



Creating Pathways for the Next Generation of Scholars

October 18, 2008
Anne Beers
Elementary School

 **STEM Summit 2008**

Washington, DC
Science, Technology,
Engineering & Mathematics
Partnership

Welcome from Carrie L. Thornhill



Welcome to the 2008 Science Technology Engineering and Mathematics (STEM) Summit. It is an honor for the Washington DC STEM Partnership (WDC STEM) to host this important gathering of STEM learners, pioneers, professionals and practitioners from across the city and region at the Anne Beers Elementary School, NASA's only Explorer School in the District of Columbia. The WDC STEM Partnership is a coalition of scientists, educators, parents, policy makers, business and community leaders working towards the common goal of improving the quality and quantity of STEM education from prekindergarten to postsecondary settings in the District of Columbia. Our vision is that the District of Columbia is recognized nationally as a STEM Center

of Excellence. Such recognition would be based on demonstrated innovation, performance across the educational continuum and capacity for ensuring readiness of graduates to compete successfully locally and in the global marketplace companies.

In readiness for this Summit, you will want to know that over the past year, WDC STEM has been engaged in efforts to:

- Strengthen the composition and effectiveness of WDC STEM by partnering with Georgetown University to support its Ward 7 college readiness initiatives; and by helping to position the Monarch Effect Foundation's butterfly migration gardens in DC schools and GroundWorks Anacostia as companion environmental education initiatives.
- Sponsor TEAMING training to 50% of the teachers at Anne Beers School and 10 interested parents as a viable STEM teaching and learning strategy.
- Convene TEAMING training for 30 STEM teachers and 20 interested parents at 5 east river schools and 5 citywide schools as a viable STEM teaching and learning strategy.
- Conduct parent math/science night sessions for parents of three Ward 7 schools guided by a variety of science and math literature and student directed exercises.

We invite you to take full advantage of all the learning, teaching and networking the Summit has to offer today to help you advance your STEM initiatives in your school communities tomorrow. We also encourage you to join with the Partnership in figuring out how to draw more attention and resources to city STEM initiatives as we seek to create pathways for the next generation of STEM scholars and to make the District all it can be in the STEM disciplines.

HAVE A GREAT STEM DAY AND YEAR!

Carrie L. Thornhill, Chair

Welcome from Rev. Dr. Kendrick E. Curry



W elcome to the second Washington DC Science, Technology, Engineering and Mathematics (STEM) Summit!

As the Ambassador for DC STEM, I applaud each of you—students, parents, educators, policy makers, community leaders and representatives from business and industry—for recognizing the importance of being a part of this momentous endeavor. I also greatly appreciate the representation from the faith community, our local media and other supporters, as well.

The Summit is but one of many milestones of the Washington DC STEM Partnership to aid in the systemic reform of our schools and communities through a heightened, comprehensive emphasis on STEM education. The workforce demands of tomorrow challenge us to inform, motivate and encourage students, parents and others about the importance of STEM education and its disciplines. That is why the outstanding presenters at this year's Summit are so eager to share their time, talent, and expertise with those of you gathered here today. They recognize that their individual successes are in vain if they are not sustained and carried forward by successive generations of students. Accordingly, our Summit theme is "Creating Pathways for the Next Generation of Scholars."

I encourage you to take full advantage of this unique opportunity to hear directly from men and women who have put forth some of the best practices in the field. The Summit is an interactive learning environment; so please feel free to ask questions and raise issues for discussion. There are also a number of interesting and informative exhibits that you simply do not want to miss. In fact, there are so many things to see and learn that we encourage you to stay for the entire program so that you don't miss a thing—including the door prizes!

Very special thanks go to the Nation Aeronautics and Space Administration (NASA), the Georgetown University and the Washington East Foundation for their considerable fiscal and human resource contributions. Without your help, the Summit would not be possible.

Special thanks to all of you who worked tirelessly to make this Summit a reality and to help us move closer to achieving our long-term vision of the District of Columbia as a national leader in STEM education. Know that your labor is not in vain! I especially thank Ms. Carrie Thornhill, Chair of the Washington DC STEM Partnership; Ms. Deborah Jones, the Washington East Foundation; Ms. Gwendolyn Payton, Principal of Anne Beers ES; Ms. Stephanie Harris, NES Team Liason; and Ms. Joy Majied, President of Majied and Associates for their indefatigable efforts and contributions that helped to make this Summit a success.

