
  Presenter: Dr. Wilmer Cody, Executive Director, National Education Goals Panel

• National Housing Agenda: Ensuring Quality Education for Children and Youth in Public Housing
  Date: October 23
  Presenter: Mr. Ronald Blackman-Moreno, Director of Community Outreach, QEM Network

• Violence in Schools (Revisited): Ways to Deal with School Safety and Discipline
  Date: November 6
  Presenter: Mr. Edward Muir, Director of the School Safety Department, United Federation of Teachers (New York)

• Election Results: Implications for the Education of Low-income and Minority Children and Youth
  Date: November 20
  Presenters: Mr. Claudio Sanchez, Education Correspondent, National Public Radio
  Dr. Ramona Edelin, President and CEO, National Urban Coalition

• Special Session: Ensuring Quality Education and Training for Minorities: What Should the Transition Team Know?
  Date: Monday, November 30
  Presenters: Mr. Michael Cohen, Member of the Transition Group on Education and Training
  Dr. Shirley Malcolm, Head, Directorate for Education and Human Resources, AAAS

• The Media: Its Influence on the Education of Minorities
  Date: December 11
  Presenter: Ms. Dorothy Gilliam, Columnist, The Washington Post

• BIENNIAL MEETING OF THE JANUARY 15TH GROUP, JANUARY 1993
  Focus: What National Organizations Are Doing and Can Do to Ensure Quality Education for All: Increasing Collaborations for Greater Success
  Date: January 15, 1993

SESSIONS HELD FEBRUARY - JULY, 1993

• Enterprise Zones: Empowerment through Enterprise Zones: Strategies to Rebuild the Economic and Social Structures Within Low-income Communities
  Date: February 26
  Presenter: Mr. Jonathan R. Steiner, Tax Counsel at the Office of Congressman Charles B. Rangel

• Role of Business: Business Leadership: Its Role in Shaping American Education
  Date: March 5
  Presenter: Mr. Melvin W. Thompson, Executive Director of the Institute for Science, Space, and Technology, Howard University
  Date: March 19
  Presenter: Mr. Andrew S. Bush, Professional Staff Member for the Committee on Ways and Means

• Federal Policies: Reauthorization of the Elementary and Secondary Education Act and Proposed Reforms in Student Financial Aid
  Date: April 2
  Presenter: Ms. Suzanne Ramos, Education Counsel to Senator Edward Kennedy

• Community Service: National Service Plan: Its Implications for Low-income and Minority Youth
  Date: April 9
  Presenter: Ms. Maureen McLaughlin, Acting Assistant Secretary for Post-Secondary Education

• Reform Efforts: Reform Efforts in the D.C. Public Schools
  Date: April 16
  Presenters: Panel discussion featuring Maxine Bleich, President of Ventures in Education; Barbara Clark, Executive Assistant for Educational Programs and Operations for D.C. Public Schools; and Sadia White, Ventures Coordinator at McKinley Penn High School

• Legal Implications: Implications of Recent Court Decisions for the Education of Minorities: A Look at the Agers Case
  Date: April 30
  Presenter: Dr. Elias Blake Jr., President of the Benjamin E. Mays National Education Resource Center

• Higher Education: Community Colleges and Their Role in Educating Minorities
  Date: May 14
  Presenter: Dr. Enid Jones, Executive Director for the Commission on Minority Education and Director of Research at the American Association of Community Colleges

• Urban Reform: Reconstructing Our Cities: A Revisit of the Kerner Report in Commemoration of the 25th Anniversary of the National Advisory Commission on Civil Disorders
  Date: May 21
  Presenter: Dr. Lynn A. Curtis, President of the Milton S. Eisenhower Foundation

• Higher Education: Racial Climate on College/University Campuses: Impact on the Education of Minorities
  Date: May 28
  Presenter: Dr. Reginald Wilson, Senior Scholar at the American Council on Education