Again, to all participants and STEM Partners, I extend a heartfelt welcome.

Enjoy the Summit!

Rev. Dr. Kendrick E. Curry
Washington DC STEM Ambassador



COUNCIL OF THE DISTRICT OF COLUMBIA
THE JOHN A. WILSON BUILDING
1350 PENNSYLVANIA AVENUE, NW
WASHINGTON, DC 20004

VINCENT C. GRAY
CHAIRMAN

October 18, 2008

CONGRATULATIONS
2008 CITYWIDE STEM SUMMIT PARTICIPANTS

On behalf of the Council of the District of Columbia, it is my pleasure to thank and congratulate the parents, students, educators and scientists who have assembled for the October 18, 2008 Citywide Science, Technology, Engineering and Mathematics Summit at Anne Beers School. Your involvement demonstrates your commitment to improving the quality and effectiveness of STEM education in the District of Columbia. At a time when we need to improve our competitiveness in the world, region and city, there is nothing more important than increasing student achievement and strengthening school performance. We are proud to see a growing interest and commitment of school communities in taking up the challenge in the critically important STEM disciplines.

National studies have cited how Asia and Europe have exceeded the United States in the critical areas of innovation and science, how China and India are outpacing the US in the graduation of engineers, and the lack of public awareness by the US of these trends and their implication for jobs, careers, industry and national security. The time has come for the US to restore its standing in world and for the District of Columbia to become a STEM Center of Excellence. We applaud the Washington DC STEM Partnership for its efforts to raise the importance and added value of STEM education as both an education and workforce strategy, to share best and promising practices of what good STEM education looks like and to generate excitement and enthusiasm among the professionals and beneficiaries alike.

Have a great Summit! I look forward to continuing to support your efforts and learning of your progress.

Sincerely,

Vincent C. Gray



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Public Works and the Environment
Public Safety and the Judiciary

October 2008

Carrie L. Thornhill, Chair

The Washington DC STEM Partnership

c/o The Washington East Foundation

3600 Alabama Avenue, SE

Washington, DC 20020

Dear Carrie and Partners:

On the occasion of your Science Engineering Technology and Mathematics (STEM) Summit on October 18, 2008, I am pleased to welcome and bring greetings to all of the parents, students, scientists, educators, government agencies, civic and business leaders from east of the river and across the city to the great Ward 7. I am particularly delighted the citywide Summit is being held at Anne Beers Elementary School, our city's first and only NASA Explorer School, and that you are bringing together those pioneers and practitioners who share our vision for high quality STEM education.

As part of my priority commitment to improving education in Ward 7 and across the city, please know you can count on my support for your continuing efforts to raise awareness of the importance and benefits of STEM education, locally, nationally, and internationally; to promote effective teaching and learning strategies and to generate and sustain excitement among stakeholders about preparing the next generation of STEM scholars and workforce participants.

I look forward to joining you at the Summit and catching the spirit of the moment and possibilities for action in our schools and neighborhoods.

My best wishes,

Yvette M. Alexander
Yvette Alexander
Ward 7 Councilwoman



WDC STEM Partnership

Chair

Carrie L. Thornhill
Civic Leader

Ambassador

Rev. Dr. Kendrick E. Curry
Engineer/Faith-based Leader

Principal

Anne Beers Elementary School
Gwendolyn Payton

NES Team Liaison/ Educator/Elementary

Stephanie Harris

Katrinka Agurs
Teacher, Anne Beers ES

Gilda Allen
DDOE

Brenda Atkinson-Willoughby
Georgetown University

LeGrande Baldwin
Educator/Community Leader

Amy Bordeaux
TLRI

Chris Bradshaw
Dreaming Out Loud

Charlene Brown-McKenzie
Educator/Higher Education

Dennis Chestnut
Community Leader

Julie Edmonds
Science Education

Kerry Joels
TLRI

Deborah Jones
Washington East Foundation

Sheila Milbourne
Parent Partner

Barbara Moses
Vice Principal, Burrville

Sandra Nitchie
Monarch Effect Foundation

Kathryn Parker
DC STEM Alliance

Mark Shelton
Dreaming Out Loud

Danielle Smith
Georgetown University

Antionette C. Wells
NASA

Marques Wheeler
Georgetown University

Frank Withrow
TLRI



2008 Summit Agenda

Saturday, October 18, 2008

8-9 am	Attendees check-in and Continental Breakfast Lobby/Cafeteria
9 am	Opening Ceremonies – Auditorium Welcome/Greetings Co Master of Ceremonies Rev. Dr. Kendrick E. Curry Co Mistress of Ceremonies Javan Clay; 5th Grade Student
9:30 am	Dr. Kerry Joels, Motivational Speaker <i>“The Road to Real Opportunity”</i>
10:15 am	Ongoing Math Science Jeopardy • Anne Beers Photo Display Inspirational Monarch Labyrinth Walk Mission Shuttle Demonstration • Astronaut Photo Booth Youth Motivational Speaker on Video • Flight Simulator
10:15 – 12:00 pm	Concurrent Sessions Students/Parents – MICP – <i>A Scientific Journey through Costa Rica and Panama</i> Educators/Parents – TLRI – Teaming and Testing Students /Parents – NASA - <i>Bottle Rocketry</i> Students/Parents/Educators – NASA – <i>Science & Education Resources</i> Students/Parents – NASA – <i>Space Operations Learning Center</i> Teachers/Students – NASA – <i>What is Your Cosmic Connection to the Elements?</i>
12:15 – 1:15	Lunch and Exhibits
1:15 – 3:00 pm	Concurrent Sessions Students/Parents – MICP – <i>A Scientific Journey through Costa Rica and Panama</i> Educators/Parents – TLRI – Teaming and Testing Students/Parents – NASA – <i>Space Operations Learning Center</i> Teachers/Students – NASA – <i>What is Your Cosmic Connection to the Elements?</i>
3:00 – 3:30 pm	Closing Ceremonies Co Master of Ceremonies Rev. Dr. Kendrick E. Curry Co Mistress of Ceremonies Caprice Humphries; 5th Grade Student Call to Action: Carrie L.Thornhill Awards, Door Prizes and Next Steps

Motivational Speaker



Dr. Kerry Joels

President TLRI - Total Learning Research Institute

The Road to Real Opportunity

Government and Private Industry are panicked. They are facing severe long-term shortages of qualified technicians, engineers, scientists and managers who can run their programs and organizations. It is not a problem that can be solved with the usual numbers of American workers, or with recruiting qualified immigrants, we will need to attract and retain traditionally under-represented students for these potentially high-paying jobs. It is a particular opportunity

for women and minorities since the shortage is real and talented people are needed to do these high-technology jobs.

The problem is that most students stay away from math and science in droves. But the fact remains that those jobs will be out there. How do we get our children the tools to succeed in school to prepare them for a shot at those good jobs? How do we motivate them to apply themselves in these challenging subject areas? If we do, it can provide remarkable economic and social benefits to our vast pool of underused talent. How do we as parents, scientists, teachers, and community leaders work together to achieve success? It is an extraordinary opportunity if we can step up – STEM up – to the challenge.



Speakers/Presenters

Vivek Kundra, Chief Technology Officer, District of Columbia Government, was appointed by Mayor Adrian M. Fenty on March 27, 2007 to the Cabinet post of Chief Technology Officer (CTO) for the District of Columbia. As CTO, Kundra leads the Office of the Chief Technology Officer (OCTO), an organization of over 600 staff that provides technology services and leadership for 86 agencies, 38,000 employees, residents, businesses, and millions of visitors.

Kundra brings to the role of CTO a diverse record that combines technology and public policy experience in government, private industry, and academia.

Since Kundra became District CTO, he and OCTO have been honored with a series of major information technology (IT) awards. In 2008, InfoWorld Magazine named Kundra among its "CTO 25," 25 senior IT leaders from government, nonprofits, and private industry who apply creativity, tech savvy, and management skills to drive excellent results. In addition, the MIT Sloan CIO Symposium recognized Kundra among outstanding IT innovators who use leadership skills, business-technology acumen, and out-of-the-box thinking to address ever-increasing challenges facing their organizations.

Amy Bordeaux has a life long career in science education beginning as a science teacher in grades K-8 in Maryland, Virginia, the District of Columbia, Belgium, and extending through graduate school at George Mason University, Virginia, as an assistant professor. She was Vice President of Education for the Challenger Center for Space Science Education in the late 1980's and 90's in Alexandria, VA where she oversaw the development of space science simulations, evaluation, and teacher training for twenty-five centers across the United States and Canada. She was instrumental in bringing Challenger Center to D.C. Public Schools in the early 1990's to Jefferson Middle School, and in 1999 through a NASA contract with UDC for Beers Elementary School's space shuttle simulator. Dr. Bordeaux also served D.C. Public Schools in the Deputy Superintendent's Office for the Mathematics, Science, and Technology Initiative in the mid 1990's working with elementary school teachers D.C. Public to promote science education. She currently consults on projects with NASA, Total Learning Research Institute, George Mason University, Paragon Tec, FBI, and Cubic Defense Contractors, Inc.