• Apprenticeships: Youth Apprenticeships: Their Implications for Minority Students
  Date: June 11
  Presenter: Mr. Richard Kazis, Director, Work-based Learning Programs, Jobs for the Future

• Focus: Acting for Tomorrow - Now: A Summit on Quality Education for Minorities
  Date: June 27-29
  Presenters: More than 80 representatives from education, business, and government were presenters at this event.
  Served as biannual meeting of the January 15th Group

• High School Education: Do High School American History Courses Disadvantage Students of Color?
  Date: July 16
  Presenter: Dr. James W. Loewen, Senior Postdoctoral Fellow, National Museum of American History, Smithsonian Institution, and Professor of Sociology, University of Vermont
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Speakers/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 9</td>
<td>Affirmative Action, Quotas, and Reverse Discrimination</td>
<td>Wade Henderson, Esquire, Director, Washington Bureau of the NAACP</td>
</tr>
<tr>
<td>October 31</td>
<td>Educational Choice</td>
<td>Ms. Mary Futrell, Senior Consultant, QEM</td>
</tr>
<tr>
<td>November 8</td>
<td>&quot;Educating Everybody’s Children&quot;</td>
<td>Dr. Helené Hodges, Director, Research and Information, Association for Supervision and Curriculum Development (ASCD)</td>
</tr>
<tr>
<td>November 22</td>
<td>Impediments to the Education of Black Males in American Society</td>
<td>Dr. Jewell Taylor Gibbs, Distinguished Scholar 1991-1992, Joint Center for Political and Economic Studies and Professor, School of Social Welfare, University of California at Berkeley</td>
</tr>
<tr>
<td>December 6</td>
<td>Pre- and Post-Natal Health Care and Efforts on School Readiness: Issues / Action Recommendations</td>
<td>Elena Nightingale, M.D., Special Advisor to the President and Senior Program Officer, Carnegie Corporation of New York</td>
</tr>
<tr>
<td>February 14</td>
<td>The Education of Children in Poverty: Issues / Policies / Recommendations for Action</td>
<td>Ms. Judith E. Jones, Director, National Center for Children in Poverty and Associate Clinical Professor of Public Health, Columbia University</td>
</tr>
<tr>
<td>February 28</td>
<td>Reaffirming Community Values in Support of Education</td>
<td>Mr. Roger Wilkins, Robinson Professor of History and American Culture, George Mason University</td>
</tr>
<tr>
<td>March 13</td>
<td>Ensuring Quality Education for Minority Teachers</td>
<td>Dr. Arthur Wise, President, National Council for Accreditation of Teacher Education (NCATE)</td>
</tr>
<tr>
<td>March 27</td>
<td>The Role of National Organizations in the Education of Minority and Low-income Children</td>
<td>Dr. Ramona Edelin, President, National Urban Coalition</td>
</tr>
<tr>
<td>April 10</td>
<td>School-Based Management / Parental Involvement - Efforts Aimed at School Restructuring and Empowering Parents: Are They Working?</td>
<td>Sharon Robinson, Director, National Center for Innovation, National Education Association</td>
</tr>
<tr>
<td>April 24</td>
<td>Emerging Issues and Strategies for School to Work Transition</td>
<td>Dr. Robert Lerman, Professor of Economics, American University</td>
</tr>
<tr>
<td>May 15</td>
<td>Is Chapter 1 Helping Poor Kids: Yes or No? From the Chapter 1 Commission</td>
<td>Ms. Cindy Brown, Council of Chief State School Officers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Kati Haycock, American Association for Higher Education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ms. Phyllis McClure, NAACP Legal Defense and Educational Fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mr. Paul Weckstein, Center for Law and Education</td>
</tr>
<tr>
<td>May 22</td>
<td>Factors to be Considered in Organizing Communities</td>
<td>Ms. Jennifer Henderson, Director of Training, Center for Community Change</td>
</tr>
<tr>
<td>June 12</td>
<td>The Future of Federal Financial Aid: Policies / Trends / Potential Effects on Minorities</td>
<td>Ms. Janet S. Hansen, Study Director, Committee on Post-secondary Education and Training in the Workplace and Senior Staff Officer, NAS/NRC</td>
</tr>
<tr>
<td>June 26</td>
<td>Year-Round Schools</td>
<td>Mr. Paul Goren, Senior Policy Analyst, National Governors Association</td>
</tr>
<tr>
<td>July 10</td>
<td>BIENNIAL MEETING OF THE &quot;JANUARY 15TH&quot; GROUP</td>
<td>“Applications of Technology in Education: Current Efforts and Proposed Strategies and Their Implications for Minorities”</td>
</tr>
</tbody>
</table>
# 1990-91 QEM Network Brownbag Discussion Series