Charlene Brown-McKenzie received her Bachelors of Arts in Sociology from Georgetown University in Washington, DC and her Masters in Social Work from Columbia University in New York as a licensed independent clinical social worker. Ms. Brown-McKenzie has worked with numerous children and families in both New York and Washington, DC. She is currently the Executive Director of the Meyers Institute for College Preparation, a pre-college academic enrichment program for middle and high school students in the Washington, DC area. MICP is housed in the Center for Multicultural Equity and Access on the Georgetown campus. This office promotes educational excellence and racial quality for students of color on the campus of Georgetown University. Ms. Brown-McKenzie has continually supported her office by helping to inspire hope, confidence, and a heightened interest in the value and benefits of post secondary educational opportunities for students of the District of Columbia area.

Speakers/Presenters

Reverend Dr. Kendrick E. Curry is the Senior Pastor/Teacher of the Pennsylvania Avenue Baptist Church (PABC) in Southeast, Washington, DC. He is a born-again, called and committed pastor-leader that strives for the continual advancement of the cause of Jesus Christ within the church and its community. For nearly two years, Dr. Curry has led PABC to new heights by substantive preaching, experiential worship, church visioning, educational programming, and community leadership and development activities. As one who is committed to helping persons to experience the fullness of life spiritually, educationally and economically, Dr. Curry is proud to serve as the Ambassador for the DC Science, Technology, Engineering and Mathematics (STEM).

Prior to coming to the DC metropolitan area, Dr. Curry pastored for 5 years in West Virginia. In addition to serving as pastor in WV, Dr. Curry worked numerous projects in the STEM work-force. Dr. Curry was the first Program Director for the prestigious Harriett G. Jenkins Predoctoral Fellowship Program, a program funded by the NASA and administered by the United Negro College Fund Special Programs Corporation. Its mission is to employ the best practices to increase the numbers of women, minorities, and disabled people with doctoral degrees in STEM disciplines.

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A former Project Scientist in Research and Development at the Union Carbide's Technical Center in South Charleston, WV, Dr. Curry authored over 25 internal and external publications in the field of catalyst development. Dr. Curry was also the lead recruiter of masters and doctoral Chemical Engineering students from the Massachusetts Institution of Technology and the University of Michigan.

Dr. Curry earned his BS degree Chemical Engineering from Prairie View A&M University and his MS and PhD in Chemical Engineering from the University of Michigan. He also earned a Master of Divinity from Virginia Union University.

Dr. Curry is married to the former Rev. Karen Whitney and is the proud father of Keyona and Kendrick, II.



Speakers/Presenters

Stephanie Harris was born in Chicago, Illinois. After an intense career in management at IBM she entered the field of teaching. Her motivation for this radical change was based upon her observation of the need to develop a worthy student product capable of handling the complexities of employment in private industry and government. She has published in Teacher's Digest and is responsible for guiding the NASA Explorer School Program at Anne Beers Elementary School since 1997. She has had extensive educational training from NASA Goddard Space Flight Center and was an Academic Fellow at NASA Glenn Research Center in Cleveland, Ohio.

Irv Sheffey, Environmental Justice Organizer, Sierra Club, Washington, DC Irv works closely with several local community groups within the Washington metropolitan area, including Groundwork Anacostia River, largely addressing the restoration of the Anacostia River and its tributaries. He has been involved in organizing river clean-ups, tree plantings and various educational and advocacy activities geared towards monitoring regulations and developments that potentially affect the river's cleanliness and health. Prior to coming to the Sierra Club, Irv was a Lead Citizen Forester for Casey Trees, planting trees throughout the District, an administrative manager with the City of New York, and a consultant developing and conducting management and skill training management for public sector clients. He was active in his community working on campaigns addressing development and resident rights, mentoring youth at risk and organizing seminars (to) focusing on the empowerment of individuals and communities of people of African descent. Irv graduated from Antioch College/Baltimore-Washington campus with a B.A. degree in Human Services Administration in 1974, and more recently, completed an M.S in Environmental Studies at Antioch New England Graduate School in Keene, New Hampshire.

Carrie Thornhill is a long time champion for the city's people, places, institutions and prosperity. She has devoted a significant number of years to helping build community, create economic opportunity and improve the well being of children and families, schools and public education performance in the District of Columbia. She is currently focused on improving the quality and quantity of STEM education from early grades to college settings. She currently chairs the Washington DC Science Technology Engineering and Mathematics Partnership of educators, scientists, parents and policymakers who envision the District of Columbia becoming a Center of Excellence in STEM education.

Carrie is formerly an at-large member of the DC Board of Education, the Board of Trustees of the University of the District of Columbia and chair of the Education Committee for the Hillcrest Community Civic Association. She is a founding architect of Marshall Heights Community Development Organization (MHCDO), the DC Childcare Corporation, Pre-Kforalldc, the DC Children and Youth Investment Corporation and the DC Neighborhood College.

Speakers/Presenters

Dr. Antoinette C. Wells is the Education Program Specialist at NASA Goddard Space Flight Center. She is responsible for coordinating and managing professional development opportunities and student programs to engage students in STEM courses to promote STEM careers. She manages k-12 programs at the Center to support school initiatives in STEM education throughout the Northeast Region. She has served as a Principal and Teacher. Dr. Wells has been actively involved in restructuring and school reform. Under her leadership, the school made positive gains in student achievement. The school, staff, and students received many grants, awards, and recognition for their accomplishments.

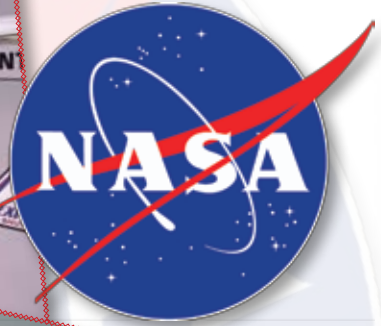
Dr. Frank B. Withrow has been a classroom teacher of special children, supervising teacher, Director of Research and Clinical Services, Department of Children and Family Services for the State of Illinois, Executive Director of the President's National Committee for the Handicapped, Chief of Technology for the U. S. Department of Education, Head of Technology for the Council of Chief State School Officers and the Director of Development for the NASA Classroom of the Future. He has produced several books and has more than 200 film and television credits. He has received several national awards and COSN had created the WITHROW national award in his honor. (He is the head of the Withrow Clan of fifteen educators from pre school to graduate school.)

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Partners-in-Action

NASA



Partners-in-Action

Anne Beers





Partners-in-Action

The Monarch Effect Foundation



MEYERS INSTITUTE FOR COLLEGE PREPARATION

"Inspiring Interest and Hope in Higher Education"



GEORGETOWN
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MICP Website - <http://micp.georgetown.edu>

Partners-in-Action

Georgetown
University



Partners-in-Action

Groundwork Anacostia River D.C.

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A Brief History

of Anne Beers Elementary School

Anne Beers Elementary School opened in 1942 as a tribute to Anne Duvall Beers, one of the first women to fill an important administrative position in the District of Columbia Public Schools. Originally Anne Beers contained 12 classrooms. In 1950, eight more rooms were added along with an auditorium and a recreation field. The second edition was completed in 1969 which included additional classrooms, a main office, a health suite and a multipurpose room.

The instructional program supports pre-kindergarten through the fifth grade in self-contained classrooms. The curriculum encompasses a literary and mathematics block based upon the approved standards and curriculum of the District of Columbia Public School System. Other subject areas such as music, art, general science, aerospace science, and astronomy are taught through the integration of thematic units. A program to address all students, including those with special needs is also an integral part of the school's instructional offerings.

Anne Beers's faculty and staff strongly encourage the continuous in-depth involvement of parents and members of the community. The Parent Teacher's Association and the Local School Restructuring Team (LSRT) are the primary avenues of parental and community involvement and play an important part in the local school management process.

The mission of Anne Beers Elementary School is to establish and maintain a professional, global learning community which provides each child with the highest quality education possible each and every day in order to maximize learning and achieve proficiency for all.

Goal 1: Increase student achievement

Goal 2: Ensure a safe, orderly, and inviting learning environment.

Goal 3: Increase parental, community, and business partnerships which support student achievement.

Goal 4: Develop knowledgeable young people who are caring and concerned about their world.