## List of Topics and Dates

### Sessions Held, December 1990 - August 1991

#### December 7, 1990
- Separate Schools for Black Males
  - Dr. Spencer Holland, Director, Center for Educating African American Males, Morgan State University

#### December 17, 1990
- Violence Afflicting Our Communities - Responsibilities of Educational Leaders and Organizations
  - Dr. Elsie L. Scott, Executive Director, National Organization of Black Law Enforcement Executives

#### January 4, 1991
- Legal and Other Issues in Financial Aid for Minority Students
  - Aty. Elizabeth Heffnerman, Partner, Hogan & Hartson, Education Practice Group

#### January 15, 1991
- Educational Tracking
  - Dr. Jonilla H. Braddock, II, Director, Center for Research on Effective Schooling for Disadvantaged Students, The John Hopkins University, Baltimore, MD

#### February 1, 1991
- "Immersion vs. Transition" in Teaching English as a Second Language
  - Dr. Ana "Cha" Guzman, Director, Alliances for Minority Participation, National Science Foundation

#### February 15, 1991
- Desegregation of Schools and the Busing of Young Children
  - Aty. Janell Byrd, Staff Counsel, NAACP Legal Defense & Educational Fund

#### March 1, 1991
- Magnet Schools
  - Dr. Rolf K. Blank, Project Director, State Education Assessment Center, Council of Chief State School Officers

#### March 15, 1991
- National Standards of Excellence/Certificate of Initial Mastery: Implications for Minority Youth
  - Mr. Michael Cohen, National Center for Education and the Economy

#### March 29, 1991
- Enhancing Education Opportunities in Housing Projects and Low-income Residential Communities
  - Dr. Shirley M. McBride, President and Mr. Ronald Blackburn, Director, Community Outreach, QEM Network

#### April 12, 1991
- School Financing: Inequitable Funding of Schools
  - Aty. Mario Moreno, Regional Counsel, Mexican American Legal Defense and Educational Fund

#### May 3, 1991
- Educational Choice
  - Mr. Charles E.M. Kolb, Deputy Assistant to the President for Domestic Policy, The White House

#### May 24, 1991
- Biannual Meeting of the "January 15th" Group
  - "National Professional Teaching Standards"

#### June 7, 1991
- School Financing: Post-Secondary Education
  - Mr. Peter Smith, Executive Director, National Commission on Responsibilities for Financing Post-Secondary Education

#### June 28, 1991
- Female Offenders and Education
  - Ms. Reesa Motley-McMurty, Acting Chief of Female Offenders Programs, D.C. Department of Corrections

#### July 12, 1991
- New Expectations for Teachers of Color
  - Dr. Mary E. Dilworth, Senior Director for Research, American Association of Colleges for Teacher Education

#### July 23, 1991
- The National Pollution Prevention Environmental Education Program
  - Mr. James G. Barnes, President, Health Systems Marketing and Development Corporation

#### August 9, 1991
- Educating a Population at Risk: Homeless Families
  - Ms. Carol Fennelly, Political Advocate, Community for Creative Non-Violence

#### August 16, 1991
- Health & Education: Forging a Partnership for the Benefit of Adolescents
  - Renee R. Jenkins, M.D., F.A.P., Associate Professor of Pediatrics, Howard University College of Medicine