In 1989, funded by a National Science Foundation grant Anne Beers installed two-fully equipped science laboratories for the primary and intermediate grades. These efforts focused on the creation of an environment for hands-on discovery in a standard's based science.

Vision met opportunity on an October day in 1997 when Congressman Louis Stokes, in support of Teach for America, visited Anne Beers, as a guest teacher. The principal at that time, Constant Hollingsworth, discuss the recent discovery of a portable Star Lab Planetarium she had inadvertently found stuffed in the back of a storage closet. She had also dreamed of the inclusion of an astronomy class and an aerospace curriculum. Clear about her agenda she seized the moment. Surrounded by Secret Service and

numerous dignitaries she ask the Honorable Congressmen for five minutes of his time and used this opportunity to tell him her vision for the future of Anne Beers. Thirty days later, teachers were engaged in a round table discussion with science educators from Goddard Space Flight Center, NASA Glenn Research Center, and the University of the District of Columbia School of Science and Engineering. As a result of this meeting, a grant was approved by NASA Glenn Research Center to fund the development of a curriculum in Astronomy. Shortly thereafter, five teachers, over a 2-week period of intensive professional development with NASA scientists and educators, at Goddard Space Flight Center, created and implemented this curriculum for Beers. Although this was a big step, establishing and sustaining a model program became a major challenge.

Glenn Research Center pleased with this outcome, asked Stephanie Harris to become an Academic Fellow to develop a Distance Learning Curriculum for Anne Beers' students for the summer of 1998. During that period Stephanie Harris virtually lived with educators and scientists from NASA Glenn Research Center from June until September. Working closely with Dr; Lyn Bondurant and Letty Maxwell, the science coordinator for the Orchard School of Science in Cleveland, Ohio, they created a standard's based science, and mathematics Distance Learning curriculum which addressed specific content modules for each grade K-6. The curriculum included a unit for location and shadow investigations based upon the position of the sun, for grades 1 and 2. Grades 3 and 4 completed a Weather Phenomena investigation and grades 5-6 studied and compared water and soil investigations of the Cuyahoga and Potomac rivers. The purpose of this distance learning pilot centered on the encouragement of lines of communication between two diversely populated elementary schools, Orchard School of Science in Cleveland, Ohio and Anne Beers. Students interacted through video-conferencing and the internet. This engagement culminated when students from Orchard School of Science and Anne Beers met face-to-face during a week at Space Camp, in Huntsville Alabama.

As a result of our successful completion, NASA Glenn Research Center requested further commitment to an extension, as academic fellows for the summer of 1999. Directed by Robert Norris, Executive Director of the NASA SEMAA Academy at the University of the District of Columbia, they were asked to turn the distance learning curriculum in to a manual, to be used by the NASA SEMAA sites, across the country.

In September of 2000, funded by the continued support of NASA Glenn Research Center and the University if the District of Columbia Science, Engineering and Mathematics, Aerospace Academy, Anne Beers became a SEMAA sub-site to form a standards-based instruction program taught in an After-School environment. Also funded by these entities was the installation of a full scale planetarium and a high fidelity Space Shuttle cockpit and Mission Control Center for space shuttle launch and descent shuttle simulations. For the past 3 years the Anne Beers infrastructure has implemented a space science curriculum as an intrinsic motivation for learning.

In 2002, NASA Headquarters announced their commitment to the world to become actively involved in the support of science, mathematics and aerospace education in public and private schools across the nation. Their intention is to inspire the next generation with an infusion of NASA educators and scientists, specifically dedicated to certain schools, to encourage and support the knowledge of science and aerospace technology investigations and career awareness. In April 2002, Anne Beers applied and became the first of 50 NASA Explorer Schools in the United States. This partnership includes the educational and financial support of NASA personnel to engage students in science discovery activities and interactive content instruction with real-time NASA scientists and NASA exploration observations. Raising the

exponent of the Anne Beer's vision and philosophy, teachers formed a special team to implement NASA science content objectives into classroom instruction in the first year for grades 5 and 6, and for the remaining two years of this partnership, grades 3 and 4 and finally grades 1 and 2. Their intention is to create and provide continuous support to chosen NASA Explorer Schools to encourage and develop stand alone public and private schools, dedicated to a standards' based science engineering and mathematics curriculum.

Sustaining this kind of academic infusion was frightening. Although faculty and staff were extremely enthusiastic about becoming a NASA Explorer School, the collective commitment and responsibility it would take to sustain the quality of this kind of program, after the partnership ended, would further challenge the abilities of staff and faculty.

In March of 2003, in an effort to acknowledge this challenge for NASA Explorer Schools, NASA Headquarters, joining forces with the National Science Teacher's Association, and the National Alliance of State, Science and Mathematics Coalitions (NASSMC), merged to create the NASA Explorer Schools partnership for Sustainability. This was a competitive opportunity to be awarded to only ten of the NASA Explorer Schools. NASSMC works in partnership with state leaders to meet the nation's demands for a competent and competitive workforce by improving the state's education of students in mathematics, science and technology. NASSMC is the only organization in the nation that supports a network of state mathematics, science and technology coalitions. NASSMC's member coalitions focus their efforts on developing state specific activities, programs and policies to improve the quality of instruction in their state. NASSMC assists states in building effective coalitions composed of business, education and policy making individuals.

NASSMC offers these coalition essential services and resources that help states develop strategies to improve education. In May, 2003, Anne Beers was one of 10 NASA Explorer Schools in the country to receive this grant. The District of Columbia has never had an educational partnership of this nature. As a result of this grant Anne Beers, community leaders, local politicians and private industry combined to form the first coalition known as the Washington DC Science Technology Engineering and Mathematics Partnership (WDC STEM).

The mission of the WDCSTEM Partnership is to establish and sustain a unique alliance of educators, parents, public policy makers, corporate and civic leaders who work together to promote the enhancement and effectiveness of mathematics, science, engineering and technology education in the District of Columbia, for all students and faculty from pre-kindergarten to postsecondary settings. The Partnership envisions a District of Columbia that is recognized as a national Center of Excellence in science, mathematics and engineering that demonstrates innovative performance across the educational continuum and develops a capacity for ensuring readiness of graduates to compete successfully in a global marketplace.

Anne Beers' STEM focus received a major boost with the appointment of Gwendolyn Payton as its principal in 2006. Under her enthusiastic educational leadership, Beers' sustains a host of long time partnerships and forms new dynamic ones, the most recent of which, are with the Total Learning Research Institute (TRLI) for whole school TEAMING training for teachers and students and with the Monarch Effect Foundation for environmental education to save the monarch butterfly. Anne Beers remains the only NASA Explorer School in Washington, DC and continues to operate under the skillful and dynamic guidance of Stephanie Harris, NASA Explorer Team Leader.

Fact Sheet

The Washington East Foundation

The Washington East Foundation (WEF) was founded by residents from the Ward 7, Hillcrest and Penn Branch neighborhoods. WEF is an alliance of Ward 7 and Ward 8 residents working together to promote a sense of community between the Wards and to improve the quality of life for residents. WEF is a 501c3 not-for-profit organization which operates a limited number of projects, serves as a fiduciary agent for charitable civic groups, and in the future expects to engage in grant-making to benefit East Washington and citywide civic activities.

Project Focus Areas

■ WEF projects focus on three areas: community economic development, environmental education and Science Technology, Engineering and Mathematics (STEM) education across the continuum of pre-K to postsecondary education.

Past Projects

■ Past projects have included: real estate classes, a people-mapping project, boat tours of the Anacostia River and a multi-year partnership with the University of the District of Columbia, supporting teachers and parents in environmental education in ten Ward 7 and Ward 8 school communities.

Flagship Project

■ The WEF is the catalyst and sponsor of the Washington DC Science Technology Engineering and Mathematics Partnership (WDC STEM). The WDC STEM Partnership is a coalition of scientists, educators, parents, policy makers, business and community leaders working towards a common goal of improving STEM education. The Partnership meets monthly at Anne Beers school and is focused on Teaming Training for teachers, Math Science for parents, college readiness for students, butterfly migration gardens and a citywide STEM Summit.

Funding

■ Funding to date has come from individual contributions, grants from the University of the District of Columbia (UDC) and the Office of State Superintendent for Education (OSSE).





Special Thanks

The Office of the State Superintendent
for Education OSSE

DC Public Schools

DC Public Charter Schools

District Government Agencies

Ms. Gwendolyn Payton, Host Principal

Jerome Wilcox and
Pennsylvania Avenue Baptist
Church's Young Adult Ministry

City Year AmeriCorps

Chartered Health

Anne Beers Student Ambassadors

Parent Leaders, Ms. Herndon and Ms. Pratt

And, to the entire staff at our Host School,
Anne Beers Elementary School

